A meeting of the Board of Trustees was held via video conference at 1:00 p.m. on November 13, 2020.

The following Trustees were present: Dambly (chairman), Schuyler (vice chairman), Barron, Amoros, Black, Brown, Casey, Cotner, Culler, Dandrea, Delligatti, Detwiler, Dietrich, Doran, Dunn, Fenza, Han, Harpster, Hartzler, Hoffman, Kleppinger, Lubert, Lubrano, Oldsey, Paterno, Pegula, Pope, Potts, Rakowich, Rapp, Redding, Schneider, Short, Stanell, Tribeck, and Wagman. The Governor’s non-voting representative, Mr. Shipley, was in attendance.

Present by invitation were Emerita Trustee Riley; Faculty Senate representatives Clements, Mangel, Rowland, Seymour, and Williams; student representatives Akbar, Kelliher, McKay, Pathickal, Walsh, and Zhao; Constituent representatives Belkowski, Houston, and Sturges; ALC Chair Edmondson; and staff members Dunham, Gray, Guadagnino, Harvey, Jones, Lokman, Ortiz, Pangborn, and Sims.

Chair Dambly asked for a moment of silence in memory of Trustee Emeritus H. Jesse Arnelle, who was first elected to the Board in 1969 and served as a Trustee for 45 years before being honored with a lifetime designation of Trustee Emeriti in 2014. Arnelle passed away October 21, 2020 in San Francisco.

Chair Dambly recognized President Barron and his team, faculty, staff, and students for a job well done during a difficult semester. On behalf of the Board, Chair Dambly congratulated graduating seniors and their families, stating the graduates leave Penn State with an education that has prepared them with the experience, knowledge, and keen insight to succeed in what will be a changed world.

Chair Dambly noted the week as Military Appreciation Week at Penn State and despite a virtual format this year, noted Penn State is dedicated to honoring veterans, service members, and military families and recognizing their service and sacrifice. He acknowledged Colonel Eugene McFeely, Senior Director for Veterans Affairs and Services, and the entire Penn State Military Appreciation Committee who worked on the annual tradition. He then introduced Colonel Lee Havird, Commander of the Air Force ROTC Detachment 720 and Professor of Aerospace Studies, and Cadet Colonel Abigail Orth, Air Force ROTC Detachment 720 Cadet Wing Commander, who shared how Penn State ROTC leadership made prudent data-driven risk management decisions to continue the ROTC training mission in a COVID environment. Both thanked the Board and University officials for providing a safe educational environment to pursue academic degrees in person and to conduct key military training activities this semester.

Chair Dambly noted this is the first meeting for two new Trustees: Acting Secretary of Education Noe Ortega who was nominated by Governor Wolf to serve as Secretary of Education in October 2020, and by virtue of his position serves as an Ex Officio member of the Penn State Board of Trustees, and Randall Black, who was newly elected by delegates from Agricultural Societies to serve on the Penn State Board of Trustees. He also congratulated Lynn Dietrich for being re-elected by the delegates from the Agricultural Societies.

Chair Dambly recognized and extended the Board’s appreciation to Senior Vice President for Finance and Business David Gray and Vice President and Dean for Undergraduate Education Dr. Robert Pangborn for their commitment and service to the Board and to the University. Both will be retiring in December and receiving an etching from the Penn State Elms Collection as a token of the Board’s appreciation. Both Gray and Pangborn offered remarks of appreciation and gratitude to the University, Board, and their colleagues, and reflected on accomplishments made as part of the Penn State team.

Chair Dambly noted that the Board met in Executive Session earlier in the day to discuss various privileged matters and called the meeting to order.
Shannon Harvey, Associate Secretary of the Board, conducted a roll call for attendance purposes, and reported that all Trustees were present except for Ortega and Wolf, and that the number present for a quorum was satisfied. Chair Dambly proceeded with the meeting.

**Chair, Vice Chair and Officer Elections**

Chair Dambly asked Frank Guadagnino, Secretary of the Board, to proceed with the Chair, Vice Chair and Officer Elections. Frank Guadagnino, in his role as Secretary of the Board, conducted the election of officers. With 35 voting trustees present at the meeting, 29 votes were cast electronically through the Diligent platform and six by telephone, with 18 votes needed to elect officers. On September 21, 2020, Trustee Potts, Chair of the Committee on Governance and Long-Range Planning, provided all Trustees with the process and timeline for electing candidates for the offices of Chair and Vice Chair of the Board. Trustee Schuyler announced his candidacy for Chair of the Board; and Trustees Kleppinger and Schneider announced their candidacy for the position of Vice Chair of the Board. Candidates submitted biographical sketches and vision statements which were distributed to all members of the Board. Each candidate was also provided an opportunity to speak to the Board about their candidacy.

Mr. Guadagnino called for nominations for the position of Chair. Trustee Oldsey nominated Trustee Schuyler for Chair; the nomination was seconded by Trustee Potts. There being no additional nominations from the floor, Mr. Guadagnino declared the nominations to be closed.

Mr. Guadagnino then called for nominations for the position of Vice Chair. Trustee Delligatti nominated Trustee Kleppinger for Vice Chair; the nomination was seconded by Trustee Doran. Trustee Fenza nominated Trustee Schneider for Vice Chair; the nomination was seconded by Trustee Harpster. There being no additional nominations from the floor, Mr. Guadagnino declared the nominations to be closed.

Mr. Guadagnino stated that the remaining officers of the Board also required election. Incumbent officers included: Secretary Frank T. Guadagnino; Associate Secretary Shannon S. Harvey; Assistant Secretary Carmella Mulroy-Degenhart; Assistant Secretary Crystal K. Straw; Assistant Secretary Kim I. Wright; Treasurer David J. Gray; Assistant Treasurer Kimberly J. Fisher; and Assistant Treasurer Susan J. Wiedemer. In addition to the incumbents, Michele M. Spangler was on the ballot for consideration for Assistant Treasurer.

Mr. Guadagnino provided the Trustees with voting instructions and stated that results of the election would be announced later in the meeting. Given the remote format of the meeting, the voting ballot was available in Diligent for Trustees or telephone to cast their vote.

**Action Items**

Chair Dambly stated that at its November 4th meeting, the Committee on Audit and Risk voted to accept on behalf of the Board the audited financial statements for the year ending June 30, 2020. A review of the audited financial statements by Joseph Doncsecz, Associate Vice President for Finance and Corporate Controller, as of June 30, 2020 are available in Diligent.

Chair Dambly noted that there were seven Action Items for consideration before the Board.

A. Approval of the Minutes of the meetings of the Board held on September 18, 2020 and November 9, 2020. A motion to approve Action Item A was seconded and approved by the Board.

B. Proposed Authorization to Expend Funds, Forker Laboratory Renovation, Penn State Shenango

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution B. David Gray, Senior Vice President of Finance and Business/Treasurer provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.
WHEREAS, Article V, Section 5.09(a)(iii)(7) requires the approval of the Board of Trustees for capital projects under $10 million in cost that are bond-financed; and

WHEREAS, The proposed Forker Laboratory Renovation is recommended by the Administration to be funded with bond financing.

THEREFORE, BE IT RESOLVED, That authorization to expend funds for the Forker Laboratory Renovation, as designed by BHDP Architecture of Pittsburgh, Pennsylvania, is approved in the amount of $7,900,000.

C. Proposed Amendment to Fiscal Year 2018-19 to Fiscal Year 2022-23 Capital Plan

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution C. David Gray provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.

WHEREAS, At its September 15, 2017 meeting the Board of Trustees authorized a five-year plan of capital expenditures by the University and its controlled affiliate, Penn State Health, for the period FY2018-19 to FY 2022-23 ("the Capital Plan"); and

WHEREAS, As part of the Capital Plan, total Penn State Health and College of Medicine capital commitments between July 1, 2018 and June 30, 2023 were approved by the Board of Trustees for up to $1.447 billion; and

WHEREAS, In connection with Penn State Health being established as a separate obligated group, at its November 15, 2019 meeting, the Board of Trustees amended the Capital Plan to remove capital expenditures attributable solely to Penn State Health, resulting in a decrease in planned capital expenditures from $1.447 billion to $775 million for projects relating to the College of Medicine for University-owned or controlled projects that benefit either the College of Medicine and/or both the College of Medicine and Penn State Health (collectively, “COM/PSH Projects”); and

WHEREAS, Upon further review and evaluation, Administration now recommends deferring certain College of Medicine capital projects from the Capital Plan, including the proposed Innovation Pavilion, and instead including upgrades to existing Education and Animal Facility spaces on the Hershey campus.

THEREFORE, BE IT RESOLVED, That total capital commitments under the Capital Plan for COM/PSH Projects for the period of Fiscal Year 2018-19 to Fiscal Year 2022-23 are hereby further reduced from $775 million to $526.3 million, resulting in a revised total Capital Plan of $3.816 billion.

D. Proposed Amendment to Borrowing Authority for The Pennsylvania State University

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution D. David Gray provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.

WHEREAS, At its September 15, 2017 meeting the Board of Trustees authorized $2.2 billion of borrowing and guaranty of indebtedness to support the University’s capital plan for the University and its controlled affiliate, Penn State Health, for the period FY2018-19 to FY 2022-23 (the “2017 Borrowing Resolution”); and
WHEREAS, In connection with Penn State Health being established as a separate obligated group, at its November 15, 2019 meeting the Board of Trustees amended the 2017 Borrowing Resolution to reduce the authorized Obligations (as defined therein) to support the Fiscal Year 2018-19 to Fiscal Year 2022-23 capital plan from $2.2 billion to $2.012 billion (the “2019 Amended Borrowing Resolution”); and

WHEREAS, At its March 19, 2020 and April, 14, 2020 meetings the Board of Trustees authorized an increase in the borrowing authority in the amount not to exceed $1.127 billion to be used solely to fund a one-time advance contribution to the State Employees’ Retirement System and associated costs thereof (the “SERS Borrowing Resolutions”); and

WHEREAS, To provide greater flexibility to the University to meet its financial needs, at its June 23, 2020 meeting, the Board of Trustees expanded the use of the $2.012 billion of capital plan borrowing authority to include working capital needs as determined by the officers of the University (the “2020 Amended Borrowing Resolution”); and

WHEREAS, The Administration is now proposing a reduction in the borrowing authority associated with a reduction in capital commitments in the Capital Plan for the Penn State College of Medicine; and

WHEREAS, Article V, Section 5.09(a)(ii)(5) requires approval by the Board of Trustees for the “Authorization to borrow money.”

THEREFORE, BE IT RESOLVED, That, excluding the borrowing authority relating to the SERS Borrowing Resolutions, the total borrowing authority for the period of Fiscal Year 2018-19 to Fiscal Year 2022-23 is hereby reduced from $2.012 billion to $1.888 billion, with allocation for COM/PSH Projects reduced from $400 million to $275.8 million.

E. Proposed Water Reclamation Facility Land for Perpetual Easement Swap with State College Borough

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution E. David Gray provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.

RESOLVED, That the Board of Trustees, approves the exchange of a fee simple transfer of a University-owned 0.35-acre parcel for a perpetual easement over a 0.42-acre Borough of State College-owned parcel, both located on University Drive in the Borough of State College, Centre County, Pennsylvania.

FURTHER BE IT RESOLVED, That the Officers of the University are authorized and directed to take such steps as are necessary to make effective these resolutions.

F. Proposed Acquisition of 101 North Atherton Street, State College, Centre County

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution F. David Gray provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.

RESOLVED, That the Board of Trustees, approves the acquisition of 101 North Atherton Street, Borough of State College, Centre County, Pennsylvania, comprised of 0.26 acres and one building totaling 6,222 gross square feet from D&P of Ohio for an amount not to exceed $2,850,000.
FURTHER BE IT RESOLVED, That the Officers of the University are authorized and directed to take such steps as are necessary to make effective these resolutions.

G. Proposed Amendment and Restatement of the University’s Long-Term Investment Pool (“LTIP”) Spending Policy and the Investment Policies for LTIP and Non-Endowed Funds (“NEF”)

The Committee on Finance, Business and Capital Planning recommended that the Board of Trustees approve resolution G. David Gray provided supporting remarks and context for this item. A motion to approve the following resolution was seconded and approved by the Board.

WHEREAS, The Board of Trustees on November 6, 1986, adopted a resolution regarding the University’s Endowment Spending and Investment Policies for Endowment and General University Funds and subsequently approved revisions to such policies on March 18, 1995; July 12, 1996; September 8, 2000; November 22, 2002; November 19, 2004; May 18, 2007; September 11, 2009; September 17, 2010; and May 12, 2014; and

WHEREAS, The Officers of the University have recommended amending and restating such policies as presented to the Board of Trustees at this meeting and as hereinafter set forth.

THEREFORE, BE IT RESOLVED, That the University’s LTIP Spending Policy and the Investment Policies for LTIP and Non-Endowed Funds are hereby amended and restated in their entirety as follows:

(I) The Penn State Investment Council (“PSIC”), consisting of the Senior Vice President for Finance and Business/Treasurer, as Chairperson of PSIC, the Chief Investment Officer, Office of Investment Management, and five to nine non-University members (at least one of whom shall be a member [either voting or emeriti] of the Board of Trustees), each serving three-year staggered, renewable terms, is hereby authorized to administer the spending and LTIP investment policies hereinafter adopted by the Board of Trustees and to report as requested concerning the same to the President of the University and to the Committee on Finance, Business, and Capital Planning of the Board of Trustees. In such administration, PSIC may delegate appropriate functions to properly designated University Officers and other University personnel.

(II) In order to preserve the purchasing power of LTIP, spending over time should be limited to a percentage of the market value of LTIP, set at a level anticipated to preserve over time LTIP’s real (inflation-adjusted) value after consideration of investment returns.

(III) LTIP should be invested to attempt to achieve a real (inflation-adjusted) total return over time sufficient to support a spending rate limited in accordance with (II) above, while providing for growth of the LTIP base sufficient to accommodate an assumed rate of inflation.

(IV) A primary investment attribute to be employed in managing the LTIP shall be prudent diversification achieved through flexible yet disciplined implementation of a mix of investments and strategies. The specific construction of the portfolio with regard to strategies employed and managers utilized will be determined by, and under the overall supervision of PSIC, which shall be guided by its written Investment Policies, Objectives and Guidelines. Investment processes and results shall be carefully monitored by PSIC to ensure compliance with such policies, objectives, and guidelines.
In performing its duties delegated under this resolution, PSIC shall be guided solely by fiduciary principles. PSIC shall consider only financial criteria in formulating investment policies or in proxy voting unless specifically directed to do otherwise in a definitive manner by the Board of Trustees.

NEF should be invested to provide liquidity for working capital over the annual operating cycle of the University, and to serve the interim and longer-term needs of the University for plant renewals and replacements, debt service and capital additions. NEF will be invested in a manner that emphasizes capital preservation and meets the cash flow requirements of future University liabilities, while achieving modest growth in the principal value to accommodate future inflation. The specific construction of the NEF portfolio(s) with regard to strategies employed and managers utilized will be determined by, and under the overall supervision of, the Office of Investment Management (“OIM”), which shall be guided by written Investment Policies, Objectives and Guidelines approved by the Senior Vice President for Finance and Business/Treasurer and the Corporate Controller’s Office (CCO). Investment processes and results shall be carefully monitored by OIM to ensure compliance with such policies, objectives, and guidelines.

Long-term assets approved for commingling with LTIP by the Board of Trustees will follow LTIP policies overseen by PSIC.

Chair Dambly introduced Dr. Barron for the President’s Report and Discussion. Dr. Barron first thanked the Chairman for his years of service in the role, noting Dambly’s remarkable commitment in time and effort on behalf of the University and his efforts to promote collegiality within the Board and within the University.

President’s Report and Discussion

Dr. Barron delivered a report titled Key Trends Key Actions REVISTED.

For companion slides, reference [Appendix I]

The meeting is available in its entirety at https://youtu.be/Z3pmzX0MptM

Chair Dambly thanked Dr. Barron for the relevant presentation and topic discussion. He then concluded his service as Chairman of the Board with a reflection on highlights and accomplishments during his 3-and-a-half-year tenure and thanked fellow Trustees, University leadership and staff for their work and leadership. His noted highlights included an improvement in communications and collegiality, an improved budget process, a comprehensive Board assessment that led to three Board retreats, the establishment of the Racism, Bias and Community Safety Task Force, governance changes made to the Standing Committee structure to add a Standing Committee on Equity and Human Resources, and the establishment of diversity goals for the Board. Dambly said he was honored and proud to serve his alma mater, which has been a highlight of his life, both personally and professionally.

Report on Chair, Vice Chair and Officer Elections

Chair Dambly called on Secretary Guadagnino to report on the Chair, Vice Chair and Officer Elections. Guadagnino reported for the position of Chair, there were 35 votes cast. Eighteen votes were necessary for election. Trustee Schuyler received 35 votes. For the position of Vice Chair, there were 35 votes cast, 18 were necessary for election. Trustee Kleppinger received 26 votes; Trustee Schneider received 9 votes.

Matthew W. Schuyler was elected as Chair of the Board, effective immediately.

David M. Kleppinger was elected as Vice Chair of the Board, effective immediately.
For each of the Board Officer positions, Secretary; Assistant Secretaries; Treasurer, and Assistant Treasurers, all incumbents were re-elected, effective immediately; and Michele M. Spangler was elected as Assistant Treasurer, effective immediately.

**Announcements by the Chairman of the Board of Trustees**

Chair Dambly called on the 30th Chair of the Penn State Board of Trustees, Matthew W. Schuyler, to close the meeting. Chair Schuyler thanked Dambly for his service, noting additional highlights and accomplishments during Dambly’s tenure. Chair Schuyler presented Dambly with a gift of appreciation, a boxed gavel set from the Elms Collection, on behalf of all Trustees. Chair Schuyler also presented Dambly with a Penn State Yeti cooler to recognize the spirit of collegiality and friendship Dambly extended to Trustees.

Chair Schuyler stated it was an honor to be selected as Chair of the Board and looks forward to serving Penn State in this role. He stated the Board will continue to work through the COVID crisis and its impact on higher education, as well as strategic matters such as affordability, financial management, innovation, the future of higher education, and inclusivity for all at Penn State.

Chair Schuyler called for other matters to come before the Board. There being no other business, the public meeting was adjourned at 3:00 p.m.

Respectfully submitted,

Frank T. Guadagnino
Secretary, Board of Trustees
Presentation Overview

How has COVID-19 affected Key Trends and Strategies in:

- Enrollment
- Financial
- Faculty
- Research
- Future of Learning
Key Trends — Enrollment
National Enrollment Trends — Pre-Pandemic

Demographic mismatch for students of the future:

• Northeast continued decline in birth rates and high school graduates.

• Greatest decline - well-prepared students with high income.

• Greatest growth – urban, lower income, first-in-family, minorities.
Achieve Penn State: Programs and philanthropic strategy for scholarships that enable low income first-in-family students to graduate and graduate on time (PASSS, STEP, RaiseMe, Complete Penn State, Smart Track to Success).

Ensuring graduation of a population not expected to graduate (US News – predicted vs. actual) But...low income students still graduate 22% below the university average.

$477 million raised for Open Doors Program priority to date.

Inaugural Discover Awards: Cost competitive – adjacent seven states; 775 new student admits for Fall 2020.
Current Penn State Actions

- Data-driven media approach to recruitment.
- “All In”: The importance of an inclusive campus.
- Common Application: Increase in applications and diversity of applications.
- Strategic focus on diversity, equity and inclusion.
- Educational Equity Scholarships (total impact $25M).
- Next level of commitment - taskforces nearing completion (Report to Board’s Oversight Taskforce on November 18).
  - Select Commission on Racism, Bias and Community Safety
  - Student Code of Conduct
Pandemic’s Toll on Higher Ed Enrollment

- Largest enrollment declines in freshman, part-time (community colleges declined 8%) and international students (11.2%).
- Enrollment among undergraduates is down 2.5% this year across all types of institutions, and graduate enrollment is up 3.9%.
- Overall enrollment is down 1.8% compared with the same period last year.
- Four-year publics have the most robust enrollments.

Source: National Student Clearinghouse Research Center
Penn State’s Fall 2020 Enrollment Data

- Overall enrollment, excluding Penn College, saw a 1.8% decline to 89,816 compared to fall 2019.
- Undergraduate enrollment is 74,446, down 2.2%.
- First-time baccalaureate students number 15,614, down 2.3%.
  - 8,465 at University Park
  - 6,799 at the Commonwealth Campuses,
  - 350 in the World Campus
- Nearly even if “deferred” enrollment included
- Graduate enrollment increased 0.6% to 14,039.

Source: Penn State Census
Post-Pandemic Forecast

• Most predictions suggest a short-term enrollment impact.
• Whitman Insight Strategies – Penn State analysis:
  o Opportunity to attract students who wish to remain close to home.
  o Students “stuck” in the decision-making process despite improved personal outlooks.
  o Desire personal connections to make decisions (e.g. tours).
  o Parent concerns about COVID safety and career success.
  o Penn State favorability markers are higher now than in June.
  o Perceptions of openness and inclusion – Penn State rated highly compared to peers.
Penn State needs to:

- Focus on flexibility – “meet you where you are.”
- Focus on those thinking “locally” to drive Commonwealth Campus enrollment.
- Double-down on our “fit” – provide unprecedented access to students, faculty and space virtually.
- Proactive communication on what we are doing and how we are moving forward.
- Focus on career outcomes (e.g. recruiter surveys rank us 5th; tied with MIT).
Key Trends — Financial
Financial ranking organizations place 1/3 of all colleges and universities as unsustainable (another quarter at risk).

Small schools most problematic: enrollment demographically controlled; 40% have fewer than 1,000 students; 80% have fewer than 5,000 students (800 schools have critical finances).

State flagships and well-heeled privates: the most robust.

State funding is predicted to continue to decline.

Forbes most recent report (Nov. 2019) has financial conditions deteriorating. D financial grade colleges have increased by 61% since 2013.
Pandemic’s Toll on Higher Ed Finances

- Forbes estimates pandemic impact on higher ed exceeded $120 billion by the start of the semester – not built into any university plan.
- Cost-cutting measures have become common.
- Dependency on enrollment growth appears even more problematic.
- Overwhelmingly, colleges and universities went “remote.”
- Pandemic revealed a lack of innovation in higher ed.
- Students believe online education delivers less quality and value.
- Loss of liquidity.
Penn State’s Pre-Pandemic Actions to Ensure Financial Stability

- Focus on recruitment.
- Tuition taskforce.
- Focus on retention to graduation—becoming key financial factor—a student retained is a student we don’t have to recruit.
- Substantial efforts to create efficiencies and savings for innovation and affordability. Huron savings approach—Penn State’s leadership commitment to the Board.
Penn State’s Strategies Since Pandemic

- Plan for a budget that cannot be balanced by reliance on traditional out-of-state students who are increasingly financially challenged. Will pendulum swing even more to international, but are they less likely to come?
- Started early on extensive cost-cutting measures – hiring chills, salary freezes, unit budget cuts, etc.
- Innovation dollars sacrificed for financial stability.
- Accelerated investment in the vibrancy of online/remote education, building upon Penn State foundations and expertise.
- Strong efforts to protect our enrollment.
Key Trends — Faculty
National Faculty Trends—Pre-Pandemic

- Faculty are aging: at least 25% of tenured and tenure-track professors are approaching 70. Renewal of the faculty is more challenging than ever.
- Institutional response: hire part-time and non-tenure track (In 1969, 80% tenured; now, less than 1/3). But does high use of adjuncts result in decreased student success?
- Emergence of mission faculty; mission support—preceptors as well as TA’s; coupled with instructional designers (if you can afford it).
- Does shared governance become a burden?
In fall 2018, of the 1.5 million faculty in degree-granting postsecondary institutions, 54% were full-time and 46% were part-time.
Penn State Actions—Continuing

- 47% tenured or tenure-track; adjuncts only 6% of credit hours.
- Voluntary Retirement Program was an opportunity to add young faculty (202 faculty) with $14M in savings from faculty and staff positions.
- End of college/campus recycling associated with significant shift to non-tenure track (restarted because of pandemic).
- Philanthropy providing endowments to support new faculty hires: Digital Innovation, Transformative Experiences, Impact the World themes.
- Strategic funding of technical and support staff.
Key Trends — Research
National Research Funding Trends

• Considerable downward pressure on federal support.
• Post-recession: Flat to declining federal support except in areas perceived as having more direct impact (e.g. NIH, computer science).
• 1960: Feds 73% of university support – now 60%; corporate sponsorship 3% to 6%; universities 10% to 20%.
• Research universities flat or slight increase; smaller educational institutions flat or decrease.
Pandemic’s Impact on Research

- AAU reports that the research university response to the pandemic has built a stronger degree of trust that is bi-partisan.
- Pandemic has demonstrated the importance of interdisciplinary research.
- Opportunity to leverage that trust by continuing to focus on enduring problems.
Penn State Actions Taken—Continuing

• Focus on global issues—energy, water and food security; human health; economic development (Impact the World themes).
• Focus on national needs (AI, additive manufacturing, 5G, opioid epidemic, child maltreatment).
• Importance of interdisciplinary investments.
• Continued growth in research expenditures (up over 4% and exceeding $1.0 billion for the first time in our history).
• Diverse research portfolio receives funding from all 15 Federal agencies.
Some Specific Penn State Actions Taken Since the Pandemic

- Rapidly shifted labs and research to study COVID-19 to contribute to the national effort.
- Contributed PPE to hospitals and medical personnel when there were national shortages.
- Focusing on safety, while enabling research personnel and students to continue their research.
Key Trends — Future of Learning
Future of Learning—Pre-Pandemic

- Upward mobility: High School 4%; AAU College 45%.
- Rapid automation/“Jetson’s lifestyle”: College education even more important to achieve high salaries.
- Cognitive, intrapersonal, and interpersonal skills key to career success (role of internships plus other engagement).
- Learning through failure vs. learning by syllabus.
- Competency-based, badge-based; stacked credentials.
- Data analytics in the classroom.
Four Key Trends
From the Berlin School of Creative Leadership

1) The *unbundling* of education--more competency-based approaches.
2) *Personalization*--through technology and other resources.
3) *Continuous* education--transcending time, place, and the traditional 'bundles' of requirements.
4) *Creativity orientation*--commitment to integrate arts and humanity-minded learning with more technical and critical thinking skills.
Penn State Actions—Pre-Pandemic

- “Open concept” for courses across the university to allow for seamless progress toward degree.
- Strategic Plan focus: priorities including Digital Innovation and Transformative Experiences (requires major investment).
- Living laboratories.
- Invent Penn State.
Pandemic’s Toll on Learning

Whitman Insight Strategies – Penn State analysis

• Students are concerned about the value and quality of online.
• Students want the college experience: Socialization, extracurriculars, sports, living away from parents.
• By a large margin, students want a combination of in-person and online instruction: The college experience with flexibility and choices.
Penn State Strategies Moving Forward

- Analysis of outcomes are driving decisions.
- Focusing on “meeting students where they are” with in-person, hybrid, remote synchronous, and remote asynchronous classes.
- Accelerating opportunities and resources to enable remote teaching at a high level.
Key Conclusions—National

• The pandemic has accelerated many of the trends in higher ed.
• Financial strain is exacerbated by the pandemic coupled with demographic changes and decreasing support for public higher education.
• Predictions indicate robust outcomes for public flagships (research points to need for flexibility, career success, support programs, fit, etc.—strategies already in place at Penn State that we can amplify).
• Students want a college experience with flexibility.
Key Conclusions—Penn State

- One Penn State 2025 is more important than ever: Pandemic accelerated this path (meet students where they are; invest in educational experiences online; need for transformative experiences even if online).
- Much of our strategic programming reflects national trends.
- Key issue is innovation in the face of growing financial strain.