

PENNSSTATE



UNIVERSITY | **LIBRARIES**

**The University Libraries
Strategic Plan
2008/2009 – 2012/2013**

**June 30, 2008
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NOTE: The Penn State University Press Strategic Plan for 2008-2013 has been developed separately from the Libraries and is being submitted along with this document. The George T. Harrell Library of the Penn State Hershey College of Medicine and the H. Laddie Montague, Jr. Law Library of Penn State Dickinson School of Law are represented in the strategic plans of those schools as well as in this plan.

I. Executive Summary

The University Libraries are a strategic asset to Penn State, advancing intellectual discovery, information literacy, and lifelong learning, all in support of the University's strategic goals in teaching, research, service, and outreach. As Penn State distinguishes itself as a comprehensive student-centered research university, the Libraries will be distinguished through services and collections that enable future learning and new research methods. Rooted in both the bricks and mortar spaces and the online library collections, our outstanding faculty and staff have adopted more fluid roles that link us to the entire "life-cycle" of scholarship and research, from inception and creation to access and preservation. The Libraries are nationally recognized for our collaborative efforts to bring positive change to the scholarly communications systems that underwrite the research enterprise.

From now until 2013, we will allocate our resources to develop more integrated student services, deeper collections that match the research priorities of the University, and a robust technology infrastructure to manage and preserve the e-research outputs in all disciplines. Core library values and services will provide the basis for consulting and liaison programs serving a changing professoriate and student body. To achieve our vision for the Libraries in 2013, we have defined strategies, tactics, and strategic indicators in five areas of focus:

1. Services
2. Collections
3. Information Technology
4. Diversity
5. Agility

Each of the strategies defined in the University Libraries' plan are important to the overall development of the Libraries' collections and services over the next five years and beyond. However, we have identified three key programs that will have a broad impact on the Libraries' ability to transform services to our students and faculty. Implementing these programs will transform our own roles and the information services profession.

1. ***Accelerating the Transition to a Digital Collection***, to improve access for all Penn State users while also improving collections in new, interdisciplinary areas.
2. ***The Knowledge Commons at University Park***, a dynamic environment integrating student research support with technology services. ITS will be a significant partner.
3. ***Cyberinfrastructure, e-Content, and Data Stewardship***, which the Libraries and ITS will develop jointly to provide a cohesive suite of access, security, discovery, preservation, curation, repository, archival, and storage services for born digital data.

II. Mission, Vision, Values

Mission

The University Libraries advance intellectual discovery, information literacy, and lifelong learning, serving Penn State's strategic goals in teaching, research, service, and outreach. As an active participant in the worldwide community of scholars, our faculty and staff select, create, organize, and facilitate access to resources that are relevant to the University's programs and pursuits. The Libraries create a welcoming, supportive, and inclusive environment that connects students and scholars to the world of information and ideas.

Vision

The University Libraries will be a national leader in the integration of intellectual content, services, and technology within the larger world of ideas and knowledge.

Values

The Libraries are committed to:

- Intellectual freedom
- Equitable access to resources
- Superior service
- Agility and responsiveness
- Leadership
- Collaboration
- Diversity
- Stewardship of collections and resources
- Patron confidentiality and privacy
- Excellence in professional practice
- Scholarship in librarianship and related fields

III. For the Future: The University Libraries Today and in Ten Years

The University Libraries Today

The University Libraries are a strategic asset to Penn State. The Libraries provide a wide array of services, collections, and facilities to support teaching, research, and learning. Each of the 37 Penn State libraries distributed across 24 Penn State campuses tailors their collections and services to support the needs of the local community or disciplines. Designated by the State Library of Pennsylvania as one of four State-wide Library Resource Centers, we support Penn State's historic land-grant mission by providing the Commonwealth with access to our collections at any Penn State library and through services that include interlibrary lending and digitized collections online. We contribute to Penn State's global mission, assisting our researchers in the advancement of knowledge worldwide, and promoting broad access to scholarship and research as a public good for society and as a benefit to our local community. Ranking eighth among the membership of the Association of Research Libraries, we support an academic and outreach mission that continues to broaden and present significant challenges for the next decade.¹

We are recognized for high quality services by all of our community. Our 2008 LibQUAL+™ survey reports that across all populations of Penn State, the “overall quality of service provided by the library” is rated 7.47 on a 9 point scale, with 9 being the highest (this equates to 4.1 on a 5 point scale).² 79.5% of respondents report using the physical libraries at least once a month, while 86.4% report using library resources through the Web in a given month. The LibQUAL+™ survey shows that collections and information discovery/access are the library services most important to our faculty and graduate students. However, accessibility does not always equate with success in locating what one needs. Our faculty continues to ask for research assistance and services that support basic functions such as citation management, while undergraduates are most concerned with the physical spaces in the Libraries and the in-person help that they can receive there.³

We know that Penn State's students and faculty have choices when they begin to seek information. Over 95% of our community uses online gateways such as Google at least once a month.⁴ Online services such as Amazon make it easier to buy a book than to go to the library. In general, the online network has become the starting point for nearly all information discovery. The Libraries embrace this shift, which enables us to offer richer, more specialized services to

¹ Association of Research Libraries Annual Statistics, 2005-06. ARL ranks research libraries by total expenditures.

² LibQUAL+™ is a suite of services, offered by the Association of Research Libraries, that libraries use to solicit, track, understand, and act upon users' opinions of service quality. The program's centerpiece is a rigorously tested Web-based survey bundled with training that helps libraries assess and improve library services, change organizational culture, and market the library. The Libraries conducted its 2008 LibQUAL+™ survey in April-May 2008.

³ 2008 FACAC survey. The FACAC survey was conducted in Spring Semester 2008. The FACAC survey included questions about the Libraries, but also focused heavily on technology in general.

⁴ LibQUAL+™ 2008.

Penn State. At least 92% of our graduate students and faculty use online resources licensed by the Libraries at least once per month.⁵ The Libraries, where feasible, negotiate for system-wide electronic access for all Penn State campuses, and we define our collections as “one collection geographically dispersed” across all Penn State campuses. Penn State’s collections now include over 5.2 million volumes, and more than 30,000 full-text electronic journals.⁶ Roughly 53% of our annual \$17M collections budget is allocated to multi-year licenses for electronic resources, up from 5% in 1997.⁷ While we continue to acquire and license collections for Penn State, we are now also called upon to identify, curate, and manage access to a broader range of information resources accessible across the world. Traditional collection measures can no longer give a complete picture of the information landscape we work in.

In the past several years, the Libraries have been nationally recognized for our collaborative efforts to bring positive change to the systems of publication and dissemination that underwrite the research enterprise. The alignment of the Penn State University Press to report to the Dean of University Libraries and Scholarly Communications ties processes of publication closely to the traditional mission of collecting and stewarding the books and journals that make up the scholarly record. As budgets are squeezed, more publishers cut their programs for new and small disciplines. Through the Office of Digital Scholarly Publishing, both the Libraries and the Press can experiment with services that will enable Penn State faculty to disseminate their research in new ways that best achieve the goals of the researcher, and in ways that will ensure the longevity of those findings.

Environmental Scan for the 2008-2013 Strategic Plan

To identify our priorities for the next five years, we began by scanning our environment. Much of the change we foresee is premised on technological innovation, but it is also a reflection of political and economic priorities, as well as the changing culture and demographics of our State-wide community. The breadth of issues demonstrates both how central libraries are to higher education and the wide range of services that we provide to the Penn State community. Some of the most important elements in the environment are listed below.

- Public funding for higher education continues to decrease, while inflation in print and electronic publishing continues to erode the Libraries’ purchasing power. Meanwhile, universities and colleges hear more public calls for fiscal and educational accountability.
- Security in both physical and electronic environments has become critically important to universities and libraries.
- Our students rely on the physical libraries as their primary places for private and communal academic study, seeking more hours and expanded services. However, limited space available to the Libraries will require converting existing facilities to develop new services.

⁵ LibQUAL+™ 2008.

⁶ Data reported to the Association of Research Libraries 2007/2008: 5,220,080 vols.

⁷ Estimate of expenditures on e-journals and databases provided by University Libraries’ technical services department.

- Classroom learning has become progressively more collaborative, and research teams frequently span institutional and international borders.
- Expansion of Penn State's academic programs in law, medicine, and the health and life sciences at University Park will impact Libraries' strategies for collections, including space, online access, and budgeting.
- Discovery of and access to information by our users has been decentralized and moved to the network, with multiple points of entry, including OCLC, Google, Amazon, and other commercial enterprises, in addition to our local catalog and Website.
- Consumer experience now drives student and faculty expectations for fast, seamless, and transparent access to educational services and information. Our students now see no distinction between help in locating information and help needed to make technology work for them.
- Information technology has begun to change conceptions of privacy in ways different from traditional library approaches.
- Research methods and funding now focus heavily on interdisciplinary research, which is reflected in the success of Penn State's research institutes.
- Technology will shape practices of research and scholarship, enabling new modes of discovery previously not possible, and challenging the existing methods of scholarly communication. "Informal" and non-traditional distribution channels for academic information and scholarship have proliferated and taken on an increased importance.
- Commercialization of academic research has created a fragmented and contentious intellectual property environment, challenging and limiting traditional academic uses of information.
- Transition from print to electronic collections has accelerated. In many libraries, historic print collections are being removed to remote storage or discarded in favor of electronic access to both journals and monographs. Research libraries are beginning to explore how to share their traditional collections across multiple institutions to rely on fewer print copies in their own collections while preserving copies for the nation.
- Breadth of services needed in a contemporary research library require our staff to maintain a greater diversity of skills and subject expertise.
- Demographics of our students, faculty, and colleagues continue to shift toward a more pluralistic society, requiring a greater understanding of the importance of diversity.
- As people live and work longer there is increased emphasis on lifelong learning, and our student body and alumni will reflect these trends.
- Online learning continues to grow, providing the University with more opportunities to educate members of the Commonwealth and students worldwide. These factors may change how our undergraduates at all campuses utilize library collections and services and how they will complete their education at Penn State in the next five to ten years.

The challenges presented to the Libraries are great, requiring us to anticipate the impacts of these factors through multiple strategic efforts.

The University Libraries' Next Decade

The Libraries are already firmly rooted in both bricks and mortar spaces and virtual online library collections. We have an outstanding and dedicated faculty and staff who have embraced the changing environment to create new services that are still based on the core library mission

of providing access to and preserving the world's cultural record. As Penn State distinguishes itself as a comprehensive student-centered research university, the Libraries will be distinguished through services and collections that enable future learning and research methods. In doing so, we will transform our own roles and the information services profession.

From now until 2013, we will reallocate our resources and seek new resources to develop more integrated student services, deep collections that match the research priorities of the University, and a robust technology infrastructure to manage and preserve the e-research outputs in all disciplines. Core library values and services will provide the basis for new consulting and liaison programs serving a changing professoriate and student body.

Because physical libraries will remain important parts of student life, especially at University Park and other resident campuses, we will create new learning spaces at all campuses that engage our students and inspire their research. Our personal services will become more visible aspects of our online library as well, ensuring that we can help users regardless of their location. Our instructional programs will be stronger and more directly integrated into the curriculum through instructional partnerships throughout the Penn State system. In 2013, print resources will be acquired, but they will represent a smaller share of our overall collections budget. Information technology is now core infrastructure to the Libraries and to research and scholarship across the board. Our students now see no distinction between our support for locating information and help needed to make technology work. Therefore, support for information discovery, content, and the use of technology will be completely integrated. Collaborations with ITS and campus and academic units will be critical to maintaining transparent and seamless access to knowledge and the tools to use it. Our services to the research community will grow through support for e-research that is data-driven, collaboratively executed, and computationally based. We will have enabled much of the University's programs to distribute research findings immediately and directly to their disciplines and to solidify Penn State's reputation as a world-class research university.

Farther forward, the Libraries in 2018 will likely look very different, and so will the University. A significant portion of our current leadership and faculty will have retired, and our current students will begin to take their place. The learning practices of today's student will inform the research and teaching practices of tomorrow's faculty. Research in all disciplines will have embraced computational methods and will use a variety of visual media to analyze and present the work in publication and in the classroom. Scholarship will be conducted and communicated almost entirely online. Digitally based research will be formally accepted by promotion and tenure committees in the humanities and social sciences, as well as the physical sciences. Penn State will serve as a focal point for internationally based collaborative research programs. Interdisciplinary research will have spawned entirely new fields and programs, especially in the sciences and engineering fields.

In the past, libraries were rated primarily by the size of their print collections. In 2018, research libraries will be distinguished by the quality of their services and their support for the "life-cycle" of scholarship on their campus, ranging from new research initiatives to student learning. Print collections across the nation will make up a still smaller percentage of total resources as more content is delivered exclusively online and collections will be almost completely digitized. Major research collections like Penn State's will serve as trusted repositories for the limited number of "last copies" retained to ensure preservation and serve national needs. Special and

archival collections will grow in importance for research libraries and will see new life as historical resources and primary source materials are digitized and become available in electronic formats. This is one area of research library collections in which paper and print based materials will continue to grow to meet the specialized needs of a variety of disciplines and research projects, and in which libraries will continue to invest in print based materials where they have an institutional reputation as the center for a given area of historical research. The digitization of these resources for worldwide access will expand the use of rare collections now locked away in vaults and open primary source materials to undergraduates as well as established scholars; but the artifacts will be preserved locally because of their value.

The Libraries will have invested during the previous five years in systems that support the creation and preservation of digital scholarship, and these will be undergoing continued development. By 2018, the Libraries' scholarly communications programs will be integrated completely into the work of our subject specialists serving the departments and disciplines. We will continue to provide research assistance, directing students and faculty to the best possible research sources, while also providing services that allow authors to deposit seamlessly their own research findings into an international network of discipline based digital libraries. Our librarians will have deeper subject expertise and first-hand working knowledge of the research practices in the fields they serve.

In ten years online instruction will be an essential part of the University's degree programs, and some degrees will be offered exclusively online. Perhaps half of our students will never visit a Penn State campus while undergraduates in residence will continue to be divided evenly between University Park and the campuses. Students will access our librarians in person and online throughout their coursework, receiving immediate customized support that is linked directly to their assignments.

Achieving our Goals through Collaboration

Libraries have a long history of collaborative services and programs across institutional boundaries including cooperative cataloging, interlibrary lending, and joint acquisitions through consortia, all of which have allowed a more efficient use of resources across all libraries. Over the next decade the University Libraries must collaborate with other research libraries, consortia, and service units at Penn State to achieve our vision. We will see jointly offered services that blend traditional roles between technologists and librarians. We will likely see collections begin to be shared and jointly managed in ways that significantly differ from the local collections approach. These collaborations will allow the Libraries to leverage its expertise and resources to complement that of other agencies and provide the best possible service to Penn State. Following is a partial list of collaborations that will be key in the coming years.

The Research Libraries of the CIC: Cooperative collections licensing with CIC universities saves us tens of thousands of dollars annually, and the CIC libraries are now seeking ways to expand those programs to negotiate more effectively with publishers. More recently, the CIC joint partnership with Google has given rise to a "Shared Digital Repository," a shared technology platform to manage, preserve, and provide access to the Google and other digitized collections. The collective digitization program begun with Google will also likely jumpstart discussions about sharing print collections throughout the CIC to enable all libraries to reduce the overall size of their physical collections (see "Strategic Area 2: Collections").

The Penn State University Press: The nucleus of our scholarly communications programs and services is found in our work with the Press. As budgets shrink, researchers in smaller disciplines, and less-well established areas of research, face difficulty in publishing their work. Through the Office of Digital Scholarly Publishing, the Libraries and the Press can begin to examine and serve the non-traditional publication services in place or needed at Penn State's campuses. Information technology enables nearly anyone to distribute information online, but working together, the Press and Libraries will provide economies of scale to support our University's scholarly communications needs. The ODSP provides us with an opportunity to draw on the strength of both units to develop a comprehensive set of services that will enable Penn State and its researchers to distribute its intellectual assets in the most productive way (see "Strategic Area 2: Collections").

Penn State Information Technology Services (ITS): ITS and the University Libraries have a strong and fruitful history of partnership and collaboration. In this strategic planning cycle, we have worked together to build on our existing partnership and respective strengths to develop jointly strategies in two key areas (see "Strategic Area 3: Information Technology").

Service Delivery: The Knowledge Commons

The Libraries and ITS will coordinate appropriate services to provide transparent, seamless, and cost-efficient support to our users at their point of need. A major focus for our joint efforts in the next three years will be the implementation of the Knowledge Commons facility in the Pattee/Paterno Library. The Knowledge Commons will provide students with access to coordinated delivery of reference, IT support, and academic consultation services, as well as access to a variety of technical hardware, software, and information resources. We are developing this service concept as one that will be scalable to the campuses as well. (Appendix B provides more details on this program.)

Cyberinfrastructure, e-Content, and Data Stewardship Program

Complementing ITS's existing high performance computing and networking infrastructure, and the Libraries' developing scholarly communications programs, we will partner to develop a Cyberinfrastructure, e-Content, and Data Stewardship program. E-science or e-research is typically defined as collaborative, distributed, large-scale, and data-intensive. ITS and the Libraries will work together to develop sustainable strategies for the stewardship of the outputs of e-science over its life cycle – providing a cohesive suite of access, discovery, preservation, curation, repository, archival, and storage services. Our phased approach will initially entail needs assessments and prototyping of beta services while building out an infrastructure that can be extended to other areas of digital content management. (Appendix C describes the program in more detail.)

Penn State Academic Units: Working relationships with the campus administrations and University Park deans remain strong. The Libraries' administration has worked closely over the years with the Chancellors and Directors of Academic Affairs at the campuses and with the administration of the Commonwealth Campuses on integrating the Libraries' services and faculty into the academic life of each campus. Additionally, since the latest campus reorganization, we are strengthening our partnerships with the campuses for the improvement of

library facilities and student services, the development of cooperative technology support at each campus, and cooperation in development and fundraising initiatives. Hershey and Dickinson libraries are currently engaged in strategic analysis of their collections, balanced against the needs to support growing programs and shifting uses of their space. Likewise, at University Park, headway has been made in improvement to some of the subject libraries' facilities while more remains to be done. We must continue to collaborate with administrators and faculty in all of the colleges and campuses to best leverage the resources of the Libraries and its academic partners.

Areas of Strategic Focus for 2008-2013

To achieve our vision for the Libraries in 2013, we have defined five areas of strategic focus: services, collections, information technology, diversity, and agility. Each of these strategic areas will be guided by an overarching goal and several key strategies. We will enact the goal through several high-level tactics (with subsequent development of unit-level tactics within the Libraries), as well as through the ongoing operational services that form the basis of the Libraries' services. For each area we will track our progress through several strategic indicators.

From these areas of focus, we have highlighted three initiatives for special focus in the next five years, which are described in greater detail in the appendices: 1) Accelerating the Transition to a Digital Collection; 2) the Knowledge Commons at University Park; and 3) Cyberinfrastructure, e-Content, and Data Stewardship. The Libraries seek strategic investment funds for each of these major initiatives. The latter two initiatives benefit from joint planning, budgeting, and implementation with ITS, building a stronger and deeper collaboration between these two service units. Each of the strategies defined in the University Libraries' plan is important to the overall development of the Libraries' collections and services over the next five years and beyond. However, we have singled these three programs out for the wide impact they will have on the Libraries and the University, enabling us to transform our service to the Penn State community. We are committed to moving these programs forward through our annual planning and budgeting cycles, private giving, and grants.

Our five strategic areas are described in more detail below.

Services: In five years, our services, both in person and online, will have been redeveloped to support the changing nature of teaching and learning. We expect that both will continue to migrate online at Penn State, and we will expand our librarians' online presence to enable our students and faculty to use the Libraries regardless of their location. Our services will enhance their abilities to locate and vet the information necessary to create knowledge for our networked world. Our major strategic investment in this area will be a student-centered "Knowledge Commons." The Knowledge Commons will incorporate service partnerships with ITS and academic programs across the University to provide the broad range of instructional, consultative, and technology services necessary to sustain multiple modes of research and learning. This program will provide a focal point for significant change in how we support student learning, and will allow experimentation with new services that can be implemented at other Penn State campus libraries. (Appendix B discusses the Knowledge Commons at University Park in greater detail.)

Collections: The Libraries have negotiated for system-wide electronic access for all Penn State campuses, and we define our collections as "one collection geographically dispersed" across all

Penn State campuses. Penn State's collections now include over 5.2 million volumes, and more than 30,000 full-text electronic journals.⁸ Roughly 53% of our annual \$17M collections budget is allocated to multi-year licenses for electronic resources, up from 5% in 1997.⁹ By 2013, our collections will still include new print materials, but the large majority of our collections budget will be devoted to purchasing, licensing, or otherwise supporting access to electronic resources. Our collections will also include a wider array of non-traditional content, including video, audio, research sensor data, and the inputs/outputs of virtual simulations conducted at Penn State and abroad. These types of materials will require new methods of providing access and preservation, as well as service interventions within the existing system of scholarly communications. The migration to electronic collections is well underway, and will accelerate in the next five years. Though this will improve access, it comes at greater costs. Penn State typically does not own these collections: we "rent" them. Because annual inflation in electronic and print publishing averages between 7% and 12%, the buying power of the Libraries' collections budget continues to erode significantly, and our ability to meet the needs of the University is threatened. Our major strategic challenge in the next five years will be to reexamine our historical funding models to ensure that our collections funds best support Penn State's new and existing areas of academic strengths.¹⁰ (Appendix A provides more details on the challenge to accelerate the transition from print to electronic resources.)

Information Technology: Information technology services are essential infrastructure, critical to all aspects of the Libraries' mission, and to Penn State's research and instructional programs. Over the next five years this infrastructure will demand continued investment and experimentation to meet the emerging demands of e-research, as well as the basic technical support for teaching and learning that takes place online and in "real" (technology-equipped) classrooms. Our catalogs and other online indexes will be redeveloped to enable more transparent access to the world's information resources. Partnerships will be key to our success in deploying a robust IT infrastructure. We have now begun co-developing with ITS deeper, seamless services blending research support with technical help. The Knowledge Commons will be a major focus for that effort. By 2013, our Cyberinfrastructure, e-Content, and Data Stewardship program, developed jointly by the Libraries and ITS, will provide a cohesive suite of access, security, discovery, preservation, "curation," repository, archival, and storage services for born digital data. We will standardize our services and approaches to extend benefits beyond the needs of e-science to be applied equally to all digital content stewardship. The Cyberinfrastructure and e-Content program will be our major strategic investment in this area, allowing us to redevelop the current generation of technology services for the next decade. (It is described in more detail in Appendix C.)

Diversity: Diversity is at the root of Penn State's historical mission to provide equitable access to education regardless of background, and the principle contributes to the breadth of intellectual inquiry that the University supports. The Libraries' collections, spaces, and personal services

⁸ Data reported to the Association of Research Libraries 2007/2008: 5,220,080 vols. Estimate of e-journals provided by University Libraries' technical services department.

⁹ Data based on the University Libraries' annual acquisitions budget statistics.

¹⁰ Data based on the University Libraries' annual acquisitions budget statistics.

demonstrate our commitment to these principles in support of teaching and learning. In five years, we will continue to make progress in our diversity efforts. Our most recent University Libraries Equity and Community Assessment (Spring 2007) shows significant acceptance of the University's and the Libraries' diversity initiatives. It also pointed out a continuing concern with "classism" in the workplace and with recruitment of a diverse staff. Our efforts will aim to maintain an open and welcoming climate for our users and for our staff. We will emphasize how diversity promotes the values of higher education and defines a community of civility, respect, and trust. The Framework to Foster Diversity will continue to guide our efforts, and our diversity initiatives will be assessed to keep them in alignment with the Framework.

Agility: Our environmental scan reveals a wide range of factors that will drive change in higher education research libraries in the next five years. To support the needs of Penn State, we cannot afford simply to respond to change; we must create it within our organization and enable it within Penn State so that we can continue to grow as a student-centered research university. The priorities outlined in this plan will demand that the Libraries take risks and position itself to adapt quickly to new program needs. The employees of the Libraries are our most important resource, and we will invest in them through continued training and development programs. We will recruit librarians with new skill sets and with diverse professional backgrounds. We will rigorously assess our activities to develop an organizational model that embraces change, promotes continued improvement, and judiciously allocates its resources to support the University's strategic needs.

The goals, strategies, tactics, and measures for each strategic area can be found in the pages that follow.

IV. Areas of Strategic Focus

Area 1: Services

Goal 1:

The University Libraries will meet the needs of current and future students and faculty through enhanced services that inspire learning and enable the discovery and delivery of information resources.

Strategies:

1. 1 We will develop our physical spaces to become more student-centered environments that integrate information, technology, and learning. The Knowledge Commons at University Park will develop new services models that can be deployed throughout all campuses.
1. 2 We will develop our highly visible services, resources, and expertise in collaboration with faculty, students, and corresponding academic programs.
1. 3 We will leverage our expertise and instructional partnerships to strengthen our students' abilities to locate and evaluate information and advance ethical uses of that information.
1. 4 We will emphasize the delivery of collections and consultation services in our users' teaching, learning, and research environments, including classrooms, the World Campus, and Penn State Online.
1. 5 We will promote information literacy as an essential learning outcome for all Penn State students.
1. 6 We will maintain and enhance our outreach role as a State-Wide Library Resource Center and as Pennsylvania's land-grant university library system via state-wide and local collaborative endeavors that support educational and research activities of Pennsylvania's citizens and our alumni.

High Level Tactics:

- Develop a Knowledge Commons service model at University Park, begin incremental implementations in Pattee and Paterno Libraries, and draw from this model to enhance services at other campus libraries.
- Assess our current discovery tools and Web presence, and identify new methods for providing users with fresh and effective ways of connecting with library resources.
- Review our staffing needs and the skills required in our redeveloped service models.
- MTSS will collaborate with ITS in equipping "real" (technology-equipped) classrooms to support faculty use of technology in teaching and learning.

Strategic Indicators:

- Study and track overall user satisfaction with library services among undergraduates, graduate and professional students, faculty, and staff.
- Assess the effectiveness of our instructional programs based on student and faculty feedback.
- Track and analyze usage of library services and resources, such as traffic counts, and user contacts in person and through online services.

Area 2: Collections

Goal 2:

We will develop excellent collections and information resources in support of scholarship and research worldwide, while promoting new models of scholarly communication based on the developing Cyberinfrastructure.

Strategies:

2. 1 We will steward our collections, making them equally available at all campuses, where feasible, and reallocating resources as necessary to support existing programs and growing areas of teaching and research spawned by interdisciplinary programs in the life and health sciences, international programs, and other key areas.
2. 2 We will work with the University's academic leadership and administration to determine suitable funding models and resources to augment our collections in appropriate areas and accelerate the migration to electronic collections in support of Penn State's strategic initiatives.
2. 3 We will be leaders in national collaborative efforts to make all of our collections and materials more accessible and findable worldwide.
2. 4 We will partner with other research libraries and organizations to promote more openly accessible research findings and data as a public good that benefits society as well as higher education.
2. 5 We will partner with our colleagues in the CIC and around the nation to develop and support digital library programs that make accessible Penn State's unique collections and support our research specialties.
2. 6 We will steward our collections with programs that support the creation, preservation, and discovery of information in all formats for future generations of scholars.

High Level Tactics:

- Reexamine our historical funding models to ensure that our collections funds are used to best advantage in support of Penn State's new and existing areas of academic strengths.
- Analyze disciplinary needs at Penn State to determine how best to acquire and build print collections and continue developing our unique Special Collections.
- When digitizing from our collections, we will focus on our strengths and participate in complementary projects, including the Google Library project, CIC Shared Digital Repository, and other digitization efforts through national/regional organizations.
- Use the Office of Digital Scholarly Publishing to collaborate with the Penn State Press to identify a range of sustainable services that support our researchers' ability to publish their work in ways that best advance their goals.

Strategic Indicators:

- Investigate and track overall user satisfaction with library collections.
- Review and analyze collections expenditures by disciplinary area and by format.
- Monitor usage of print and electronic collections.

Area 3: Information Technology

Goal 3:

We will pursue strategic partnerships to develop and implement innovative information technology services and systems.

Strategies:

- 3.1 The University Libraries and ITS will partner with our faculty and other institutions to investigate and develop Cyberinfrastructure that supports a program of e-Content and Data Stewardship necessary for large scale, collaborative research.
- 3.2 The University Libraries and ITS will coordinate appropriate services to provide transparent, seamless, and cost-efficient support to our patrons at their point of need.
- 3.3 We will review our digital information systems, including the CAT and other discovery tools, to identify next generation applications and services that make it easier to access information of all types.
- 3.4 We will employ formal project management methodologies and service management principles in collaboration with our ITS partners to improve efficiencies of our IT services.
- 3.5 We will undertake applied research and development in technology to improve and expand services to our patrons.

High Level Tactics:

- The Libraries and ITS will develop a digital repository services program to: 1) support a life-cycle approach to scholarly communications, linking the research, authoring, publishing, and archiving processes; and 2) support stewardship and preservation of scholarly content and University records in a variety of formats.
- The Libraries and ITS will collaborate to manage and deliver multimedia content and expand the use of instructional technologies at Penn State.
- The Libraries will partner with other CIC universities in developing a Shared Digital Repository (SDR) to ensure long-term preservation and access of digital collections created with Google and each other.

Strategic Indicators:

- Analyze our users' satisfaction with our ability to provide technical help in the Libraries, among undergraduates, graduate and professional students, faculty, and staff.
- Establish appropriate benchmarks for effectiveness in building Cyberinfrastructure.
- Study overall user satisfaction with library online services.

Area 4: Diversity

Goal 4:

We will embrace diversity in thought and culture to promote the free expression of ideas among all members of the Penn State community.

Strategies

- 4.1 We will enhance and maintain a welcoming climate that promotes equitable access to information, and have civility and respect for all members of the Penn State community.
- 4.2 We will seek out and create opportunities for all library employees to advance a shared, inclusive understanding of the value of diversity to our culture and workplace.
- 4.3 We will strengthen and sustain processes that encourage the recruitment, hiring, and retention of a diverse library workforce at all levels.
- 4.4 We will enhance professional development opportunities for all employees, enabling them to assume leadership roles and develop expertise required to serve a diverse community.
- 4.5 Our collections and services will reflect the University's diversity and recognize Penn State's global mission.

High Level Tactics:

- Conduct periodic surveys to monitor the workplace civility and climate.
- Promote research on diversity-related issues in library and information services.
- Collaborate as appropriate with other academic units on unique hiring opportunities, e.g., the President's Opportunity Fund.

Strategic Indicators:

- Study employee perceptions of workplace climate of civility, classism, and diversity for improvements.
- Analyze employee demographics for recruitment and retention.
- Gather and review resource commitments for diversity efforts.

Area 5: Agility

Goal 5:

We will be an agile organization that proactively addresses the changing needs of our patrons and employees.

Strategies:

5. 1 We will emphasize continued employee development and training programs to improve the skills and knowledge of our work force to better serve our patrons.
5. 2 We will use our resources efficiently through reallocation and organizational adjustment to meet our strategic goals.
5. 3 We will strengthen and coordinate our assessment programs to measure our successes and determine future initiatives.
5. 4 We will identify new methods and approaches for providing services through benchmarking of our peers in higher education and relevant industries.
5. 5 We will use our relationship with the Penn State Press to explore new services and skill requirements to support scholarly communications.

High Level Tactics:

- Assign responsibility for coordinating assessment efforts across University Libraries.
- Implement small, agile, multidisciplinary teams to research, recommend, and implement change.
- Align the annual budget with strategic goals.
- Implement project management processes across the organization.

Strategic Indicators:

- Implement an internal (department-to-department) customer service satisfaction survey and analyze results for potential improvements.
- Increase participation in staff development/training programs.

V. Budget Planning

Recycling Plan for FY 2008/2009 - 2012/2013

The University Libraries' budget is composed of four major sources of continuing income: collections, salaries, wages, and operations. The Libraries' reallocation of funds to the central administration over the previous ten years has come primarily from two sources:

1. Salaries and personnel; and
2. Collections: acquisitions and licensing.

Operating funds have not increased in over a decade and must be supplemented by private giving to meet current needs; and the wages budget for part-time student employees is supplemented each year by \$1M in salary savings from permanent positions to balance it. Thus, the only two realistic sources for budget recycling are the salaries and collections budgets. The Libraries have returned \$1.6M in salaries to the University over the last ten years and have protected the collections budget, as has the University, since the collections are so valued by faculty and students and often cannot be acquired later. A loss of collections funds also compounds our annual loss of purchasing power due to inflation and the weak dollar overseas. However, the erosion of staffing has reached a level that it is impacting services, hours, and staff expertise.

Looking ahead, we have concluded that we can no longer protect collections from the budget recycling process to the same degree, in spite of the damage it may cause to an already stressed collections budget. Given the number of staff we have already cut through recycling, we are seeing the impact on the quality and the extent of our services at the same time that we are challenged to provide new services such as data curation. With this round of recycling, we are likely to see our acquisitions and processing of new materials slow down, the need to reduce hours that the Libraries are open to students and faculty, and an inability to meet demands for new electronic and print resources and new services.

In Table 1 below, we present our proposal for annual recycling over the next five years. In FY 2008/2009 we have chosen to take the majority of recycling from open salaries (roughly three staff FTE). In subsequent years we will recycle equally from both the collections and salaries of positions left open through attrition and turnover.

Table 1: Estimated Centrally Recycled Funds and Sources, 2008/2009-2012/2013

	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	TOTALS
Centrally Recycled Funds						
Recycling target	\$ 183,592	\$ 189,100	\$ 194,773	\$ 200,616	\$ 206,634	\$ 974,715
Collections	\$ 65,992	\$ 94,550	\$ 97,386	\$ 100,308	\$ 103,317	\$ 461,553
Salaries - open positions	\$ 117,600	\$ 94,550	\$ 97,387	\$ 100,308	\$ 103,317	\$ 513,162

Recycling targets are equal to 1% of the targeted base. IT student fees have not been included in this calculation. This projection assumes a 3% annual increase to our base budget in each of the five years.

Strategic Investments to Achieve Our Goals

Strategic investment funds, based on the return of our recycling or infusions of new monies, provide the Libraries with a significant opportunity to manage strategic changes that will strengthen and grow services that will benefit the entire University.

The Provost's memo on strategic planning, dated June 26, 2007, describes three budget scenarios for strategic investment funds: 1) a return to the Libraries' budget equal to one-half of our centrally recycled funds, 2) a return to the budget equal to the total of our centrally recycled funds, and 3) a return to the budget of all recycled funds, plus new funds totaling up to 5% of our base budget. It is our understanding that in each of the scenarios the returned funds could be either one-time monies or permanent additions to the base budget, and that these funds would only be allocated on a year-by-year basis, not once as a lump sum. Based on this information, we estimate the potential pool of funds that could be allocated to the Libraries as follows:

	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	TOTALS
One-half of recycled funds	\$91,796	\$94,550	\$97,386	\$100,308	\$103,317	\$487,357
Total of recycled funds	\$183,592	\$189,100	\$194,773	\$200,616	\$206,634	\$974,715
Total recycled +5% of current base budget						\$1,892,675

The University Libraries strongly believe that a commitment of \$1,892,675 in permanent funding, distributed to the Libraries over five years, will give us the best opportunities to achieve the vision that is defined in this document.

We have identified three programs for strategic investment, drawn from our focus areas of Services, Collections, and Information Technology. These are the programs of greatest significance for the future development of the University Libraries' services for Penn State. Enacting these programs will have ripple effects throughout the Libraries, raising the level of all services and bringing new efficiencies into the organization.

Collections: Accelerating the Transition to a Digital Collection (see Appendix A)

The University Libraries are guided by the principle that no matter which campus students attend, nor where faculty members reside, they should have equitable access to all library resources. To date, with the aid of funding from information technology student fees, the Libraries have internally managed the conversion from predominantly print to a large and growing variety of electronic databases and digital resources while remaining sensitive to the need for print in many disciplines. However, the declining value of the dollar and inflation in the publishing industry for both print and electronic resources places pressure on the budget for library materials that is unlike any other. While part of the IT student fee is allocated to e-resources, that does not keep up with inflation. Internal reallocation within the collections budget alone cannot meet the needs of Penn State faculty or student expectations and threatens the print collections that are

still core in the humanities. In response to the most recent LibQUAL+™ survey of user satisfaction with the Libraries, Penn State students and faculty were consistent in stating that, “we need more electronic journals and more databases.” We propose to use strategic investment funds to add new monies to our eroded collections budget, helping us to accelerate a transition to electronic resources, which are necessary in many new and emerging Penn State academic programs.

The Knowledge Commons at University Park (see Appendix B)

The Knowledge Commons will be one of the University's most student-centered spaces. Focusing on undergraduates, it will facilitate collaborative learning and information discovery through a federation of services and repurposed physical spaces. A partnership of the Libraries, Information Technology Services (ITS), and other University units, the Knowledge Commons will blend digital and multimedia technologies with library services and online collections into a vibrant, dynamic environment. To begin developing the Knowledge Commons, the Libraries have already committed \$2M to update facilities in Pattee and Paterno, and will be seeking up to \$10M more in private giving to continue these updates. Most technology costs would be contributed by ITS, and updates to library facilities will be paid for through private giving. (The ITS strategic plan references this program as well.) Strategic investment funds would be used to support new permanent staffing required for the Knowledge Commons' services and would leverage the Libraries' own investment.

Cyberinfrastructure, e-Content, and Data Stewardship (see Appendix C)

The Cyberinfrastructure, e-Content, and Data Stewardship program is a collaborative effort between the University Libraries and ITS to support the emerging content and data management requirements of e-science and e-research. Our goal is to build on existing services and infrastructure in both organizations to provide a cohesive suite of access, security, discovery, preservation, curation, repository, archival, and storage services for born digital data. We now project that at least \$2.2M will be needed to start and implement the program. ITS and the Libraries have agreed to split the costs of the program roughly equally between the two units, and have begun committing staff and infrastructure to the effort. Both units are also asking for strategic investment funds to support the program. The ITS strategic plan references this program and identifies certain funding for it.

A University commitment to \$1.8M in permanent new funding to the Libraries would have the greatest strategic benefit for the Libraries' programs and services for Penn State's faculty and staff. Permanent funding is requested, because each of these programs will require new, ongoing investments in either licensed collections, or in new staff expertise needed to develop and staff the services that will be created. If possible, we request a commitment to this funding early in this planning cycle. Such a commitment would give us the flexibility to plan well for the use of these funds over the five year cycle. While one-time funds will enhance our start-up costs, they will not address continuing costs.

The true cost of implementing each of these initiatives goes well beyond the \$1.8M that could be available. New funding would demonstrate a powerful Penn State commitment to these

programs, enabling the Libraries to make a stronger case to the donors and external funding agencies that we will also approach to support our strategic initiatives. The Libraries have already committed resources in cash and staff to start each of these efforts, and expect to continue internal reallocations to combine with any new monies made available. Our partnerships with ITS in the Knowledge Commons and Cyberinfrastructure programs will leverage both the funding and expertise, so that all new money would have a greater impact than if we were working alone.

Our plan for using strategic investment funds will vary by year. In Year 1 (2008/2009), we propose to allocate any returned recycling funds entirely to our collections in support of new electronic resources in growing program areas. Allocating these funds to the collections budget would have the greatest immediate and system-wide impact on the scholarly resources that the Libraries acquire and license. If no new funds are made available until FY 2009/2010 (Year 2 of this planning cycle)—a likely scenario—we will still favor investing early and heavily in our collections budget, though each of the other two programs may also need infusions of new cash at that point. [This information was provided by Louise Sandmeyer and Rachel Smith.]

In funding Year 2 to Year 5, we propose to detail those requests and uses in future annual budget cycles. Our reasons are several. Both the Knowledge Commons and Cyberinfrastructure/e-Content programs are still in early planning phases. We expect that the greatest need for strategic investment funds in those areas would come in Year 2 and following, and we would likely direct a significant amount of returned recycling to those programs. The exact amounts needed, and sequencing of both programs, will be detailed in annual budget requests.

VI. Appendices: Major Strategic Initiatives

Appendix A: Accelerating the Transition to a Digital Collection

The University Libraries are a geographically dispersed collection and are guided by the principle that no matter which campus students attend, nor where faculty members reside, they should have equitable access to all library resources. A student at Penn State Erie should have access to the same resources as a student at Abington, University Park, or a student taking classes online. Likewise, faculty should have access to resources for teaching and research at the point of need. Therefore, the Libraries view the transition from primarily print to primarily digital collections as its main collection development strategy. To date, with the aid of funding from information technology student fees, the Libraries have internally managed the conversion from predominantly print to a large and growing variety of electronic databases and digital resources while remaining sensitive to the maintenance of the traditional print and special collections that represent the mainstay of many areas of research and scholarship. Nevertheless, even with the infusion of IT funding to support central licensing of electronic databases for all Penn State campuses, and attempts to maintain a base level of internal funding to support dispersed print collections, the current collections funding model cannot sustain adequate development of information resources in an age that requires accelerating the transition to digital collections.

The declining value of the dollar and inflation in the publishing industry for both print and electronic resources places pressure on the budget for library materials that is unlike any other. While the Consumer Price Index has risen between 1.6% and 3.4% each of the last ten years, library electronic journal and database costs have risen between 7% and 12% each year. When coupled with the falling dollar, the ability of the Libraries to purchase new or convert to electronic resources is significantly declining over time. In addition, the collections budget continues to erode because of increasing licensing costs for currently held e-journals and databases. Budget recycling also will exacerbate the problem because the Libraries cannot continue to meet recycling goals from faculty and staff salaries alone without damaging the ability to provide the services necessary to support access to and use of our collections. Nor is budget recycling alone likely to provide the funds to accelerate the transition to electronic resources when it also must support the Libraries' new strategic initiatives in building the Cyberinfrastructure needed to advance online collections and services.

The prevalence of interdisciplinary and collaborative research, along with new and developing programs in nursing, life sciences, homeland security, international affairs, computational science, and medicine, create a critical need for access to current journal literature anywhere, anytime. Reallocation within the collections budget alone cannot meet the needs of Penn State faculty or student expectations. In response to the most recent LibQUAL+™ survey of user satisfaction with the Libraries, Penn State students and faculty were consistent in stating that, "we need more electronic journals and more databases." In 2008, and beyond, the ability to access the content in electronic journals and databases is a necessity, not a luxury. Shifting funds from the print to the electronic side of the collections budget alone will not sustain the fiscal resources necessary for the Libraries to support an advanced curriculum and keep the University competitive.

The University Libraries have made a strong commitment to the transformation from a print collection to one which is primarily electronic. It is actively working to reallocate collection dollars based upon University priorities in new and emerging disciplines. In order for the conversion to digital collections to continue and to accelerate to keep pace with curricular and research needs, additional funding is required. Librarians have compiled a list of resources that faculty and students want which totals more than two million dollars (base budget). To help address this need, the first year of funding for any strategic investment funds returned to the Libraries, regardless of the amount, would be allocated toward accelerating the transition to digital collections. During years 2 through 5, funding would be allocated across Collections, the Knowledge Commons (Appendix B), and Cyberinfrastructure (Appendix C) based on the needs and best potential for impact.

Appendix B: The Knowledge Commons at University Park

The Knowledge Commons will be one of the University's most student-centered spaces. Focusing on undergraduates, it will facilitate collaborative learning and information discovery through a federation of services and repurposed physical spaces. A partnership of the Libraries, Information Technology Services (ITS), and other University units, the Knowledge Commons will blend digital and multimedia technologies with library services and online collections into a vibrant, dynamic environment. Its staff will be highly skilled but also adept in applying the "high tech, high touch" service philosophy. The Knowledge Commons concept will also scale to the Commonwealth Campus Libraries and could see future applications at those centers.

Students tell us that they want the Pattee and Paterno Libraries to be more welcoming and comfortable, that they want them to be technologically rich, and that everything must be fast, easy, and convenient. They want to be able to research their papers, digitize audio, videotape their practice presentations, chat with their friends, receive assistance from a tutor, and have a snack—all in a 24 hour, "one stop shopping" destination.

Sequencing and Resources Plan for the Knowledge Commons

Year One: (2008/2009)

The Libraries have contracted with an architectural firm for a feasibility study. Costs for relocation of the Maps Library and Department of Information Technologies to free up public space are being funded by Libraries' existing funds and private giving. New digital commons and relocation of Helpdesk into Pattee Library will be funded by ITS.

Year Two: (2009/2010)

Repurposing and renovation of first floor of Pattee Library into space appropriate for the Knowledge Commons with funding from the Libraries (private giving and strategic investment funds). Hiring of a manager and technical support specialists.

Year Three: (2010/2011)

Establishment of new public spaces such as multimedia and podcast production centers, group study rooms; consultation/tutoring rooms and collaborative work areas, plus public service points. ITS will cover technology costs from existing and reallocated funds; the Libraries will cover other costs from private giving and strategic investment funds. Expertise in areas such as multimedia, documentation, and technical assistance will be hired.

Year Four: (2011/2012)

Additional expertise will be hired by the Libraries in areas of media and instruction. ITS and the Libraries will develop hybrid positions designed to work in technology and information rich service environments. (strategic investment funds)

Year Five: (2012/2013)

Renovation of ground floor of West Pattee and expansion of MacKinnon's Café will be a partnership of Penn State Retail Food Operations and the Libraries.

Appendix C: Cyberinfrastructure, e-Content, and Data Stewardship

The Cyberinfrastructure, e-Content, and Data Stewardship program is a collaborative effort between the University Libraries and ITS to support the emerging content and data management requirements of e-science and e-research. Future access to digitally based research data is critical to maintaining the scholarly record. Our goal is to build on existing services and infrastructure in both organizations to provide a cohesive suite of access, security, discovery, preservation, curation, repository, archival, and storage services for born digital data. We will standardize on services and approaches that extend benefits beyond the needs of e-science and that can be applied equally to digital content stewardship in areas such as digital library collections, electronic records, and Electronic Theses and Dissertations. The program will require investments in new services and infrastructure to keep Penn State competitive for faculty and future research funding.

E-science or e-research is typically defined as collaborative, distributed, large-scale, and data-intensive. The enabling technical infrastructure, including high performance computing and networking, has become more persistent at research institutions. Long-term stewardship of the outputs of the computational sciences is recognized as our next challenge. The emergence of this research has begun to force changes to the traditional scholarly communications model and require attention to how this data is integrated into the formal scientific literature and scientific collections. Our development of this program recognizes increasing expectations from the National Science Foundation and other funding agencies for program applicants to provide a sustainable data management plan, including the provision of open access to data. This program for Cyberinfrastructure, e-Content, and Data Stewardship will provide Penn State's researchers with scalable services to meet these requirements and remain competitive for funding.

The Libraries and ITS now estimate the initial cost of this program to be at least \$2.2M over five years, and the expenses to be shared roughly equally by both. Both the Libraries and ITS budgets include requests for strategic investment funds to support the development of this program. Both organizations will also support the program through reallocations of staff and redescription of positions following retirements. With our own strategic services in place, we will be better positioned to pursue collaboration with other institutions as well as pursue external funding for the development of this program.

The activities and milestones outlined here for the first three years of this new program are clearly tentative since much of our initial efforts will consist of needs assessments in different areas, which, combined with some initial prototyping, will enable us to set more concrete directions and strategies.

The first year, 2008/2009, will entail development of a governance model, targeted needs assessments, some initial service and infrastructure prototypes and pilots, as well as some strategic hiring to enhance our expert teams. The major expense in this year will be for new hires in the Libraries and in ITS-Digital Library Technologies (DLT) that will oversee major elements of the planning, and these will be supported primarily through internal reallocations.

In the second year, 2009/2010, we will collaborate with specific researchers or communities to test and refine some initial services around data collection, storage, and access, including social science and science data. The projected expenditures for this year will include major staffing investments, possibly including data curators/archivists and metadata/documentation experts in the Libraries, new systems developers in DLT, and one new graduate research assistantship in both organizations. Significant investments in new storage infrastructure will be made by ITS.

In the third year, 2010/2011, we expect to have in production fully functional services for some specific data types and services supporting ingest, access, and resource discovery. By this year, we should aim to have basic infrastructure in place that would allow us to seek external research funding for future experimental developments. However, by the third year, we can state planned outcomes only provisionally. The projected key investments in year three include new subject experts and service managers to coordinate the program's operations, digital preservationists/technologists, and documentation/metadata experts in the Libraries. ITS proposes to expand significantly their investments in storage infrastructure through strategic investment funds.

We anticipate that this program plan will develop iteratively as we conduct targeted needs assessments and complete initial phases in the first two years. Activities in years four and five will build on the results of the first three years and should expand the program's capacity to support research across the University. By academic year 2012/2013, our Cyberinfrastructure, e-Content, and Data Stewardship program, developed jointly by the Libraries and ITS, will enable the University to manage and preserve the data created by e-research, and to remain competitive for top faculty and research dollars.