

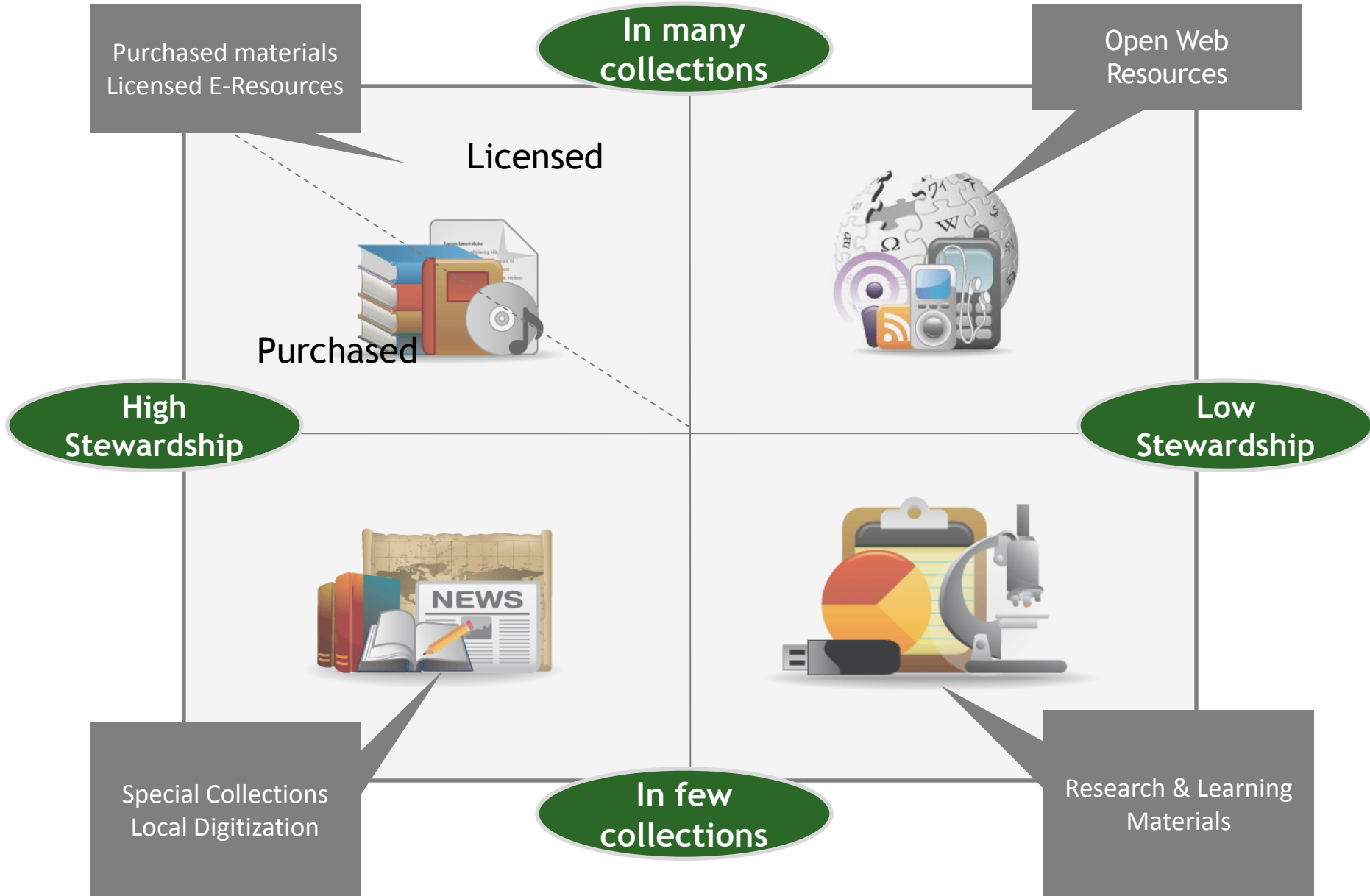


Reconfiguring Academic Collections: *Stewardship, Sustainability and Shared Infrastructure*

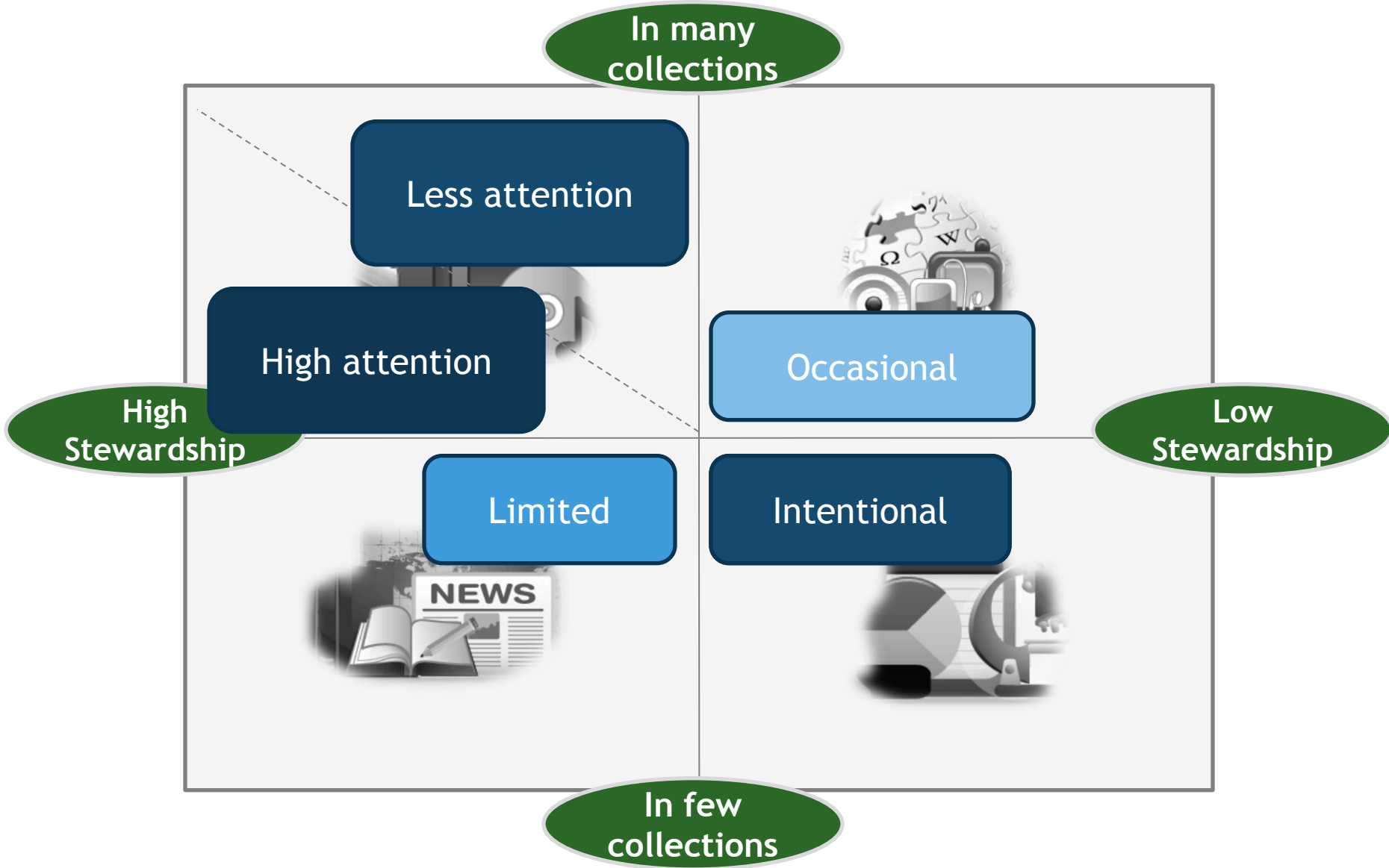
Constance Malpas
Program Officer, OCLC Research

- **A framework for academic collections**
- **Some remarks on libraries the higher education landscape**
- **A gloss on changes in the Penn State University Libraries**
- **Emerging infrastructure and its impact on the organization of academic libraries**

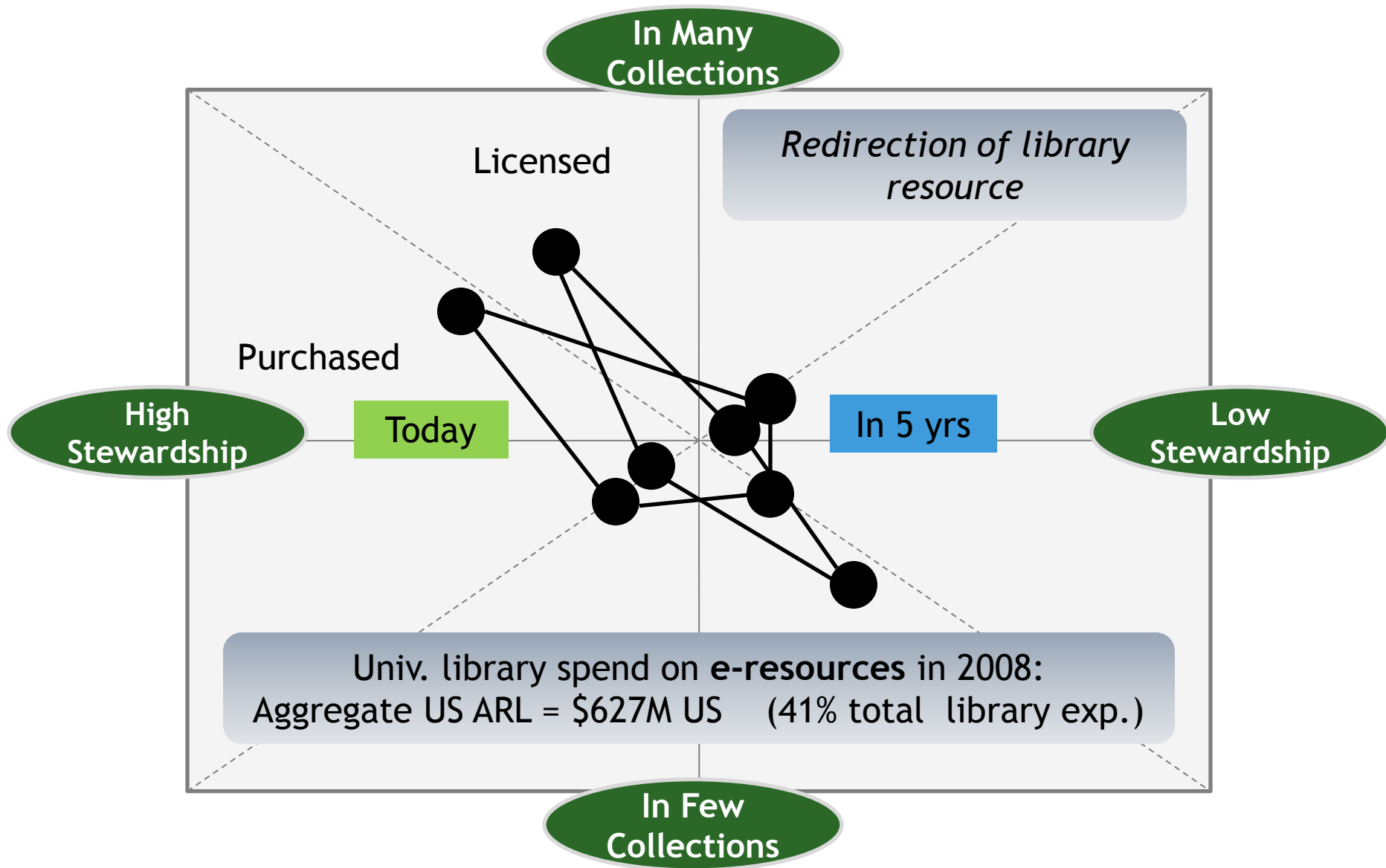
Collections Grid



Library attention and investment are shifting



Academic institutions, today and tomorrow



Change in academic collections



- **Shift to licensed electronic content is accelerating**
 - Research journals - a well established trend
 - Scholarly monographs - in progress
- **Print collections delivering less (and less) value at great (and growing) cost**
 - Est. \$4.25 US per volume *per year* for on-site collections
 - Library purchasing power decreasing as per-unit cost rises
- **Special collections marginal to educational mandate at many institutions**
 - Costly to manage, not (always) integral to teaching, learning

What factors are driving this change?



- **Erosion of library value proposition in academic sector**
institutional reputation no longer determined (or even substantially influenced) by scope, scale of local print collection
- **Changing nature of scholarly record**
research, teaching and learning embedded in larger social and technological networks; new set of curation challenges for libraries
- **Format transition; mass digitization of legacy print**
Web-scale discoverability has fundamentally changed research practices; local collections no longer the center of attention



A Penn State perspective, ca. 2002



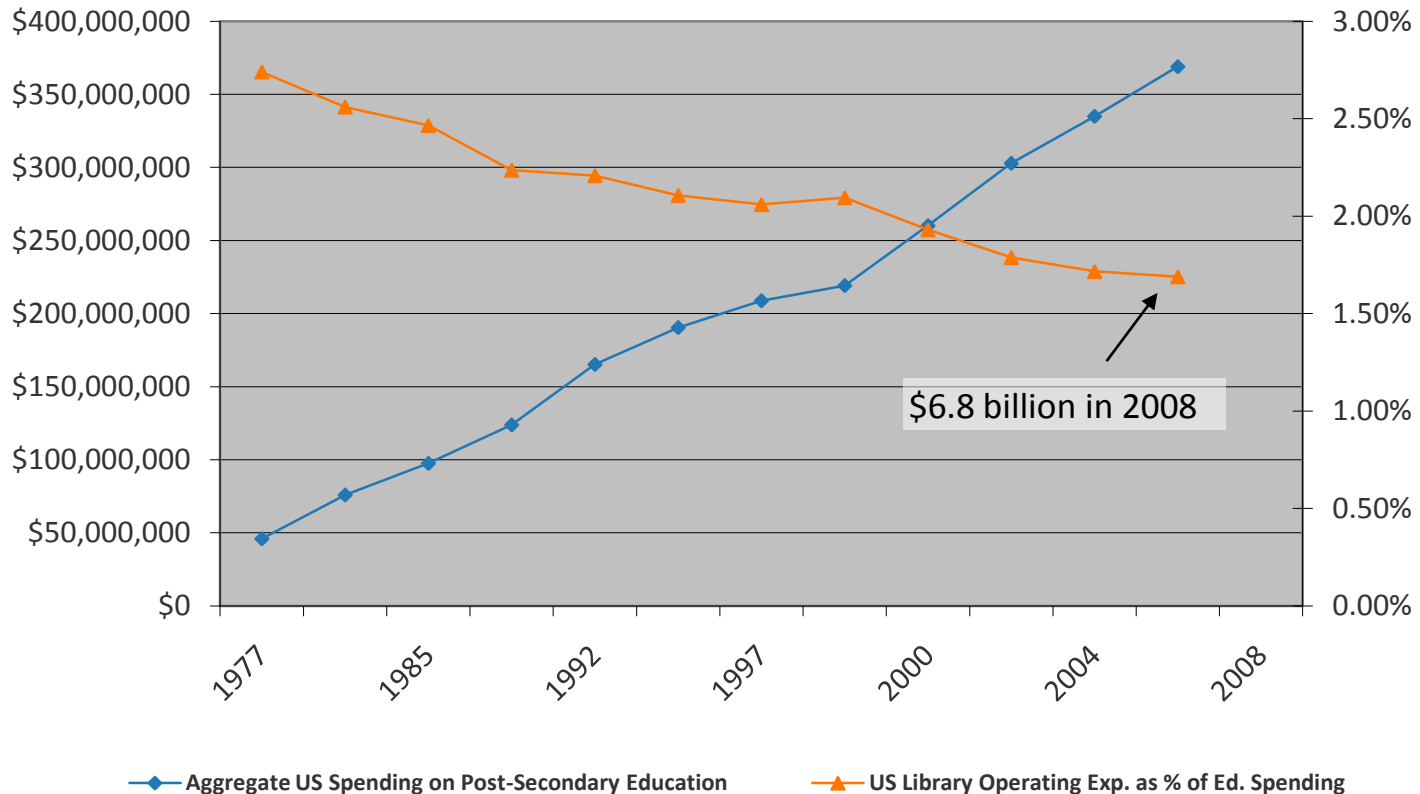
The *ubiquitous question of whether electronic journals are capable of replacing paper versions is beginning to be answered*. The author discusses patterns of use observed in a scholarly setting where severe remote library storage [shortage] created greater incentive to rely on electronically archived journals (JSTOR). *As awareness of electronic access increased, use of the equivalent paper collection declined*. In fact, electronic use is on a significantly larger scale than that measured for paper. These observations permitted the author to confidently transfer all electronically archived journals to remote storage and to *conclude that electronic journals can substitute for paper*.

Robert S. Seeds, (2002) "Impact of a digital archive (JSTOR) on print collection use", *Collection Building*, Vol. 21 (3), pp.120 – 122.

A long term, system-wide trend

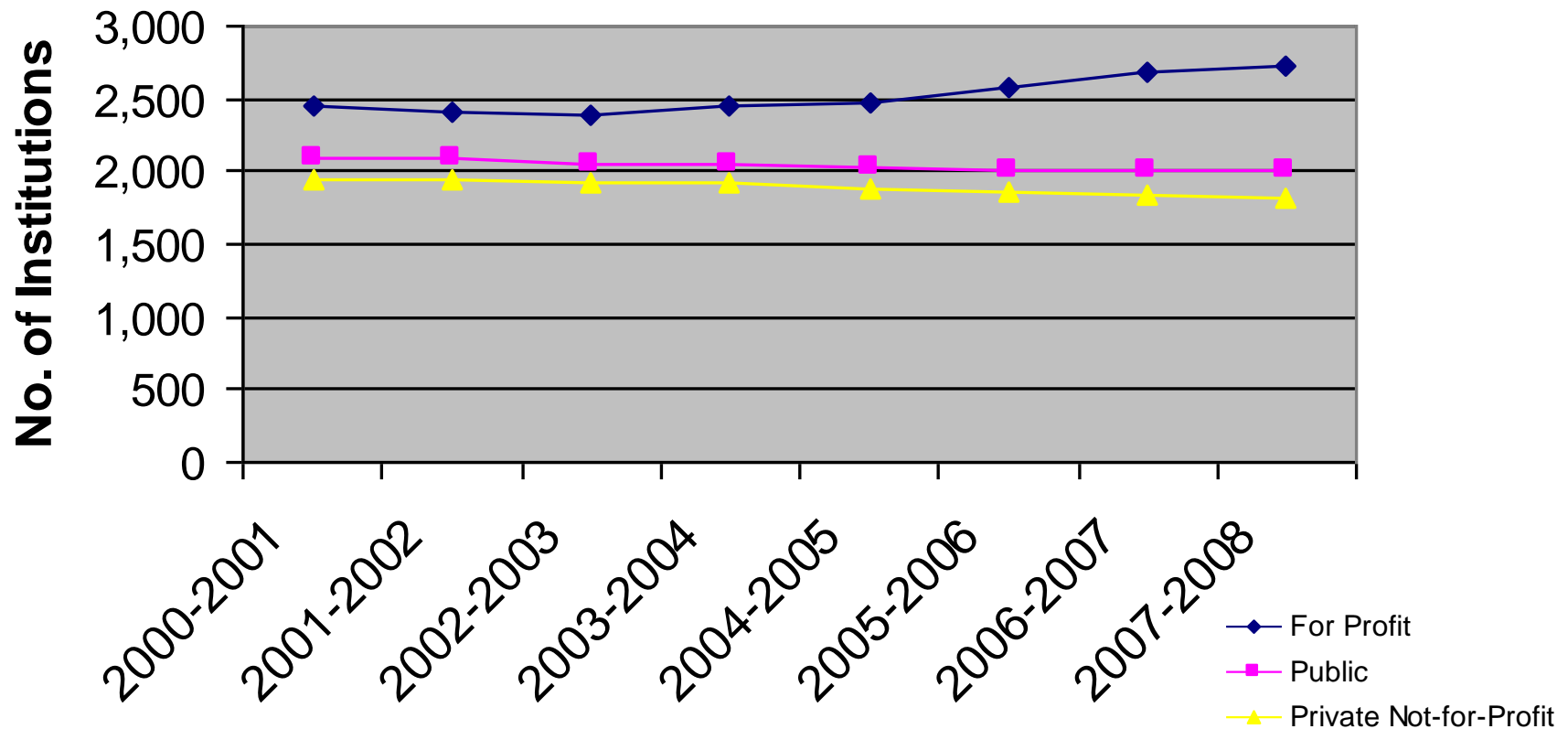


US Academic Library Expenditures vs. Total Spending on Post-Secondary Education



Shift in provision of higher education

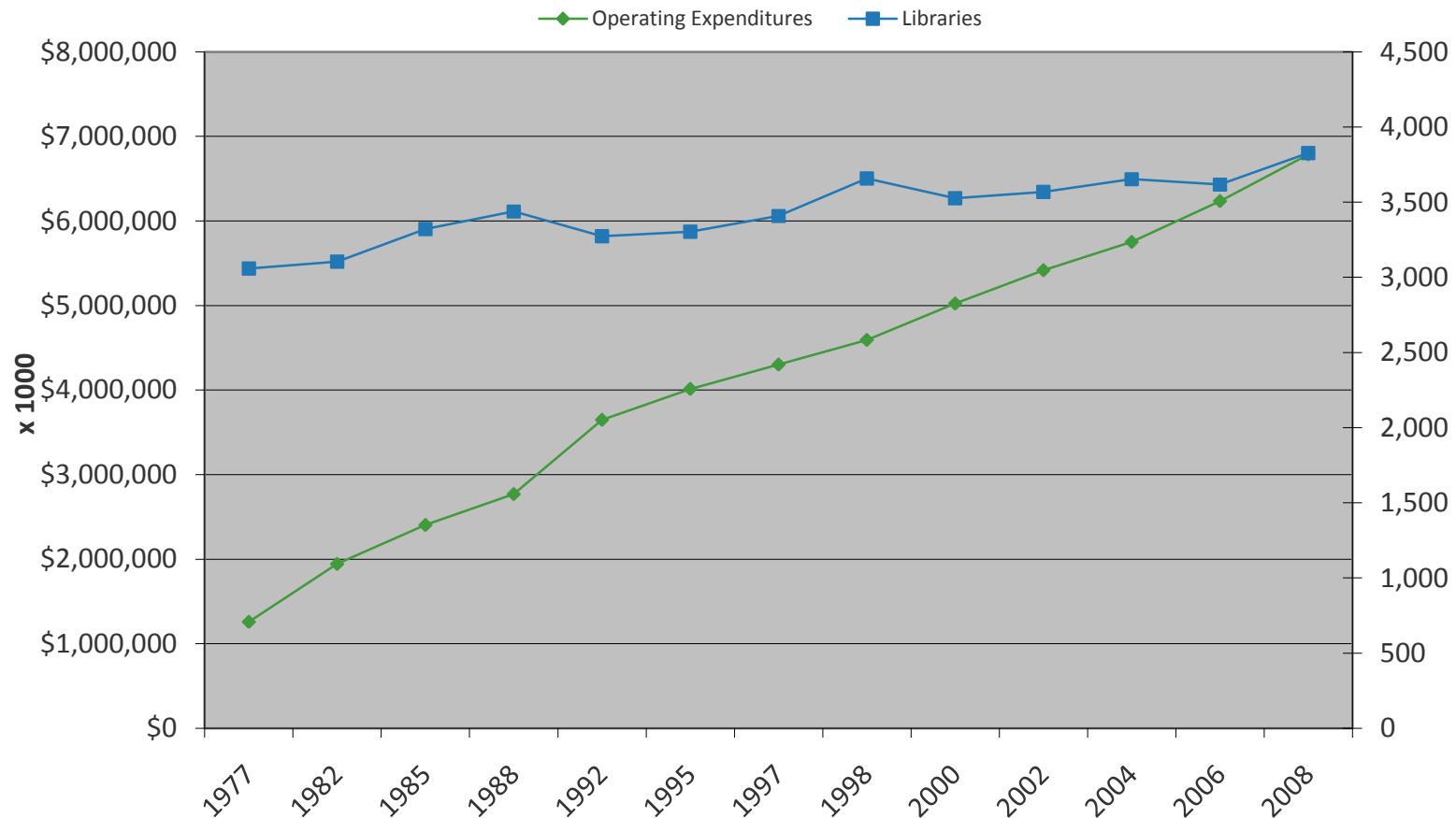
Distribution of Post-Secondary Educational Institutions
in the United States by Source of Funding



A limited population with growing expenses

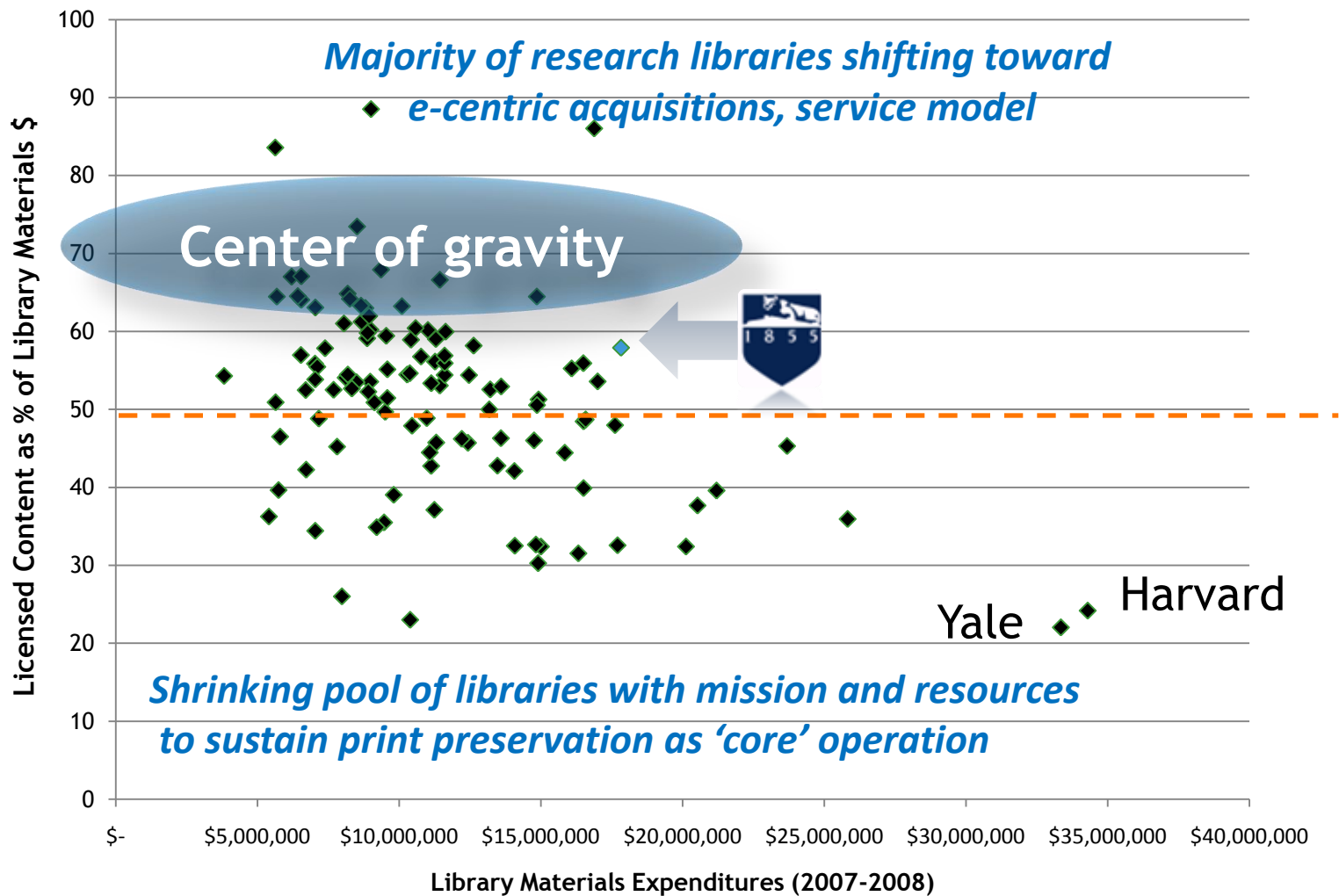


US Academic Libraries & Operating Expenditures 1977-2008

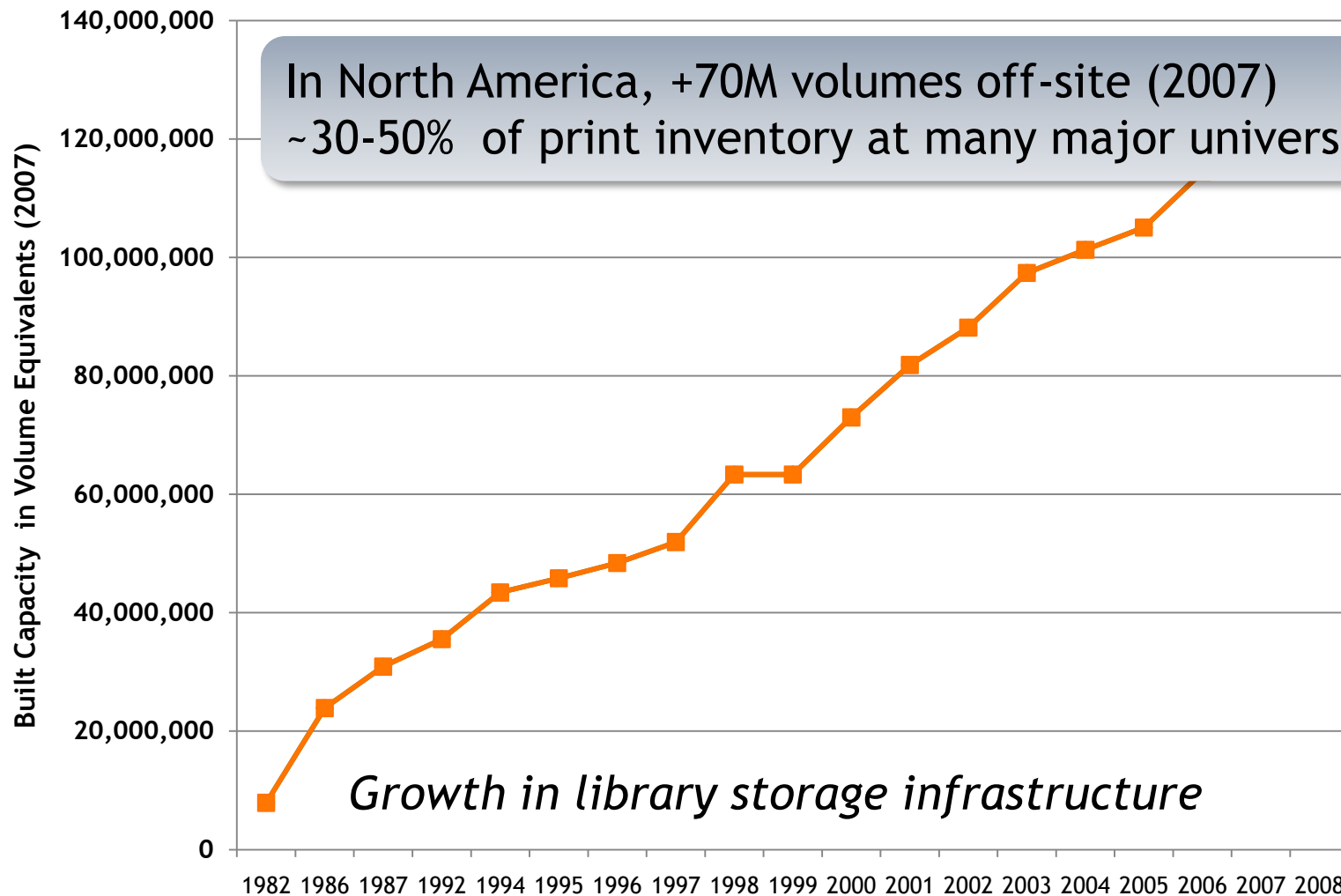


OCLC Research. Derived from data reported in NCES *Digest of Education Statistics: 2008*.

In US research libraries, a tipping point ...



... the books have left the building



Derived from L. Payne (OCLC, 2007)

It's not about space, but priorities



- If the physical proximity of print collections had a demonstrable impact on researcher productivity, *no university would hesitate to allocate prime real estate to library stacks*
- In a world where print was the primary medium of scholarly communication, a large local inventory was a hallmark of *academic reputation*

We no longer live in that world.

We've moved from infrastructure designed to instill and reinforce a common cultural identity

a locally managed copy of the canon

to a decentralized model supporting disciplinary development and scientific innovation

specialized departmental libraries

re-aggregated and embedded in larger social and technological networks

knowledge commons, virtual "libratories"



A Penn State perspective, ca. 1924



PROFESSOR PATTEE TEACHING CLASS IN OLD MAIN LIBRARY

future. For courses in literature, as literature is now taught, handbooks are necessary. The insistence now is not upon facts *about* authors and masterpieces, but upon the masterpieces themselves. The pupil must read wisely and intensively from the best work of the authors included in the course, and with the equipment of the average school or college library this is impossible. Each member of a large class cannot go to the library and draw the Poems of Longfellow when Longfellow is under consideration, or the writings of Poe or Lowell or Whitman or Burroughs when those authors are up for consideration, and the ordinary student is not able to buy for himself separate editions of the various classics comprehended in the course. The only solution is a book of selections copious enough to illustrate the message and the style and the significance of each of the major authors and of each of the great phases of our literature.

Pattee, F. Lewis. (1924). *Century readings for a course in American literature*. Rev. ed. New York: The Century co..

[mdp.39015070462232]

A traditional configuration, ca. 1900



LIBRARY LION

PENNSYLVANIA STATE UNIVERSITY LIBRARIES

No. 6

June, 1969



The Carnegie Library building was completed in 1904.

In 1905

~22,000 volumes

By 1926

~92,000 volumes

~55,000 circulations

“The True University is a Collection of Books” (Thos. Carlyle)



AREAS BY USE				MENT
USE	NO OF RMS.	AREA	% TOT. AREA	
ACADEMIC				1949
REFERENCE RM.	1	1836	1.86	1952
CATALOGUE RM.	1	1680	1.70	1953
SEMINAR	2	238	0.24	SE
READING RM.	1	1914	1.94	HEATED VOLUME
ADMIN & GENL				37380
STACKS	14	63140	64.03	11206
OFFICE	2	574	0.58	1588
RECEIVING RMS.	2	1155	1.17	39237
COAT RMS.	6	504	0.52	419835
SMOKING RMS.	3	252	0.25	3829
TOTALS	57	98613	100.00	7615

By 1940s,
~200,000 volumes

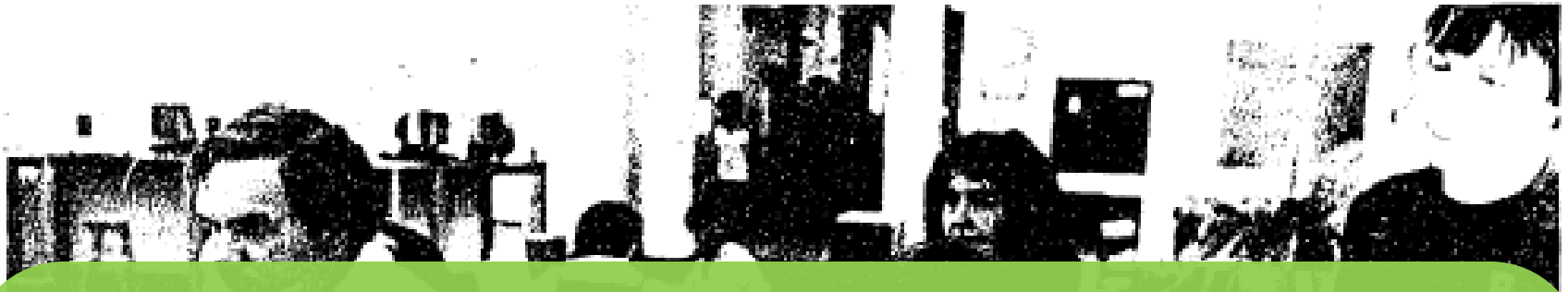
In mid-1950s,
~400 000 volumes
(25% in dept'l libraries)

64% of library space
allocated to stacks;

<6% to academic
functions

*center of scholarship
or
warehouse of books?*

The networked library



A boon for research and learning in all of the colleges was the computerization of the University libraries, begun in 1975. The libraries' holdings, except for those in a few specialized areas, were still inadequate for an institution the size of Penn State. ... Patrons also had access via computer to the bibliographic resources of the Research Libraries Group (a consortium of the nation's leading research institutions), thus partially offsetting the limitations of the University's own collections.

Bezilla, Michael. 1985. *Penn State: an illustrated history*. University Park: Pennsylvania State University Press. (p.371)

Photo by Sam Stricki

Pattee Library will be getting fourteen more computers to complete its Library Information Access System. Shown using the terminals, from left to right, are Lee Stout, Doug Klees (sophomore-engineering) and Ralph Pearce (sophomore-chemical engineering).

Reconfiguring collections and services



Coming Soon!

The KNOWLEDGE COMMONS NAMED BY PETER G. AND ANN TOMBROS, JOHN R. AND JEANETTE McWHIRTER

News & Events

BOOKS IN PATTEE ARE

MOVING

Books are moving

Use the "I Want It" button in The CAT. Read More >

Naming Opportunities at a Glance

Your named space will touch the lives of current and future Penn State students.

- 1 The **YOUR NAME HERE** DEDICATED POST-PRODUCTION SUITE (\$40,000) provides five to six dedicated multimedia editing workstations.
 - 2 The **YOUR NAME HERE** CONSULTANT OFFICE (\$25,000) provides space for IT assistants.
 - 3 and 6 The **YOUR NAME HERE** AUDIO RECORDING ROOMS (2 @ \$40,000 each [no. 3]; 1 @ \$50,000 [no. 6]) or the latest in multimedia production technology.
 - 4 The **YOUR NAME HERE** STUDY ALCOVE AND SOUND BOOTHS (\$200,000) provides quiet study area close to services.
 - 5 The **YOUR NAME HERE** POST-PRODUCTION ROOMS (2 @ \$50,000 each) provide technology to edit and view multimedia projects in small groups.
 - 7 and 8 The **YOUR NAME HERE** PRESENTATION PRACTICE ROOMS (1 @ \$60,000 [no. 7]; 1 @ \$50,000 [no. 8]) provide equipment and space to practice oral communication skills.
- Note: areas 1-8 also serve as collaborative and group study spaces.*
- 9 The **YOUR NAME HERE** MULTIMEDIA CLASSROOM (\$500,000) provides a classroom in the round for instruction featuring multimedia.
 - 10 The **YOUR NAME HERE** MEDIATECH HELP DESK (\$25,000) provides a service point for media equipment consulting and circulation.
 - 11 The **YOUR NAME HERE** KNOWLEDGE COMMONS MANAGER (\$50,000) gives a central location for the manager to observe usage and provide services for students.

- 12 The **YOUR NAME HERE** KNOWLEDGE COMMONS HELP CENTER (\$100,000) provides professional reference and technical assistance.
- 13 The **YOUR NAME HERE** GROUP STUDY (3 @ \$50,000 each) gives private spaces for four to six students to work on course projects.
- 14 The **YOUR NAME HERE** GENERAL WORKSTATIONS (\$50,000) provide 48 computer-equipped workspaces with ample space.
- 15 The **YOUR NAME HERE** QUICK ACCESS SERVICE AREA (\$25,000) provides stand-up search stations for rapid access to Libraries resources.
- 16 and 17 The **YOUR NAME HERE** STUDY LOUNGE (1 @ \$50,000 [no. 16]; 2 @ \$75,000 each [no. 17]) gives comfortable study space, away from noise and close to resources.
- 18 The **YOUR NAME HERE** STUDY ROOMS (4 @ \$25,000 each) located within Adaptive Technology Services and equipped with assistive technologies for students with special needs.
- 19 The **YOUR NAME HERE** OPEN LAB AREA (\$40,000) equipped with assistive technologies.
- 20 The **YOUR NAME HERE** GROUP STUDY ROOM (\$50,000) gives private group study space for students with special needs.



- 21 The **YOUR NAME HERE** CENTRAL ATRIUM (\$5,000,000) a light-filled room with a soaring glass ceiling, interconnecting all three levels of west Pattee Library.
- 22 The **YOUR NAME HERE** READING ROOM (\$750,000) gives a place to relax and unwind—with a leisure reading collection.
- 23 The **YOUR NAME HERE** CENTRAL PATTEE ENTRANCE LOBBY (\$250,000) serves as the gateway to the academic enterprise and scholarly excellence, where more than two million visitors pass through annually.
- 24 and 25 The **YOUR NAME HERE** GROUP STUDY (2 @ \$75,000 [no. 24]; 1 @ \$50,000 [no. 25]) gives space for student groups to collaborate on course projects.
- 26 The **YOUR NAME HERE** ATRIUM SEATING (4 areas @ \$10,000 each) gives a comfortable and welcoming area where students can see and be seen by others involved in research, study, or relaxing.

Note: design schemata as envisioned October 2010; subject to change as naming opportunities evolve.

The Library

The Heart of the University

Spring 2007

Number 40

“...*cyberinfrastructure* is literally becoming *the central nervous system* for institutions like Penn State”

Kevin Morooney, Vice-Provost for Information Technology

Shared vision, common responsibility

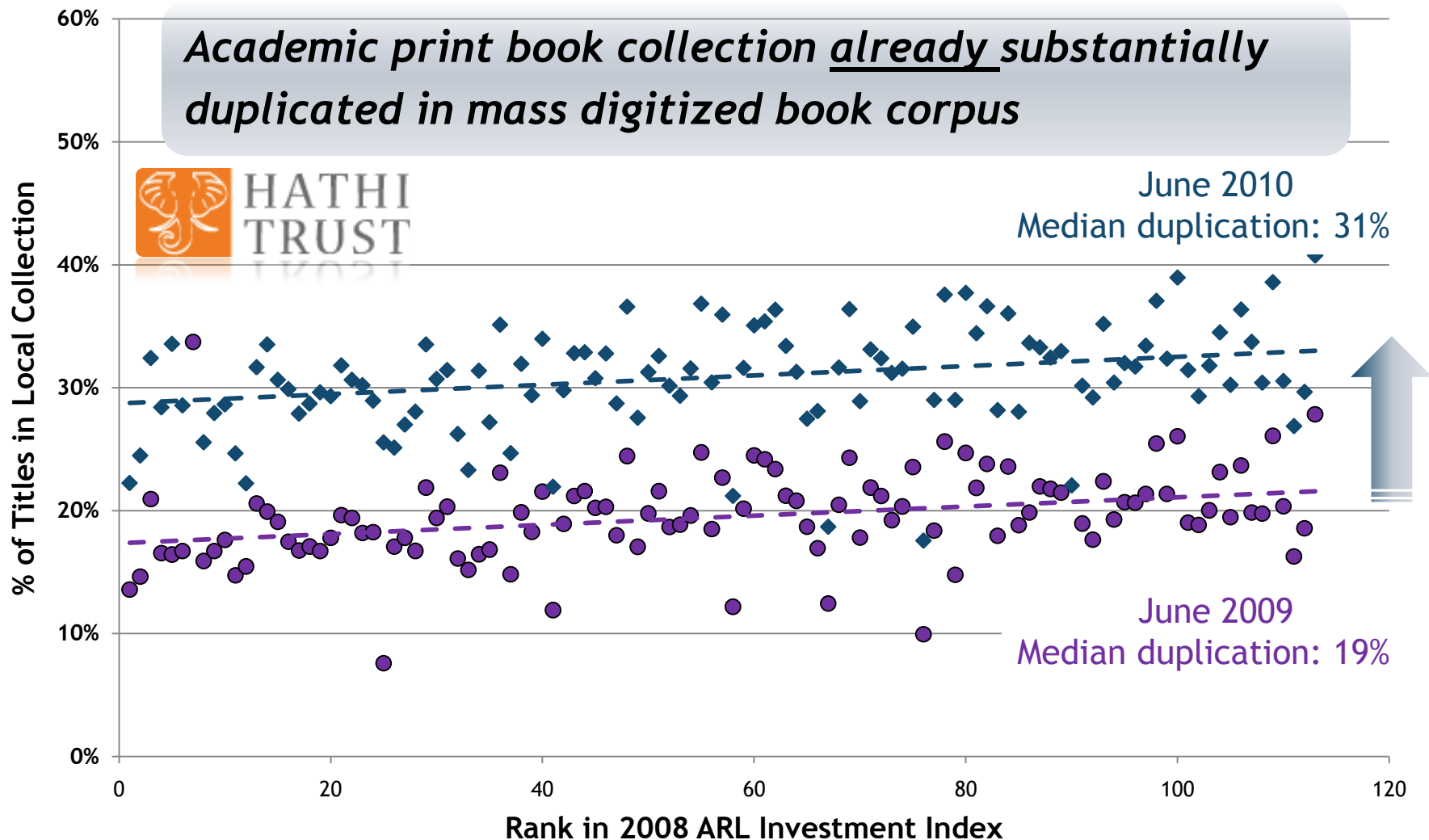


Goal 6. Use Technology to Expand Access and Opportunities		Leadership (P - Primary S - Secondary O - Other)							Projected Year	Fiscal Impact of Strategy
	Page	Executive Vice President and Provost	University Faculty Senate	Academic Leadership Council	VP for Outreach	VP for Information Technology	Dean, University Libraries and Scholarly Communications	University Budget Office		
6.1 Expand the World Campus and Other Online Educational Offerings	40				P	O			1	Large Revenue Generation
6.2 Invest in Robust/Flexible IT Infrastructure for Teaching, Research and Administration	41	O				P	P		1 / 2	Large Investment/ Efficiency Improvement
6.3 Re-Balance Centralized/Dispersed Facilities/Services for Greater Efficiency and Effectiveness	43	O				P	O		2	Large Investment/ Large Cost Savings
6.4 Protect the Integrity of the IT Infrastructure	45								1	Large Investment
Selected Performance Measures									Fiscal Impacts on Operating Budget	
<ul style="list-style-type: none"> Enrollment in World Campus programs "Return on investment" of World Campus programs Usage and growth of World Campus programs Percentage of faculty reporting use of Open Educational Resources (OER) materials Cost for "commodity" information technology services Percentage of faculty and staff computers with anti-virus software, spyware detection software, and adware detection software installed Percentage of faculty and staff laptops with full disk-drive encryption Percentage of Penn State's merchants who are Payment Card Industry (PCI) compliant Percentage of University units meeting current security standards 									<ul style="list-style-type: none"> Cost Neutral - no new expenditures required; no costs saved; existing Small Revenue Generation - mainly reprogramming existing resources; less than \$250,000 on a recurring basis Moderate Cost Savings, Investments Required, or Net Revenue Generation - \$250,000 to \$1,000,000 on a recurring basis Large Cost Savings, Investments Required, or Net Revenue Generation - \$1,000,000 or more on a recurring basis Efficiency Improvement - creates greater efficiency and may avoid 	

Usage and growth of digital repositories
 Faculty uptake of Open Education Resources

A global change in the library environment

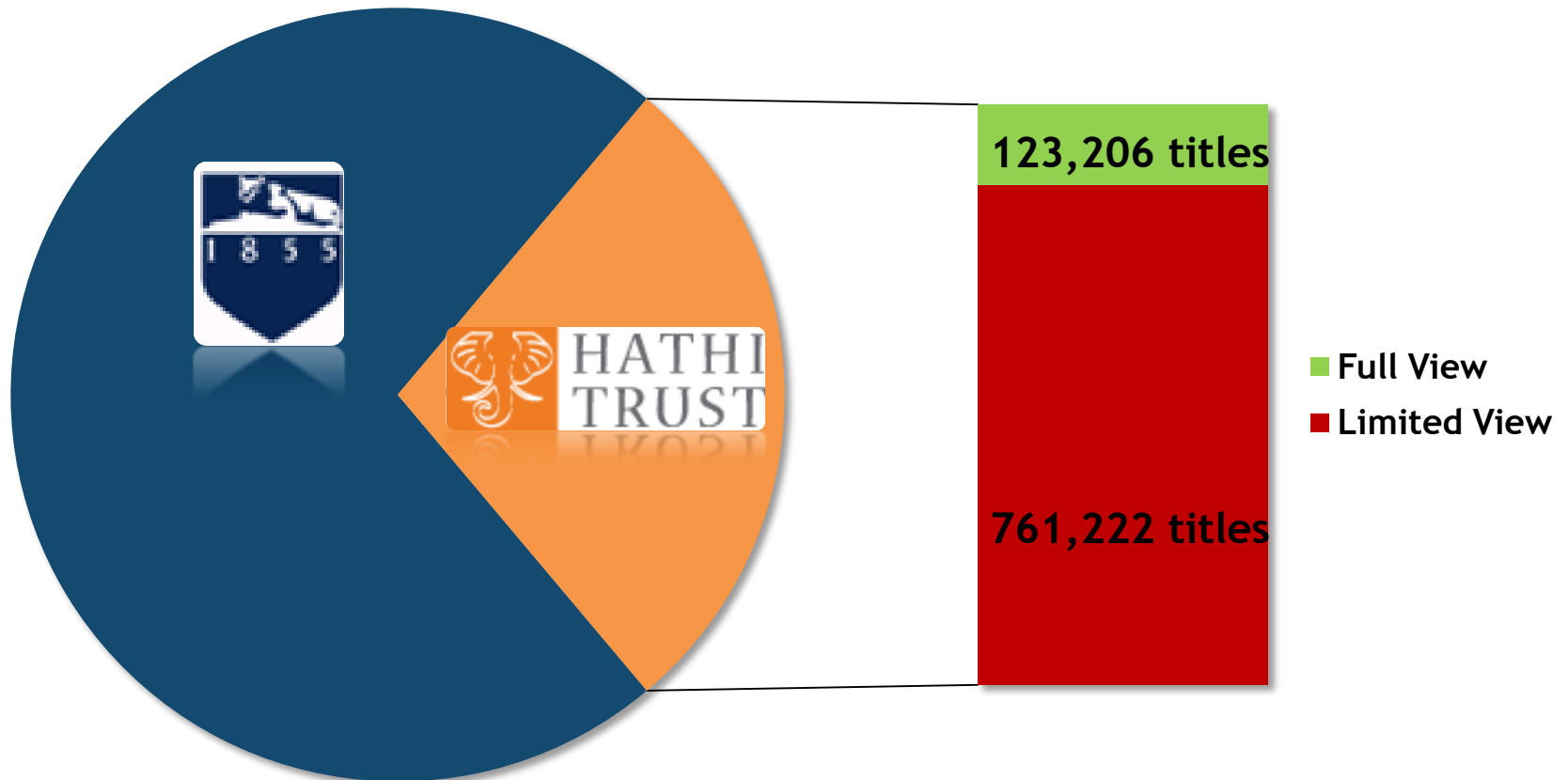
Academic print book collection already substantially duplicated in mass digitized book corpus



Nearly 30% of titles in University Park Libraries are duplicated in the HathiTrust Digital Library



3.2 million Penn State University Park holdings in WorldCat



~885K are duplicated in HathiTrust Digital Library

Stewardship and sustainability: a pragmatic view



Using recent life-cycle adjusted cost model* for library print collections,

\$4.25 per volume per year --- on campus

\$.86 per volume per year -- in high-density storage

Penn State University is spending between

[885K titles * \$.86 =] **\$760K to \$3.76M** [= 885K titles * \$4.25] **annually**

to retain local copies of content preserved in the HathiTrust Digital Library

*The library is not financially accountable for these costs
but it is responsible for managing them*

An integrative approach, a system-wide view



Library News

Penn State's Collections Grow by Millions With HathiTrust

OVER THE PAST THREE YEARS, PENN STATE HAS EXPANDED ITS COLLECTION BY MILLIONS, GREATLY WIDENING POSSIBILITIES FOR RESEARCH AND OPENING ACCESS TO VALUABLE OUT OF COPYRIGHT COLLECTIONS FROM OTHER INSTITUTIONS.

This virtual expansion of the Libraries' collections was made possible through an agreement entered in 2007 by the provosts of the CIC (the Committee on Institutional Cooperation—a consortium of the Big Ten universities plus the University of Chicago) and Google, which aimed to digitize up to 10 million volumes—the Google Book Project. From the thousands of volumes sent by Penn State to Google for the project, the out of copyright materials have been deposited into the “HathiTrust,” a repository founded by the CIC in 2008. Through the agreement, Penn State has joint access to over 1.7 million full-text digital books that are out of copyright, including many rare gems from sister institutions of the Big Ten and other universities, including Columbia, Princeton, and the University of California.



“When we think about our library collection we have to think of it more globally. All the material in Hathi is also part of our collection, no matter who digitized it,” says Lisa German, assistant dean for technical and collections services. “Anyone has full access to those books, including alumni. Alumni can go to the HathiTrust and look at any of the digitized materials, not just Penn State’s.”

✓ **Penn State holdings contributed to HathiTrust**
Increased visibility, accessibility
Shared investment in repository infrastructure

✓ **HathiTrust content not held by Penn State**
Extends local collection at reduced cost

Penn State-owned content duplicated in Hathi
Redirection of local print management
Reduces costs as inventory is rationalized
Supports reconfiguration of library space and service portfolio

Leveraging shared infrastructure



The CAT

[The CAT](#) [My Library Account](#) [Course Reserves](#) [Find Articles](#) [Materials Not at Penn State](#) [Library](#)

[Go Back](#) [Help](#) [New Search](#) [Previous](#) [Next](#) [Change Display](#) [Print/Email Marked](#) [Oops](#) [Exit](#)

Record 1 of 1 for search "9835459{035}"

Mark

[Nearby items on shelf](#)

Continue search in

[WorldCat](#)

[Google Books](#)

[Google Scholar](#)

[Locations](#)

[More ...](#)

To amend the Federal coal mine safety act. : Hearing, Eighty-ninth Congress, first session. March 10, 1965
United States. Congress. House. Committee on Education and Labor. General Subcommittee on Labor.

Publisher: U.S. Govt. Print. Off.,

Pub date: 1965.

Physical Description: iv, 139 p. :



[Full view](#)



[Limited view \(search only\)](#)

[More Information](#)

Holdings

additive vs. transformative

Pattee Library and Paterno Library Stacks (UP)

Call Number

Material

Location

Y 4.Ed 8/1:C 63/3/965

Book

[Search for digital copy BY TITLE in LexisNexis Congressional. \(nocirc\)](#)

Transforming the environment



Title [more >](#) Rains produced at will.

bookmark

Search in this text

Catalog record

Find in a library

Permanent Link

<http://hdl.handle.net/2027/>

Login to make your personal collections permanent

Add to your collection:

Select Collection



Nea

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Wo size

Go rotate

Go

image

text

PDF 1-page PDF

Contents:

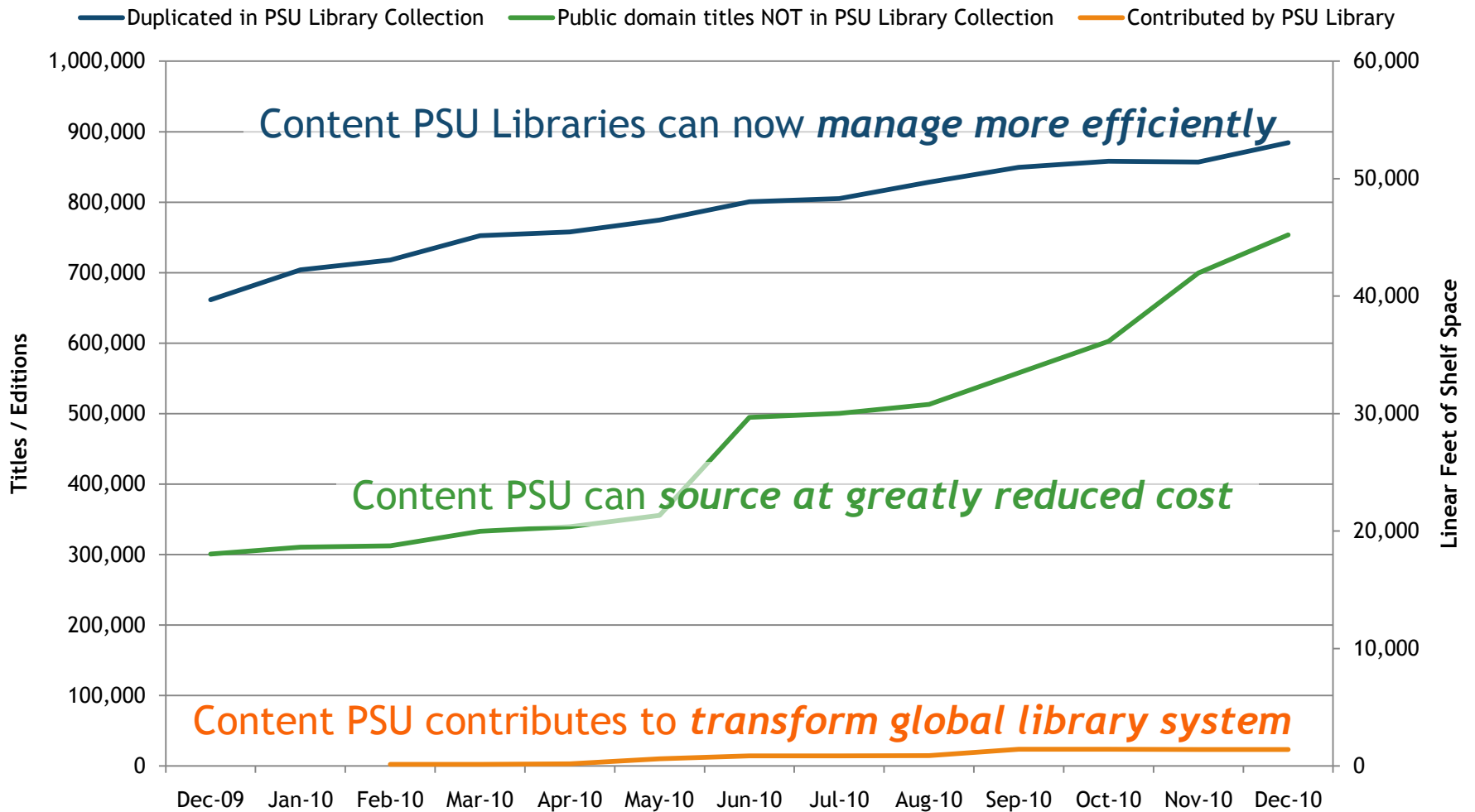
Front Cover	
Title Page	1
Section 1	3
Section 2	4
Section 3	17
Section 4	40
Section 5	54
Index	64

MAR 12 '68
NOV 21 '68
MAY 9 '70
AUG 24 '74



Pre-automation period...4 circulations in 7 years

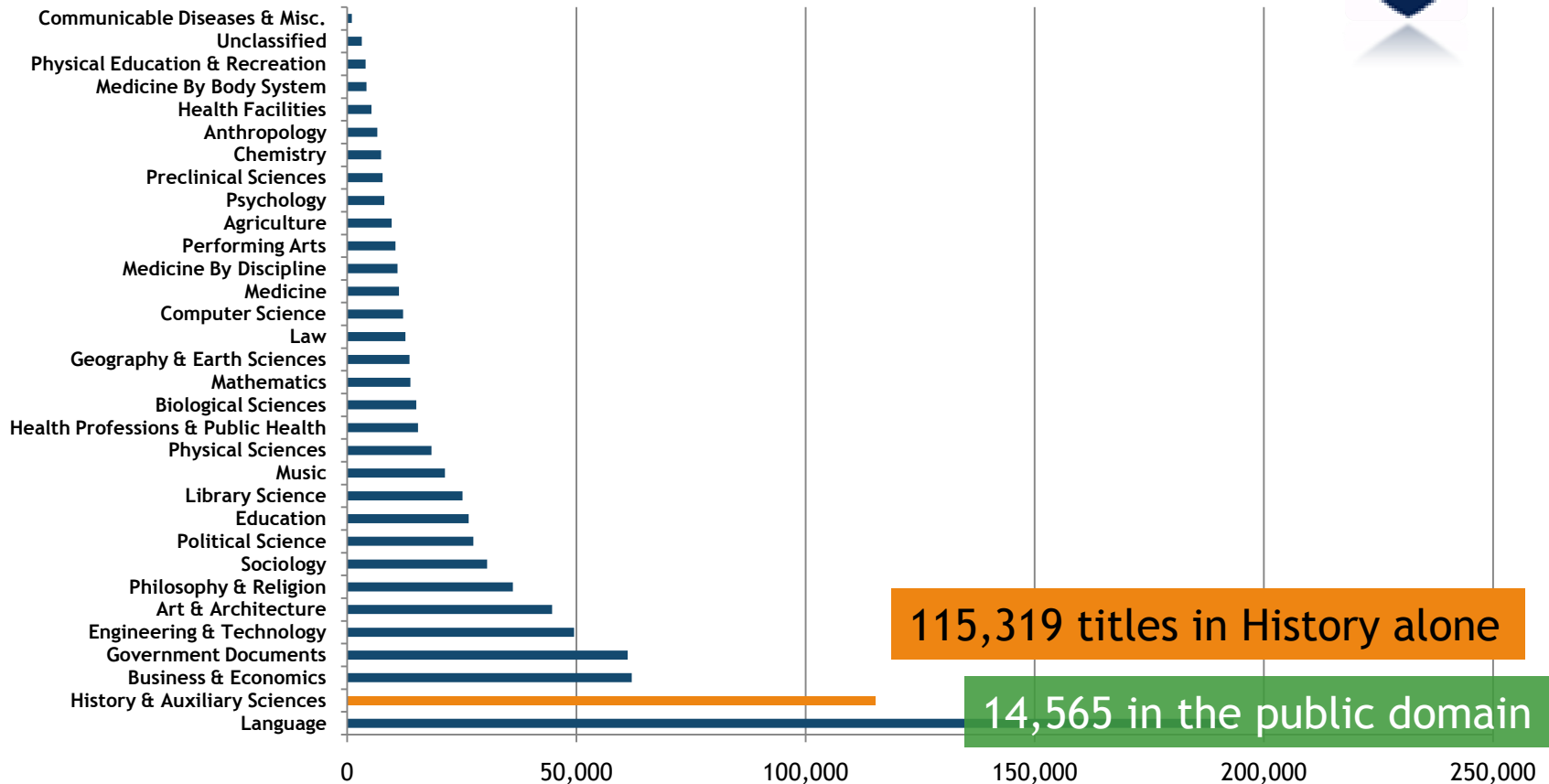
It all stacks up: ROI for shared infrastructure



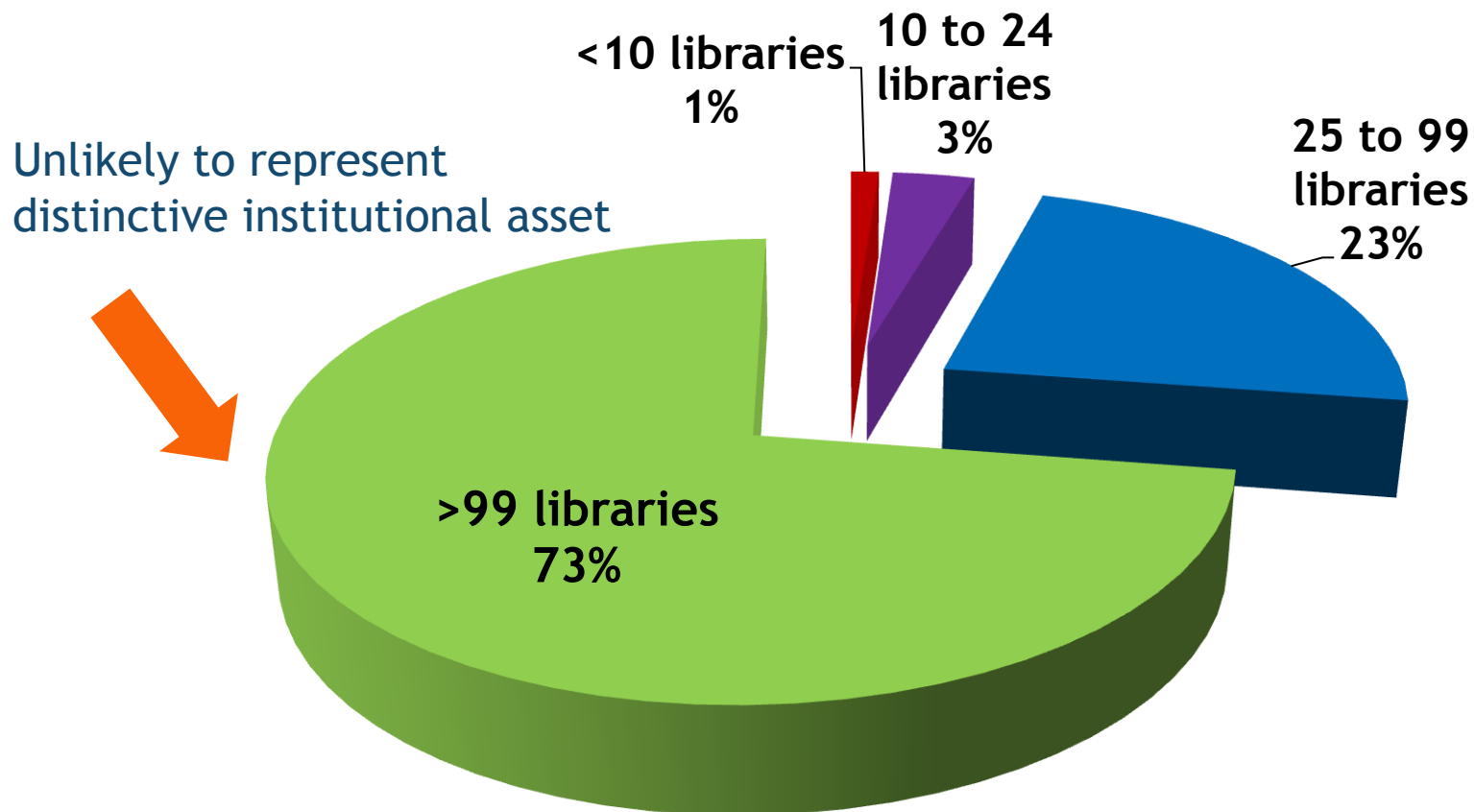
Reconfiguring collections: an evidence-based approach



Subject Distribution of Titles Held by PSU Libraries and Duplicated in HathiTrust Digital Library



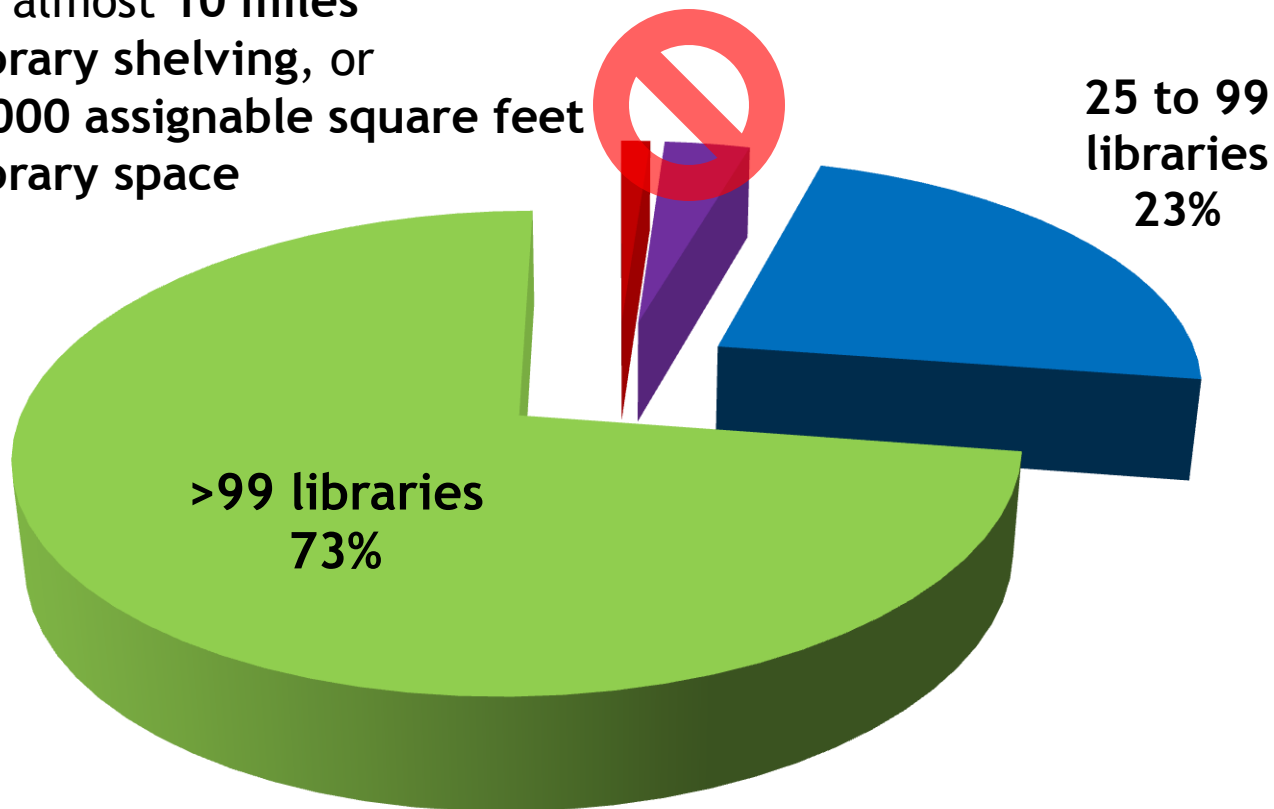
Assessing risks . . .



**System-wide Library Print Holdings for PSU-owned Titles
Duplicated in HathiTrust Digital Library**

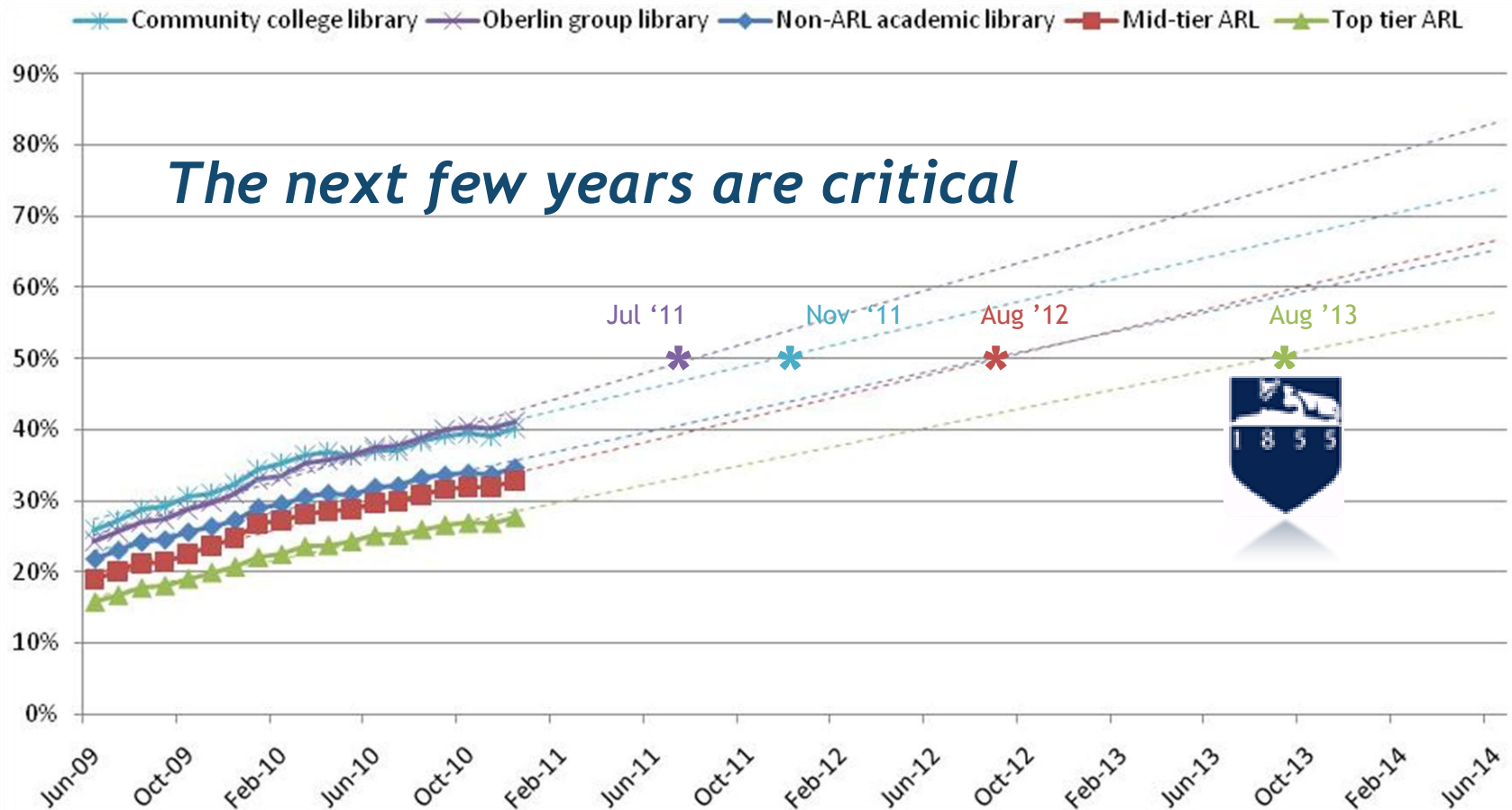
. . . and quantifying benefits

Represents almost 10 miles
of library shelving, or
nearly 68,000 assignable square feet
of library space



**System-wide Library Print Holdings for PSU-owned Titles
Duplicated in HathiTrust Digital Library**

Academic libraries in the Keystone State: a common trajectory, different timelines



Reconfiguring academic collections is not about “removing books” or devaluing scholarly interactions with legacy print

- Enabling a renewal and revitalization of the library’s core service mission to the University
- Redistributing the costs and benefits of stewardship across research library sector
- Ensuring the long-term survivability of low-use, long-tail content for future generations of scholars

A vision of the future



In 2015, interdisciplinary studies at PSU are supported by a ***robust cyber-infrastructure*** enabling faculty and students to ***identify and explore previously unknown connections*** in a corpus of scholarly materials ***10X the size of the current library collection***

Library expertise is ***redirected to the appraisal and curation*** of locally-created ***research and learning materials*** , increasing scholarly productivity and ***enhancing the University's reputation*** as a center of research and learning.

A closing thought



Photograph by James LeVeque from MakerFaire 2010 (flickr)

Reconfiguring academic collections
is a delicate operation

The fate of the library
is not at stake, for

Each generation will find
where it best fits

Thanks for your attention.

Comments, Questions?

Constance Malpas

malpasc@oclc.org



OCLC™

The world's libraries.
Connected.