

Access to Historical STE Materials in the U.S. and Canada: Trends in Collecting, Archiving, and Digitization



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The CRL LHL partnership's primary focus is on Science, Technology, and Engineering (STE) not the traditional STM

Covers the broad subjects:

- Biological Sciences
- Chemistry
- Computer Science
- Engineering & Technology
- Geography & Earth Sciences
- Mathematics
- Physical Sciences

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Major impacts on STE Collections / Collecting

- Shift to digital content
- The economy
- Growth of the research enterprise

Major impacts on STE Collections / Collecting

Shift to digital content is very pronounced in STE areas

- Many STE publishers have shifted to a “flipped” model where print becomes an add on to the electronic publication.
- Use of digital content especially in the STE areas far exceeds use of print materials.
- The development of digital archives for STE content has progressed far quicker than the development of print archives.

Major impacts on STE Collections / Collecting

It is the economy:

- According to the National Association of State Budget Officers (NASBO), twenty-four states are working from 2013 budgets with lower general fund expenditures in 2013 than in 2008.
- (NASBO): 29 states had lower spending in fiscal 2012, compared with pre-recession levels.
- Overall, total general fund expenditures for all states will not exceed the pre-recession high of \$687.3 billion spent in fiscal 2008.
- Budgets have stagnated but not the cost of content.

Major impacts on STE Collections / Collecting

Average 2013 Price/Title for Scientific Disciplines:



Chemistry	\$4,450
Physics	\$3,893
Biology	\$2,653
Engineering	\$2,652
Astronomy	\$2,322
Food Science	\$1,975
Botany	\$1,970
Geology	\$1,965
Zoology	\$1,852
Technology	\$1,830
Math & Computer Science	\$1,700

Major impacts on STE Collections / Collecting

Growth of the research enterprise:

From the National Science Foundation, global R&D expenditures over the past decade have grown faster than global GDP. The global total rose from an estimated \$522 billion in 1996 to approximately \$1.3 trillion in 2009, with the rate of growth slowing in the 2008–09 recession years.

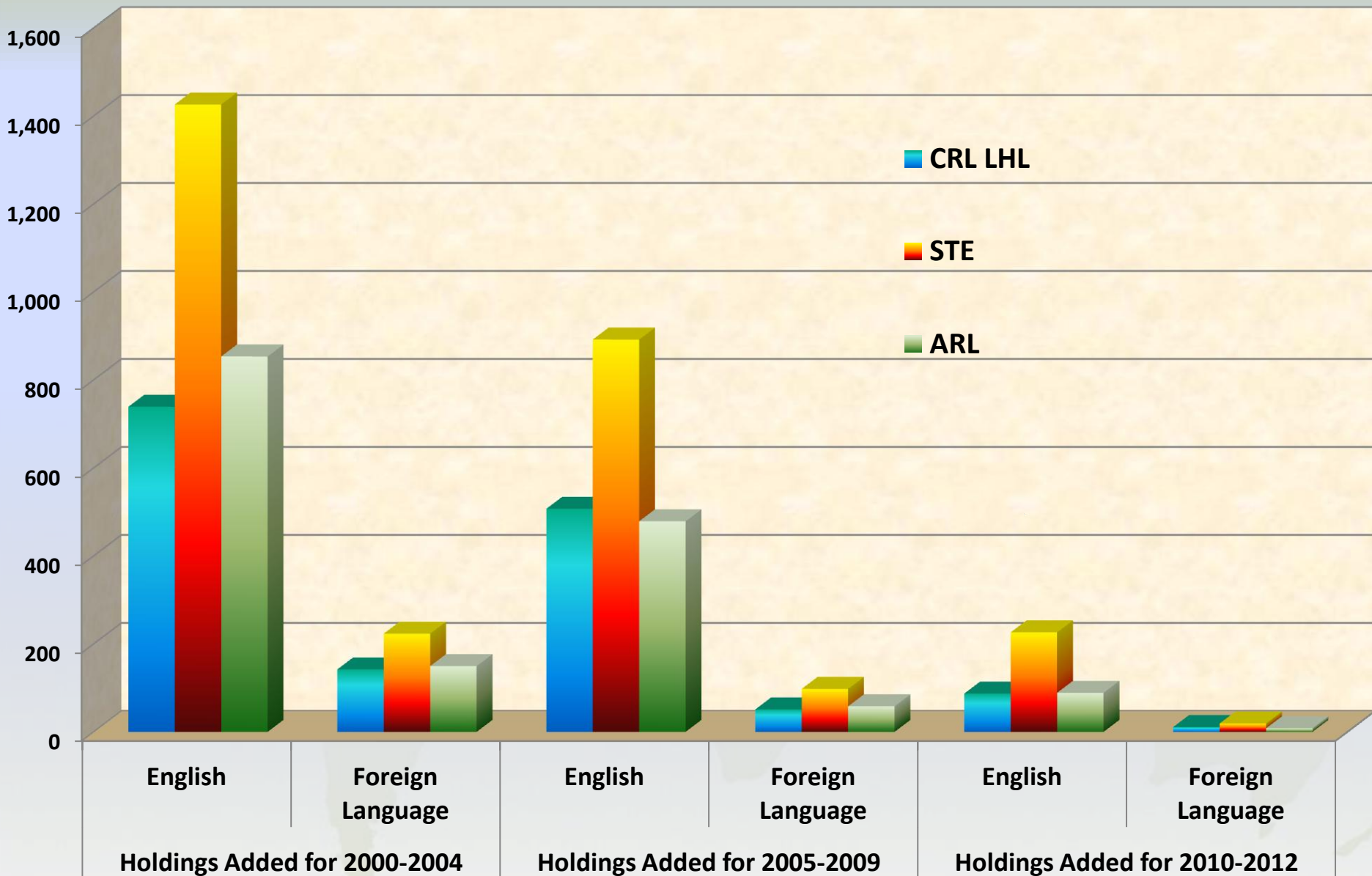
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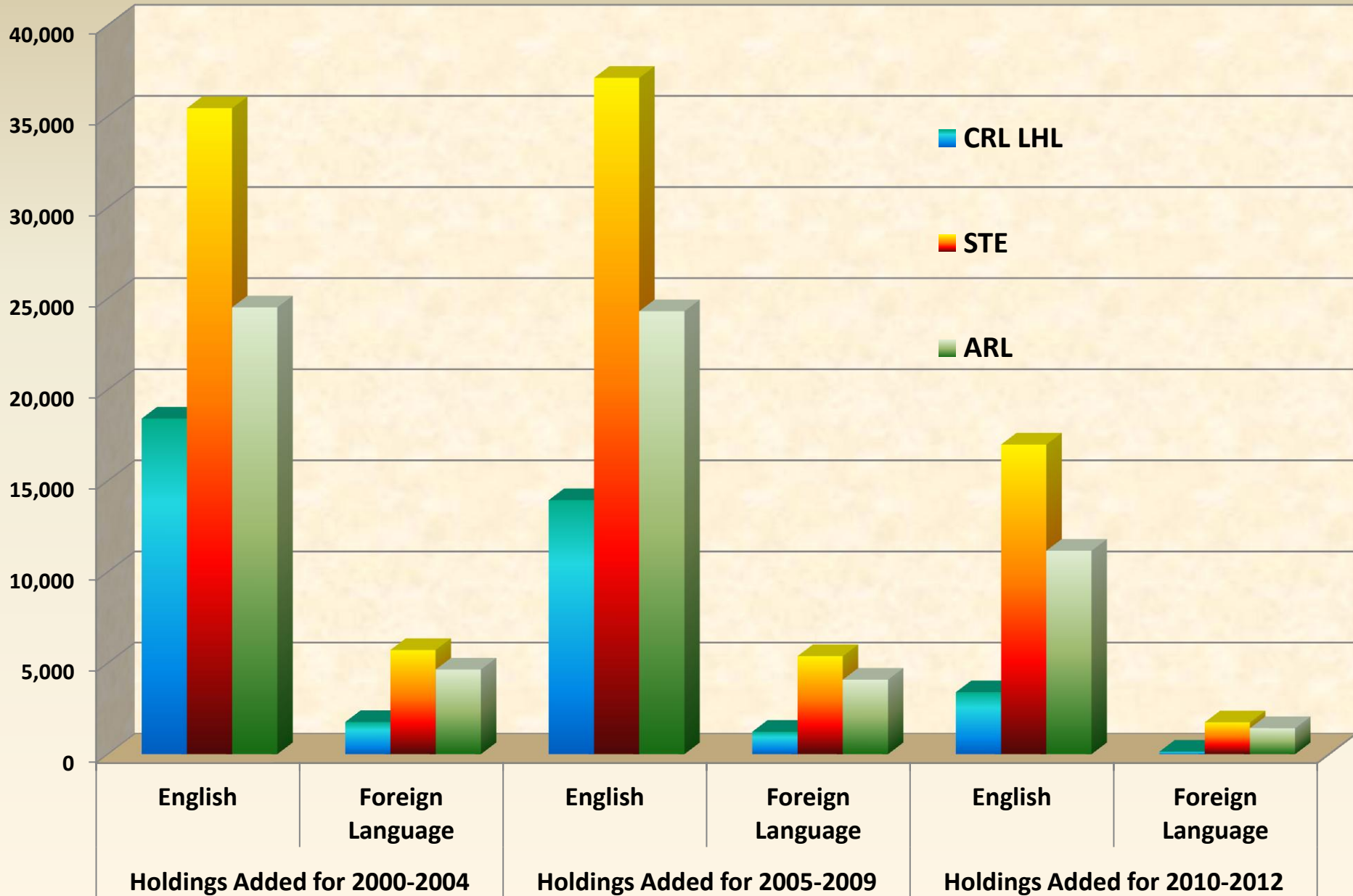
Over the past decade there has been a significant drop in collecting activity in STE areas especially in foreign language areas.

Data from OCLC records clearly shows drops in collecting activity – very pronounced after 2008.

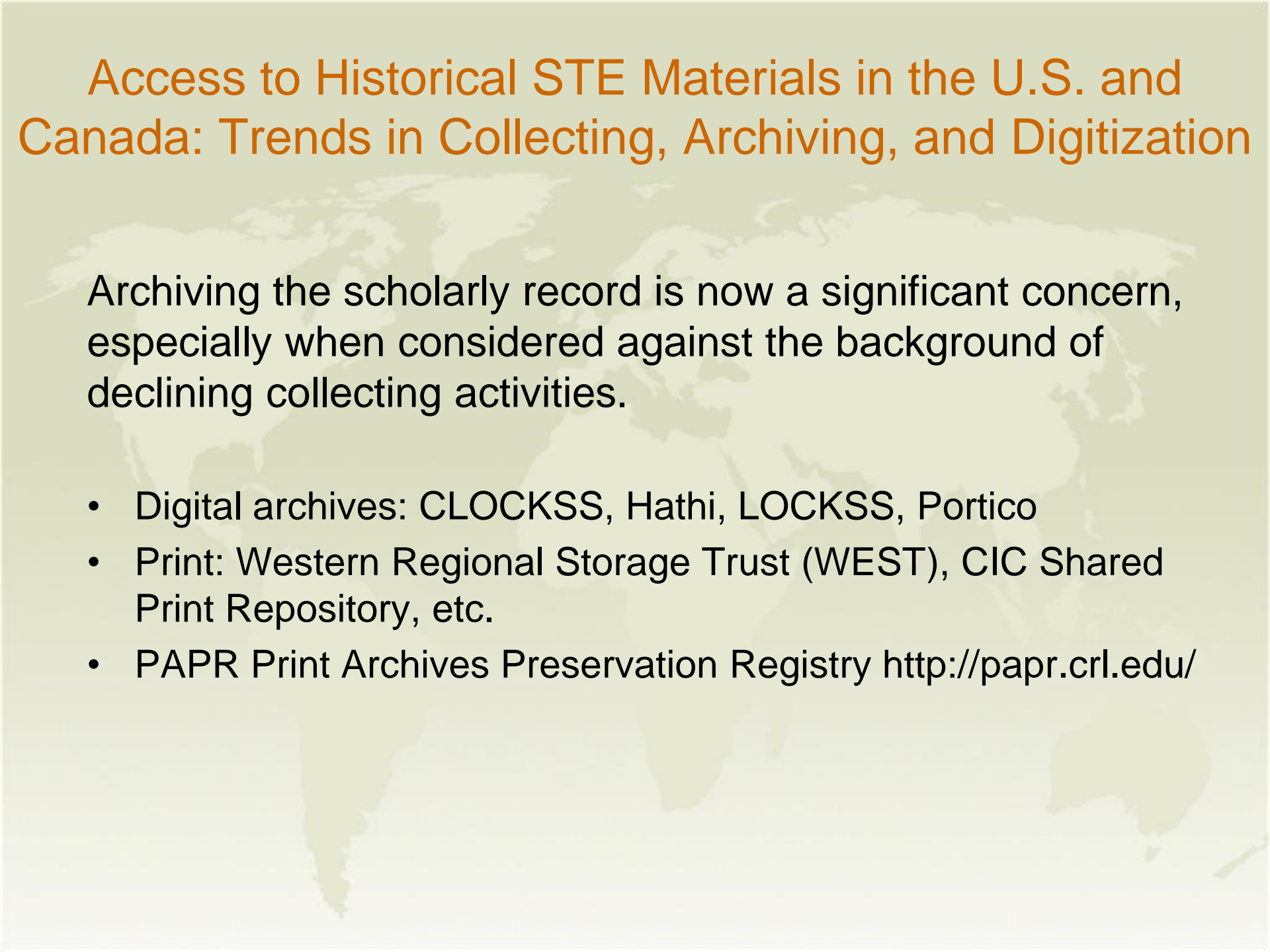
Comparison of Growth in Added Serial Holdings for English vs Foreign Languages 2000 - 2012



Comparison of Growth in Added Monographic Holdings for English vs Foreign Languages 2000 - 2012



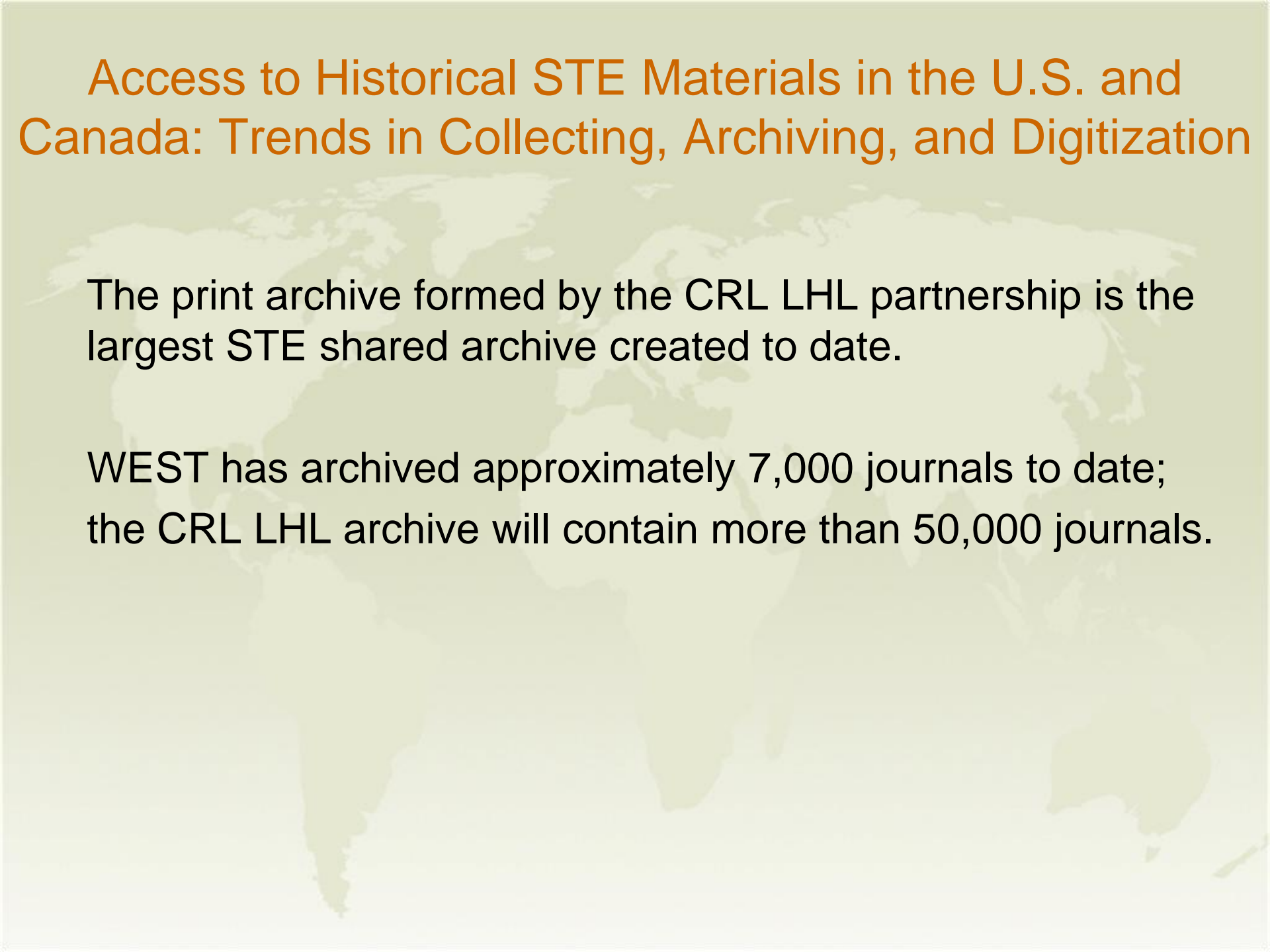
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Archiving the scholarly record is now a significant concern, especially when considered against the background of declining collecting activities.

- Digital archives: CLOCKSS, Hathi, LOCKSS, Portico
- Print: Western Regional Storage Trust (WEST), CIC Shared Print Repository, etc.
- PAPER Print Archives Preservation Registry <http://paper.crl.edu/>

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The print archive formed by the CRL LHL partnership is the largest STE shared archive created to date.

WEST has archived approximately 7,000 journals to date; the CRL LHL archive will contain more than 50,000 journals.

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The STE area was an early adopter of digital content and digital publishing of new content is the norm.

- Digitization of older print materials has not seen similar results. In CLOCKSS only 28% of the titles are archived from V. 1 on.
- Hathi 15% of the volumes in Hathi are in the STE area rising to 18% of the volumes available in the public domain.
- For serials, digitization of post 1923 content poses more issues than the digitization of books.

A faint, light-colored world map is centered in the background of the slide. The map shows the outlines of the continents in a light beige or cream color against a slightly darker, muted green background.

BREAK FOR QUESTIONS