



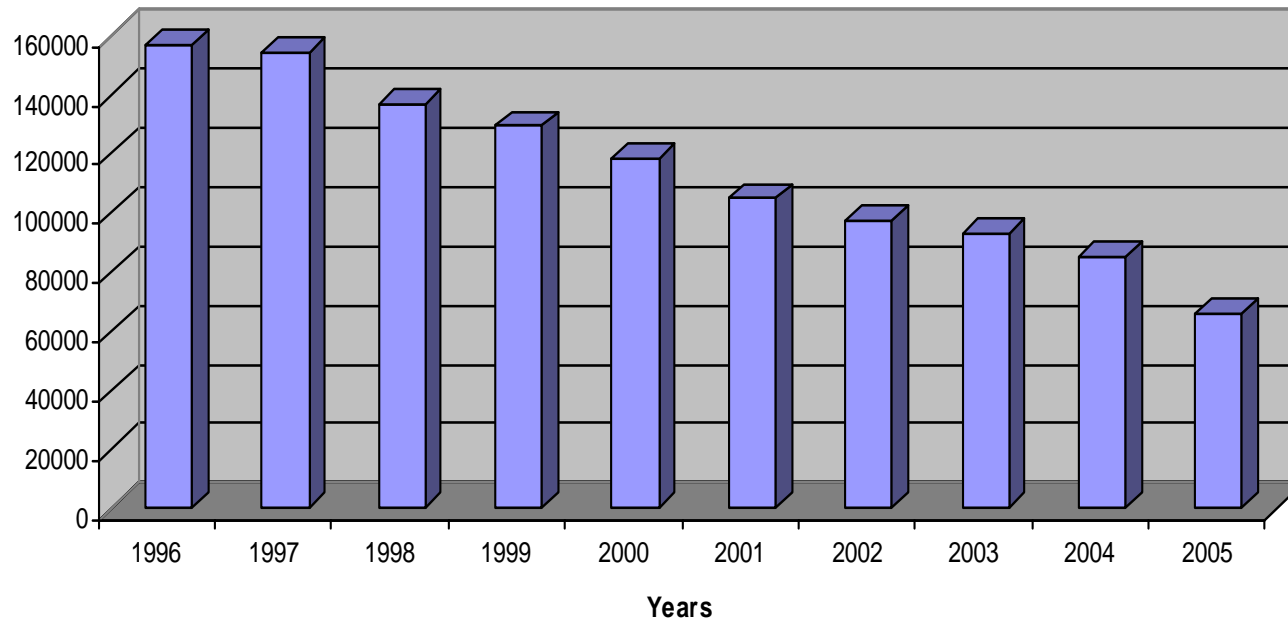
BUSIER THAN EVER: RETHINKING REFERENCE STATISTICS FOR THE DIGITAL AGE

Presentation to the 2007
Electronic Resources & Libraries
Conference

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The Decline of Traditional Reference Statistics

ARL Reference Statistics -- 1996 - 2005





New Types of Patron Contacts

- Remote access to catalogs, electronic databases, and online journals
- E-mail/live chat/instant messaging reference service
- Visits to library-generated Web pages

NISO Z 39.7-2004—Information Services and Uses: Metrics & Statistics for Libraries and Information Providers

- Based on recommendations from the NISO Forum on Performance Measures and Statistics for Libraries (2001)
- Goal is “to assist librarians and researchers ... by indicating and defining useful quantifiable information to measure the resources and performance of libraries and to provide a body of valid and comparable data on American libraries.”
 - NISO Z39.7-2004

7.3.1—Virtual Reference Transactions

- Definition--Virtual reference transactions conducted via e-mail, website, or other network-based medium designed to support virtual reference. Note: Includes questions either received or responded to.

-- NISO 39.7--2004

7.3.1 – Why Count?

- Show instant productivity gain
- Reverse decline in traditional reference statistics
- Obtain enhanced support for VRD
- Compare with other libraries
- Cost/benefit analysis (cost of service vs. amount of service)
 - E-Metrics Instructional System (FSU)
- Evaluation (includes analysis of usage statistics)
 - RUSA Guidelines for Implementing and Maintaining Virtual Reference Services #4.6.2

Where Do Virtual Reference Statistics Come From?

- VR vendor software (e.g., QuestionPoint, Docutek)
 - Periodic institutional reports
 - Questions Received
 - Answers Sent
- Instant Messaging
 - Create an online in-house statistical reporting form
- Individual Reference Activity Forms
 - Create an in-house paper statistical reporting form for questions received away from the traditional reference desk (in-person, telephone, individual emails) that measures type of question, type of patron, length of question

How to Collect Statistics

- Appoint a data collector
- Decide on sample or count
- ID & collect data from all VR providers
- Develop/disseminate procedures/forms
 - E-Metrics Instructional System (FSU)
- Convince staff/administration that this is valuable!!!

7.7.1.5—Virtual Visits

Definition—A user's request of the library web site from outside the library premises regardless of the number of pages or items viewed. (ISO 2789, 3.3.25) Excludes web site visits from within the library. Note: This statistics is the equivalent of a session folibrary's [sic] website. As such, there is a need to exclude various counts (hits, downloads) by users during any given visit.

- NISO Z39.7-2004

Why Count?

- Promoting and funding the library
- Provides fuller representation of type of library service
- Shows instant productivity gain
- May reverse library visit decline trends
- Enables continued/enhanced support for library's virtual services
 - E-Metrics Instructional System (FSU)
- **Part of library Web management (user statistics, feedback, etc.)**
- **Useful for Web site design and revision**

Where Do the Statistics Come From?

- Web site server statistics—“Hits,” page views, visits, (unique) visitors
- Log file analysis—Records of every request made to a server (e.g., address of the computer that accessed the server, individual files searched)
- Log file analysis software—On-screen counters, Webalizer (open source), WebTrends, Site Catalyst

What Do Server Statistics Look Like?

```
reqs: %bytes: last time: file -----: -----: -----: ----  
15627: 7.14%: 26/Jan/06 21:31: /library/  
3367: 1.42%: 26/Jan/06 21:30: /library/reference\_databases/  
1425: 4.90%: 26/Jan/06 19:20:  
/library/reference\_databases/ntimes/search\_type.php  
995: 2.35%: 26/Jan/06 20:45: /library/reference\_databases/ref.html  
925: 0.57%: 26/Jan/06 21:32: /library/special\_collections/  
717: 4.76%: 26/Jan/06 21:30: /library/reference\_databases/title.html  
648: 0.28%: 26/Jan/06 21:21: /library/web\_resources/  
609: 2.50%: 26/Jan/06 21:15: /library/siteindex.html  
590: 0.19%: 26/Jan/06 21:05: /library/hours/
```

How to Collect Statistics

- Appoint data collector
- Coordinate data collection for related e-metrics
- Develop plan to collect data from all sources
- Use of log analysis
- ID/address staff/decision makers training needs
- Establish data collection procedures
- Collect e-metric for desired period of time
 - E-Metrics Instructional System (FSU)
- **Convince staff/administration that this is valuable!!!**



What to Report?

One Library's Recommendations

- UNC Charlotte Task Force (2003)
- Use “employee-excluded” server statistics (exclude workstations in staff offices)
- Recommended inclusion of the following:
 - Total number of successful page views
 - Total number of distinct hosts served (individual computers)
 - Total number of library digital objects viewed (e.g., images, audio, and video)

Using Server Statistics: A Cautionary Tale

- Server statistics have gotten a bad rap
 - Server statistics use technical jargon
 - Server statistics can be misleading (due to caching, “robot” searching by search engines, graphics links)
 - Server statistics analyzed over time are useful to show trends
 - In some cases, statistics are not useful (e.g., for services only available via the Web such as ILL, electronic reserves)
- For discussions of analyzing server statistics, see:
Cohen, L. B. (2003). A Two-tiered model for analyzing library Web statistics, Part I: Web server logs. *Portal: Libraries and the Academy* 3 (2): 315-326.
Lowndes, M. (n.d.). Lies, damn lies and Web statistics. Available from: www.ukoln.ac.uk/web-focus/events/workshops/webmaster-2005/sessions/lowndes/lies-web-stats.ppt

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- Florida State University. College of Information. Information Use Management and Policy Institute. (2005). *E-Metrics Instructional System*. Available from <http://www.ii.fsu.edu/emis/modules.cfm?action=list§ion=3> Accessed 5 October 2005. [NOTE: Includes 7.3.1--Virtual Reference Transactions and 7.7.1.5--Virtual Visits.]

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- University of Rhode Island. (2006). Web Server Statistics for University Library. Available from <http://www.uri.edu/webstats/library> Accessed 16 February 2007.
- University of Rhode Island. (n. d.). Interpreting Web Statistics. Available from: <http://www.uri.edu/webstats/gensuminfo.html> Accessed 6 December 2006.

Libraries with Accessible Web Server Statistics

- [Hong Kong Baptist University](#)
- [Minnesota State University--Mankato](#)
- [Spencer S. Eccles Health Science Library](#)
(University of Utah)
- [Tampa Bay Library Consortium](#)
- [University of California--Berkeley](#)
- [University of Hawaii—Manoa](#)
- [University of Rhode Island](#)
 - --Accessed 16 February 2007