

## Measures and Statistics for Association of Research Library

### Networked Services: Concluding the E-Metrics Project

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There is a critical need for research libraries to develop new statistics and measures to describe network services and resources. This presentation describes one approach for describing and measuring some of the resources, uses, and expenditures for supporting networked services in a research library setting. A report and procedures manual (<http://www.arl.org/stats/newmeas/emetrics/index.html>) is one product of a larger effort to develop new measures and evaluation techniques by the Association of Research Libraries (ARL) <http://www.arl.org/stats/newmeas/newmeas.html>. The E-Metrics project is scheduled for completion in December of 2001. The project is funded by a group of 24 ARL member libraries. Other key products from the E-Metrics project are still in process and will be discussed at this session.

Based on a substantial field-testing process (described in detail in the report) the study team recommends a number of network **statistics** and **performance measures** that provide indicators of library networked services and resources. The **statistics** include:

- Patron accessible resources – Number of electronic full-text journals, Number of electronic reference sources, and Number of electronic books;
- Use of electronic resources and services – Number of electronic reference transactions, Number of logins (sessions) to electronic databases, Number of queries (searches) in electronic databases, Number of items requested in electronic databases, and Virtual visits to library's website and catalog;
- Expenditures for networked resources and related infrastructure – Cost of electronic full-text journals, Cost of electronic reference sources, Cost of electronic books, Library expenditures for bibliographic utilities, networks, and consortia, and External expenditures for bibliographic utilities, networks, and consortia; and
- Library digitization activities – Size of library digital collection, Use of library digital collection, and Cost of digital collection construction and management.

The performance measures are composite and/or combinations of the above network statistics along with, in some cases, non-network statistics already collected by ARL libraries (e.g., number of visitors to the library). The **performance measures** are:

- Percentage of electronic reference transactions of total reference transactions;
- Percentage of virtual library visits of all library visits; and
- Percentage of electronic books of all monographs.

These statistics and measures will provide research libraries with an important and useful set of tools to describe and assess network resources and services. The manual also provides libraries with guidance regarding the use to which the network statistics and measures can be put.

The manual has a number of specific goals and objectives. Its primary goal is to provide a beginning approach for research libraries to better describe the use and users of their networked services. A secondary goal is to increase the visibility and importance of developing such statistics and measures. Specific objectives of the manual are to:

- Identify selected key statistics and measures that can describe use and users of electronic and networked services;
- Standardize procedures and definitions to collect these statistics and measures; and
- Increase awareness of selected issues related to collecting, analyzing, and reporting the data to produce these statistics and measures.

The statistics and measures offered here will need to be continually developed, expanded, refined, and possibly eliminated over time.

A key component of the project has been to work with vendors and other organizations regarding the collection, manipulation, and reporting of vendor-supplied online database data. Many of the statistics described here resulted from the cooperative efforts among these vendors and other national/international groups interested in developing such statistics. Such efforts should be continued.

The report also discusses developments related to the degree to which research libraries are able to help their larger institution reach its goals or institutional outcomes. These outcomes may be articulated in strategic planning documents, in conversations with the provost or academic deans, as part of regional accreditation standards, or in state legislation. Nonetheless, ARL libraries need to develop a process to identify and operationalize library outcomes that contribute to institutional outcomes. Establishing such a process allows the library to inform key stakeholders in the university of the library's role in institutional outcomes *and* insures that the institutional outcomes to which the library has (or may have) links are in fact appropriate. While progress has been made in this area of measurement, much work remains to be done.

There are a number of issues and challenges that will affect the library's ability to collect statistics and measures to describe its electronic resources and services. These issues and suggestions for how the library can best address and resolve them are discussed within the report. Some research libraries possess inadequate resources, staffing, and expertise to collect, manage, and report the data related to describing networked services. For these libraries, some organizational development and commitment to collecting and using these data may be necessary to take advantage of the measurement tools and techniques outlined in this report.

Given the rapidly changing technology environment, the changing milieu of higher education, changing organizational structures within ARL libraries, and the complexity of measuring such networked services, it is almost certain that the statistics and measures proposed in this study will continue to evolve. The measurement tools offered in this report, however, will provide research librarians with important techniques to count, describe, and report networked services and resources in their libraries.