

## Statistics: *Or, Count on It!*

Some people get uncomfortable when the topic of “statistics” comes up. They envision complicated mathematical formulas and jargon they don’t understand. In the library, however, statistics basically have to do with counting. Statistics are used as one way to measure how the library is doing in meeting the needs of its community.

There are basically two kinds of measures that are used. One kind of measure tells us what the library provides. Some of these measures would include the number of volumes owned, the number of hours the library is opened, and the number of staff members. This kind of measure is sometimes called an **input measure**.

The other kind of measure tells us how much the library is used. Some of these measures include number of people visiting the library, number of items circulated, and number of reference questions answered. This kind of measure is sometimes called an **output measure**.

Statistical measures can be very useful in helping evaluate library services. Using statistics, libraries can compare themselves to other libraries in similar communities. They can also compare how they have done in one period of time with a similar period of time in the past. For example, it is not unusual for a monthly library report to show how the present year’s monthly circulation compared with last year’s.

### Typical Statistical Measures for Libraries

Some of the typical statistical measures that libraries use are:

**Budget Figures:** These show how much money the library has in income and expenditures. These figures are usually broken down into general categories, such as tax income and other income on the income side. Personnel, library materials, and building expenses are typical expenditure categories.

**Collection Figures:** These statistics show how many books and other kinds of materials the library makes available to its clientele. To determine the number of items that they have, librarians typically start with a base figure for the year, subtract the items that are known to be weeded or otherwise eliminated from the collection, and add the number of items that have been purchased or otherwise added. If you are not certain what your base number is, you can look on your last annual report. If you have questions about the

proper procedure to determine your collection size, call your Area Field Consultant at the Idaho Commission for Libraries.

**Attendance:** Two different attendance measures are taken. First, the number of total people who visit your library, regardless of reason, is taken. This would include persons attending activities, meetings, and those requiring no staff services. The second attendance number that is taken is a count of people who come to library programs. Library Programs are collected based on the primary age range of the targeted audience. Children (0-11 years), Young Adult (12-18 years), and Adult (19+ years) programs should be counted, as well as the total number of people who attend. For example, a preschool story time would be a Children's Program, but you would count parents who are also in attendance. A Senior Citizen's Book Club would be counted under Adult Programming.

**Reference Transactions Completed:** This is a relatively easy measure to collect. As the reference staff successfully answers a reference question, they simply make a hash mark on a piece of paper. (Reference questions are those questions which require the use of library materials or a referral to answer. Thus, "Where is the card catalog?" is not a reference question; "How tall is the Empire State Building?" is a reference question.) At the end of the day, the hash marks are counted, and the figure is written into the statistic book. Some libraries also try to determine the number of reference questions asked as well as answered, so they can see how successful they are in answering these questions.

**Circulation:** Circulation is measured simply by counting the number of materials that have been checked out each day. If you use an automated system, the computer should do this for you. If you use a manual system, this is usually done at the end of each day by counting the cards for the books that have been checked out. Many times, circulation statistics are broken down into juvenile and adult circulation. Other libraries keep track of the circulation of different formats, such as books, magazines, video cassettes, and audio cassettes. The statistics that you keep will depend on what you are trying to evaluate. For example, if you are just starting a video collection, you may want to keep separate statistics on the circulation of these items.

**Interlibrary Loan:** Your library's involvement with the interlibrary loan system is measured in two ways: first in how many items you borrow from other libraries, and second the number of items you lend to other libraries. Typically, these statistics can be kept on a monthly basis, simply by counting the number of forms for the items received and the items loaned. Sometimes to check the effectiveness of interlibrary loan, libraries

also count the number of items they requested from other libraries as compared to the number that they actually received.

**Computer Usage:** Computer use and wireless access are increasing services libraries provide to their users. It makes sense to monitor trends of computer and wireless use in the library. We currently measure computer terminals available, computer terminal use, and wireless use in libraries that have wireless connections they share with their public. This statistic helps librarians demonstrate one of the wide arrays of services we offer to the public, in addition to checking out books.

## Daily, Monthly, and Annual Statistics

Some statistics, most notably circulation, reference transactions, computer usage, and library attendance can be collected on a daily basis. Libraries can either purchase forms for collecting these statistics or make up their own. A computer program can also be used to eliminate time consuming arithmetic. At the end of each month, daily statistics are compiled into a monthly report for the library board. Often it is useful for the board to see the month's statistics compared to the same month of the previous year, as well as recent trends from the previous months.

At the end of the fiscal year, all public libraries in Idaho are required by law (see Idaho Code section [33-2611](#) or [33-2726](#)) to fill out an annual report and send it to the Idaho Commission for Libraries (ICfL). These reports, while time consuming, are not difficult to fill out, if good monthly financial and service statistics have been kept. Forms for the annual report are provided by ICfL. Normally you will receive the forms for these annual reports in September, and they are due in December. If you have never filled out these reports before, you might find them to be a bit intimidating. Feel free to call your area's *Area Field Consultant* if you need help.

## Using Statistics

In the spring of each year, the Idaho Commission for Libraries publishes a compilation of statistics for all public libraries in the state. In addition to giving you "raw" statistics for all libraries, this report will show some of your library's statistics in comparison to libraries in similar size communities.

Many of these comparative statistics are expressed in "*per capita*". A *per capita* statistic is simply the average number of whatever you are measuring for each person in your services area. For example, let's say that your library circulates 10,000 items a year,

and you serve 1,000 people. To get the *per capita* circulation, we divide the circulation (10,000) by the number of people (1,000) and come up with a figure of 10 circulations *per capita*. In other words, for each person served, 10 books were circulated, or the “average” person in your community checked out 10 books last year.

By using this kind of statistic, you can show taxpayers or funding agencies the kind of value that your library is providing to your community. At times you may also be able to appeal to community pride to gain support for the library. For example, if your library is supported at \$10 *per capita*, while the average library in the state is supported at \$15 *per capita*, you can make a case that your library is underfunded compared to others.

You need to realize, however, that statistics can cut both ways, and they normally need to be explained. For example, let’s say that Library A has 5 volumes *per capita*, and Library B has 3 volumes *per capita*. Does this mean that Library A is a better library? Not necessarily. It may mean that Library A has never been weeded, and that a large number of its books are old, dilapidated and will never be checked out.

This might be indicated by the turnover rate, which is the circulation figure divided by the number of volumes. Let’s say that Library A circulated 20,000 items last year, and it has 20,000 volumes. Its turnover rate is 1. Library B circulated 18,000 items last year, and it has 12,000 items. Its turnover rate is 1.5, which means that the average volume in Library B circulated more frequently than the average volume in Library A.

However, if Library A and Library B both serve 4,000 people, then Library A circulated 5 items *per capita* to only 4.5 items *per capita* for Library B. Thus, statistics can be used to show that either library is doing a “better” job. We also should not assume that more is necessarily better. For example, a library can increase its circulation fairly easily by buying more popular fiction and videos or shortening its loan period. But the question then becomes, is the library more valuable because it circulates 20 light romances, as compared to one book containing information that saves a business thousands of dollars? Or is it providing better customer service if it requires its clientele to renew materials every two weeks instead of letting them keep the materials for three weeks?

Thus, while statistics are useful tools in evaluating library services, they should not be taken out of context. In evaluating how the library is doing, it is best to look at a wide variety of measures. When statistics change radically from one year to the next, it is an indication that something changed in the library or the community, and you should try to find out what it is if you don’t already know. Statistics, then, serve as a kind of weathervane that helps you to know which way the wind is blowing for your library.