The benchmarks for school libraries in Colorado are ratios for library resources (e.g., staffing, collection, funding) and services (e.g., cooperation between library staff and classroom teachers, circulation) that make it easier to compare your school library with other school libraries in the state.

To use these benchmarks, first identify the statistics on which you would like to evaluate your school library. Then choose the 50th, 75th, or 95th percentile according to your self-determined standard for each statistic. If you choose the 50th percentile you are comparing your library to a typical one. If you choose the 95th percentile you are comparing your library to an exceptionally good one.

The benchmarks are produced by weighting the survey data to reflect the universe of school libraries in Colorado and then calculating ratios. In 2004, over 700 Colorado school libraries completed the survey and were included in the calculations for the benchmarks. Data from school libraries that left substantial parts of the survey incomplete was not included in the benchmark calculations so that the weighting would be accurate. This school library survey includes only traditional K-12 public educational institutions. (Alternative schools and kindergarten-only schools are not included, so the universe numbers for this survey may differ from figures from the Colorado Department of Education.)

### STAFFING RATIOS

Benchmarks for school library staffing are provided by two ratios: endorsed school librarian hours per 100 students and total library staff hours per 100 students.

**Hours of Endorsed School Librarians per 100 Students**

Endorsed school librarian hours per 100 students is calculated as follows: the number of hours per week of school librarians endorsed by the Colorado Department of Education divided by the number of students enrolled in the school, divided by 100:

$$\text{Endorsed School Librarian hours} \div (\text{Students Enrolled} \div 100) = \text{Endorsed School Librarian hours per 100 Students}$$

This ratio is a measure of the extent to which a library’s operations are supervised by a library professional whose training has been endorsed by the state.
**Total Library Staff Hours per 100 Students**

Total library staff hours per 100 students is calculated as the total number of weekly hours of library staff, both endorsed school librarians and other paid staff, divided by the number of students enrolled in the school divided by 100:

\[
\text{Library Staff Hours} \div (\text{Students Enrolled} \div 100) = \text{Library Staff Hours per 100 Students}
\]

This ratio is a measure of the extent to which a library is adequately staffed, taking into consideration the number of students served by the library.

---

**WEEKLY SERVICE RATIOS**

Benchmarks for weekly library services are provided by six ratios: library visits per student, library group visits per 100 students, information skills instruction (IS) visits per student, IS group visits per 100 students, circulation transactions per student, and the interlibrary loan (ILL) per 100 items circulated ratio.

**Library Visits by Individual Students and by Groups**

Library visits per student is calculated as the number of visits to the library by individual students divided by the number of students enrolled in the school. Each of the weekly service ratios is calculated in the same manner as library visits per student. For example:

\[
\text{# of Student visits to Library} \div \text{Students Enrolled} = \text{Library Visits per Student}
\]

This ratio is a measure of the frequency with which students use the library in general. In lieu of figures on uses of electronic information resources, this ratio is an important supplement to the circulation ratio.

**Circulation Transactions per Student**

Circulation transactions per student is calculated as the number of times library materials are charged out to users divided by the number of students enrolled in the school:

\[
\text{Charge-outs} \div \text{Students Enrolled} = \text{Circulation Transactions per Student}
\]

This ratio is the traditional library use measure, but also includes non-book formats such as issues of print magazines, video materials, and computer software packages, when such items are circulated.
**Interlibrary Loans per 100 Circulation Ratio**
The *ILL/100 circulation ratio* is calculated as the number of items borrowed or rented by
the library divided by circulation of materials from the library collection, divided by 100:

\[
\text{Items Borrowed/Rented ÷ (Items Circulated ÷ 100)} = \text{ILL per 100 Circulation Ratio}
\]

This ratio is another measure of the extent to which the school library participates in
resource sharing among libraries and exploits other resources available commercially.

**Caution:** While generally it is good for a library to have a high figure for this ratio, an
excessively high one—especially if coupled with low collection and circulation ratios--
may indicate the need to review the library’s collection development policy.

**PERCENTAGE OF WEEKLY LIBRARY STAFF HOURS SPENT IN LEADERSHIP OR COLLABORATIVE ACTIVITIES**

In 1999, the Library Research Service did a major study of Colorado school library
statistics, evaluating the impact of school library staff, services, and resources on test
demonstrates that library staff involvement in leadership activities, such as committee
service and technology management, as well as increased staff collaboration with
faculty and students, positively impacts test scores.

**Time spent in Leadership**
There were four variables identified as leadership hallmarks: meeting with library staff,
working with or meeting with school administrators, attending faculty meetings, and
participating in standards and/or curriculum committees. Survey respondents calculated
and reported the percentage of total staff hours per week spent in each type of
leadership activity for their libraries.

**Time spent in Collaboration**
There were six variables identified as hallmarks of a collaborative approach: planning
with teachers, teaching cooperatively with teachers, providing in-service to faculty,
offering reading incentive activities, developing collections, and managing technology
that links the students to the library or to other information resources. Survey
respondents calculated and reported the percentage of total staff hours per week spent
in each type of collaboration for their libraries.
COLLECTION RATIOS

Benchmarks for library collection development are provided by five ratios: volumes per student, print subscriptions per 100 students, audio materials per 100 students, video materials per 100 students, and computer software per 100 students.

Volumes per Student

*Volumes per student* is calculated as the number of print volumes in the library collection divided by the number of students enrolled in the school:

\[
\text{Print Volumes \div Students Enrolled = Volumes per Students}
\]

This ratio indicates the size of the library’s book collection in relation to the size of the student body it is designed to serve.

It is important to consider this ratio in relation to collection ratios for other formats (e.g., electronic subscriptions and videos), as well as the circulation ratio. These can show whether the library’s collection is well-used or contains many books that don’t circulate.

Reference Titles per 100 Students

*Reference titles per 100 students* is the number of print reference titles owned or online reference titles subscribed to by the library divided by the number of students enrolled in the school divided by 100:

\[
\frac{\text{Reference Titles}}{\left(\frac{\text{Students Enrolled}}{100}\right)} = \text{Reference Titles per 100 Students}
\]

This ratio indicates the number of print and online reference titles in relation to the size of the student body. It should help the library gauge whether it has enough reference materials available to meet the research and reference needs of the students.

Print Subscriptions per 100 Students

*Print subscriptions per 100 students* is calculated as the number of periodicals (magazines and newspapers) to which the library subscribes in print divided by the number of students enrolled in the school divided by 100:

\[
\frac{\text{Print Periodicals}}{\left(\frac{\text{Students Enrolled}}{100}\right)} = \text{Subscriptions per 100 Students}
\]

This ratio indicates the scope of the library’s print periodical holdings in relation to the size of the student body.

Over the next few years, it will be particularly important to monitor changes in this ratio relative to those for electronic subscriptions. Changes in the ratio should also be related
to the change in per student spending for print and electronic subscriptions, as well as the capital investment in equipment required to access electronic formats.

**Video Materials per 100 Students**

Video materials per 100 students is calculated as the total number of video materials (e.g., video cassettes, DVDs) in the library collection divided by the number of students enrolled in the school divided by 100:

\[
\text{Video Materials} \div (\text{Students Enrolled} \div 100) = \text{Video Materials per 100 Students}
\]

This ratio indicates the size of the video collection in relation to the size of the student population. Video materials tend to be used by whole classes or groups of students rather than by individuals.

**Audio Materials per 100 Students**

Audio materials per 100 students is calculated as the total number of audio materials in the library collection divided by the number of students enrolled in the school divided by 100:

\[
\text{Audio Materials} \div (\text{Students Enrolled} \div 100) = \text{Audio Materials per 100 Students}
\]

**Library Computers per 100 Students**

Library computers per 100 students is calculated as the total number of computers in the library or under direct supervision of the library divided by the number of students enrolled in the school divided by 100:

\[
\text{Library Computers} \div (\text{Students Enrolled} \div 100) = \text{Library Computers per 100 Students}
\]

This ratio was calculated for the first time this year. With the increasing importance of electronic access to information, computers have become an indispensable library tool. This ratio will help to measure how well equipped the school library is to help students access electronic information such as subscription databases, reference titles, and the Internet.
BENCHMARKS FOR SCHOOL LIBRARIES IN COLORADO 2004

FUNDING RATIOS

Benchmarks for library funding are provided by five ratios: print materials expenditures per student, non-print materials expenditures per student, electronic access and materials expenditures per student, and total operating expenditures per student.

**Print Materials Expenditures per Student**
*Print materials expenditures per student* is calculated as total spending for print formats divided by the number of students enrolled in the school:

\[
\text{Print Expenditures ÷ Students Enrolled} = \text{Print Expenditures per Student}
\]

This ratio indicates the level of spending on print materials relative to the size of the student body. From year to year, maintenance of a library’s buying power depends on increases in such funding to account for increases in enrollment and/or increases in costs for books and periodicals.

**Non-Print Materials Expenditures per Student**
*Non-print materials expenditures per student* is calculated as total spending for non-print formats (e.g., audio, video) divided by the number of students enrolled in the school:

\[
\text{Non-print Expenditures ÷ Students Enrolled} = \text{Non-print Expenditures per Student}
\]

This ratio indicates the level of spending on non-print materials relative to the size of the student body.

Potentially, the shift from “just in case” print collections to “just in time” electronic access to information could stabilize—even reduce—the costs of library operation. Whether or not savings occur as a result of the shift from print to electronic resources may depend largely on how electronic information is “packaged” (e.g., CD-ROM or online access) and priced (e.g., quarterly or annual subscriptions, fee-for-use).

**Electronic Access and Materials Expenditures per Student**
*Electronic access and materials* (e.g. software, CD-ROM, database subscriptions, fees for access to electronic books) *expenditures per student* is calculated as total spending for electronic access and materials divided by the number of students enrolled in the school:

\[
\text{Electronic Access and Materials Expenditures ÷ Students Enrolled} = \text{Electronic Access and Materials Expenditures per Student}
\]
This ratio indicates the level of spending on electronic format materials and access to electronic materials relative to the size of the student body. As with print expenditures, maintenance of a library’s non-print buying power relies on increases in such funding to support increases in enrollment and/or increased charges from vendors of electronic resources.

**Total Operating Expenditures per Student**

*Total operating expenditures per student* is calculated as the sum of print materials, electronic format acquisitions, electronic access, and other non-print materials costs and supplies and other operating costs divided by the number of students enrolled in the school:

\[
\frac{(Print + Non-print + Access + Other Operating Costs)}{Students Enrolled} = Total \ Materials \ Expenditures \ per \ Student
\]

This ratio indicates the overall cost to the library of providing access to its collection and electronically networked information.