

---

# NATIONAL CENTER FOR EDUCATION STATISTICS

---

Statistics in Brief

February 1997

---

## Use of Public Library Services by Households in the United States: 1996

**Contact:**  
Kathryn Chandler  
(202) 219-1767

**Authors:**  
Mary A. Collins,  
Westat, Inc.  
Kathryn Chandler,  
National Center for  
Education Statistics

Public libraries<sup>1</sup> provide important public services. They provide access to a wide range of information resources -- books, periodicals, reference materials, tapes, and computers. They also provide special programming such as summer reading programs, reading readiness groups, lectures, and films. In addition, some public libraries provide literacy tutoring services or coordinate these services for local literacy organizations. In 1993, there were 8,887 central public libraries, 7,017 branch libraries, and 1,035 bookmobiles in the United States (U.S. Department of Education 1995).

While information collected from public libraries includes a few of the services they provide and their service areas, little national level information is available on the use of public libraries by members of the community. One 1991 survey found that 32 percent of adults had used a public library or public library program in the past month and 63 percent had done so in the past year (Brick, et al. 1992). A U.S. News/CNN poll found that 67 percent of adults went to a library at least once in the past year (*U.S. News and World Report* 1995), a figure similar to that reported by Brick et al. These two sources, however, represent only single or dual items on public library use; more comprehensive population-based information on the use of public libraries and library services has not been available at the national level.

The 1996 National Household Education Survey (NHES:96), an ongoing national survey on important educational issues, included a series of questions about the use of public library services by members of U.S. households. An adult household member was asked if *any member of the household* had used a variety of different public library services, and households with any members using public libraries were asked about the reasons libraries were used. Thus, the responses represent public library use by members of each household and not by individual persons within households. This report presents the findings for each of the items for all households, and separately for households with and without children under age 18. (More information on the NHES:96 can be found in the Survey Methodology and Data Reliability section of this report.)

### Public Library Use in the Past Month and Year

About 44 percent of U.S. households included individuals who used public library services in the month prior to the interview (table 1),<sup>2</sup> and 65 percent of households used public library services in the past year (including the past month). Thus, about one-third of households (35 percent) reported that no

household members had used library services in the past year. The overall estimate of public library use by 65 percent of households in the past year is not too dissimilar from the adult-based figures reported by Brick et al. (1992) and *U.S. News and World Report* (1995). The household-based report of 44 percent in the past month is higher than the Brick et al. (1992) report of 32 percent among all adults; however, this is not surprising given that the NHES:96 estimate includes *any* household member and not a specific adult.

Public library use was more common in households with children under 18 than in households without children. Whereas 61 percent of households with children used public library services in the past month, only 35 percent of households without children did so. When the entire past year is taken into account, households with children again show substantially higher rates of use than households without children (82 percent versus 54 percent).

To assess public library use in the past month, respondents were asked a series of six questions meant to cover all the important ways in which a public library might be used. Taken as a whole, these six items define "public library use." A yes response to any of the six items placed the household in the "used in the past month" category. A second use of these items was to get at the relative prevalence of these ways of using public libraries. A subsequent question asked respondents who said no to each of the six ways of use if any household member had used public library services in any of these ways in the past year.

### **Ways of Using Public Library Services**

The most common way of using public library services in the past month was to go to a library to borrow or drop off books or tapes (36 percent; table 2). About half as many households (18 percent) reported visiting a library for other purposes, such as a lecture or story hour or to use library equipment, the second most common

form of use. About 14 percent of households had called a library for information (other than hours of operation or directions) during the past month, the third most common way of using library services. This order of frequency in the ways of using public library services was observed for households with and without children. Only very small percentages of households reported using a computer to link to a library (4 percent), having materials mailed or delivered to their homes (2 percent), or visiting a bookmobile (2 percent).

Households with children were more likely to report each type of use than households without children. In fact, about twice as many households with children used libraries to borrow or drop off books (53 percent versus 26 percent) or for any other purpose (26 percent versus 14 percent). A difference was also observed between households with and without children for calling a public library for information (18 percent versus 12 percent).

### **Purposes for Using Public Library Services**

In those households in which someone had used public library services in the past month, respondents were asked about a selected set of purposes for which the public library might have been used. The highest percentage of households reported library use for enjoyment or hobbies, including borrowing books and tapes or attending activities (32 percent; table 3). Two other purposes for using public libraries that were commonly acknowledged by household respondents were getting information for personal use, such as consumer or health issues, investments, and so on (20 percent) and using library services or materials for a school or class assignment (19 percent). Fewer household respondents said that household members had used public library services for the purposes of keeping up to date at a job (8 percent), getting information to help find a job (5 percent), attending a program for children (4 percent), or working with a tutor or take a class to learn to read (1 percent).

Households with children under 18 were more likely than households without children to acknowledge the use of library services for each of the above purposes except getting information to help find a job. Large differences are observed in the percentages of households with and without children acknowledging the use of public library services for the purposes of enjoyment or hobbies (45 percent versus 24 percent) and for a school or class assignment (38 percent versus 7 percent). While the percentage of households acknowledging the use of public library programs for children is small, those with children under 18 were many times more likely to do so than households without children -- 7 percent versus 2 percent for programs designed for children age 6 to 12, and 8 percent versus 1 percent for programs designed for children under age 6.

### **State-Level Estimates of Public Library Use**

The NHES:96 was designed to provide estimates of household characteristics and household public library use at the state level, including the 50 states and the District of Columbia. The percentage of households using public library services in the past month ranged from 32 percent to 56 percent; rates of use in the past year ranged from 51 percent to 76 percent (table 4). In six states, the percentages of households using public library services were higher than the national rates of 44 percent for the past month and 65 percent for the past year. These states are Alaska, Maryland, Ohio, Utah, Washington, and Wyoming. In two additional states, New Jersey and New York, the percentage of households using public library services in the past month, but not the past year, was higher than the national rate. In another two states, California and Minnesota, higher percentages of households used public libraries in the past year, but not the past month, compared to households nationwide. Among the states with higher rates of public library use, 48 to 56 percent of households reported a member using a public library in the past month, and 67 to 76 percent reported public library use in the past year.

There were also some states in which household library use was significantly lower than national rates for the past month and year. In six states, rates of public library use were lower than the national rate for both the past month and the past year. These states are Alabama, Arkansas, Kentucky, Pennsylvania, Tennessee, and Texas. In Delaware, the percentage of households using public library services was lower for the past month, but not for the past year. In West Virginia, the rate of household public library use was lower than the national rate for the past year, but not for the past month. Among the states with lower rates of household public library use, 32 to 39 percent of households used public library services in the past month, and 51 to 60 percent did so in the past year<sup>3</sup>.

### **Summary**

In 44 percent of households in the United States, one or more members used public library services in the month prior to the NHES:96 interview, and 65 percent of households had members who had used public library services in the past year. Households with children under age 18 were more likely than those without children to use library services in most of the *ways* and for most of the *purposes* asked about in this survey. Some of the areas of additional research that may be fruitful include an analysis of the relationship between household use of public library services and measures such as income, household size, age or ethnicity of the oldest member of the household, whether any household member has a postsecondary education, whether the household is in an urban or rural area, and other socioeconomic and sociodemographic characteristics.

There is considerable variation among states in the percentage of households that used public library services in the past month and the past year. Analysts may wish to further examine differences by state using information such as the percentage of households in the state located in urban and rural locations, the percentage of households in the state in which persons have

college degrees, or other characteristics of the households in the states.

The NHES:96 data collection phase was conducted from January through April of 1996. If there are seasonal variations in public library use, the specific timing of the data collection may affect estimates of use for the past month. The NHES:96 cannot address these seasonal issues, but they should be recognized by readers and data analysts.

### **Survey Methodology and Data Reliability**

The 1996 National Household Education Survey (NHES:96) is a telephone survey conducted for the U.S. Department of Education, National Center for Education Statistics, by Westat, Inc. Data collection took place from January through April of 1996. The sample was selected using list-assisted, random-digit-dialing (RDD) methods and is nationally representative of all civilian households in the 50 states and the District of Columbia. The national sample was supplemented in smaller states in order to provide the ability to make estimates at the state level.

Survey data were collected using computer-assisted telephone interviewing (CATI) technology. The NHES:96 included three components: the Public Library component, the Parent/Family Involvement in Education component (PFI), and the Civic Involvement component (CI). Four survey instruments were used in the NHES:96 -- a household Screener, a Parent PFI/CI interview, a Youth CI interview, and an Adult CI interview. The household Screener was used to enumerate household members, collect educational and demographic information about each household member (e.g., age, gender, race, ethnicity, current enrollment, highest educational attainment), and obtain additional information needed to sample persons or identify appropriate respondents. When a household member was sampled for an interview, some Screener questions were "moved" to the extended interview and were asked when that interview was conducted. The Public Library

component of the NHES:96, which is the basis of this report, was conducted as a part of the household Screener for about two-thirds of the households; in about one-third of households, the public library items were asked during a Parent PFI/CI interview. Any adult household member was eligible to respond to the Screener; the respondent to the Parent PFI/CI interview was the parent/guardian of the sampled child who was reported to know the most about the child's care and education.

Further information on the NHES:96 design and methodology can be found in the forthcoming *National Household Education Survey of 1996: Data File User's Manual, Volumes I through V*. In addition, two working papers will soon be available that provide detailed information on the NHES:96. These are, *Design, Data Collection, Survey Interview Timing, and Data Editing in the 1996 National Household Education Survey*, and *Unit and Item Response Rates, Weighting, and Imputation Procedures in the 1996 National Household Education Survey*. The data files from all components of the NHES:96 will be distributed on CD-ROM.

### **Response Rates**

For the NHES:96, Screeners were completed with 55,838 households. Of these, 130 households were eliminated because no household members were civilians (i.e., the only household members were on active duty in the military); this results in a household sample size of 55,708. The response rate for the Screener, adjusted for different probabilities of households being sampled for the survey, was 70 percent. Item response rates for items associated with ways of using library services were 96 to 97 percent; for items associated with the purposes for using library services, item response rates were 95 percent. As noted above, the library items were asked in the Parent PFI/CI interview when a child in the household was sampled. The majority of the item nonresponse for public library use questions resulted from the fact that not all interviews with parents of sampled

children were completed, so that the library items were not asked for those households. Responses were imputed for items with missing values (i.e., don't know, refused, or not ascertained) through an operation known as the "hot-deck procedure." As a result, no missing values remain. The presence in the household of children under age 18 was used as a sort variable in imputation.

### **Data Reliability**

Estimates produced using data from the NHES:96 are subject to two types of error, sampling and nonsampling errors. Nonsampling errors are errors made in the collection and processing of data. Sampling errors occur because the data are collected from a sample rather than a census of the population.

### **Nonsampling Errors**

Nonsampling error is the term used to describe variations in the estimates that may be caused by population coverage limitations and data collection, processing, and reporting procedures. The sources of nonsampling errors are typically problems like unit and item nonresponse, the differences in respondents' interpretations of the meaning of the questions, response differences related to the particular time the survey was conducted, and mistakes in data preparation.

In general, it is difficult to identify and estimate either the amount of nonsampling error or the bias caused by this error. In the NHES survey, efforts were made to prevent such errors from occurring and to compensate for them where possible. For instance, during the survey design phase, focus groups and cognitive laboratory interviews were conducted for the purpose of assessing respondent knowledge of the topics, comprehension of questions and terms, and the sensitivity of items. The design phase also entailed extensive CATI instrument testing and a multi-phase test that included 3,200 Screeners and over 950 parent interviews.

An important source of nonsampling error for a telephone survey is the failure to include households that do not have telephones. About 94 percent of all households in the United States have telephones. Estimation procedures were used to reduce the bias in the estimates associated with the omission of households without telephones.<sup>4</sup>

### **Sampling Errors**

The sample of households with telephones selected for the NHES:96 is just one of many possible samples that could have been selected. Therefore, estimates produced from the NHES:96 sample may differ from estimates that would have been produced from other samples. This type of variability is called sampling error because it arises from using a sample of household with telephones, rather than all households with telephones.

The standard error is a measure of the variability due to sampling when estimating a statistic; standard errors for estimates presented in this report were computed using a jackknife replication method. Standard errors can be used as a measure of the precision expected from a particular sample. The probability that a complete census count would differ from the sample estimate by less than 1 standard error is about 68 percent. The chance that the difference would be less than 1.65 standard errors is about 90 percent; and that the difference would be less than 1.96 standard errors, about 95 percent.

Standard errors for all of the estimates are presented in the tables. These standard errors can be used to produce confidence intervals. For example, an estimated 61 percent of households with children reported that one or more of their household members had used library services in the past month. This figure has an estimated standard error of 0.36. Therefore, the estimated 95 percent confidence interval for this statistic is approximately 60 to 62 percent.

The tests of significance used in this analysis are based on Student's *t* statistic (Blalock 1972). As the number of comparisons at the same significance level increases, it becomes more likely that at least one of the estimated differences will be significant merely by chance, that is, it will be erroneously identified as different from zero. Even when there is no statistical difference between the means or percentages being compared, there is a 5 percent chance of getting a significant *t* value of 1.96 from sampling error alone. As the number of comparisons increases, the chance of making this type of error also increases.

A Bonferroni adjustment (Miller 1981) was used to correct significance tests for multiple comparisons. This method adjusts the significance level for the total number of comparisons made with a particular classification variable. All the differences cited in this report are significant at the .05 level of significance after a Bonferroni adjustment.

### Acknowledgments

The authors wish to express their appreciation to the following reviewers of this report who provided valuable critique and suggestions: George Needham, State Librarian for the Library of Michigan, Chris Dunn of Library Programs in OERI, Adrienne Chute of the Surveys and Cooperative Systems Group of NCES, Claire Geddes of the Data Development and Longitudinal Studies Group of NCES, Mike Cohen of the Statistical Standards and Services Group of NCES, and Marilyn McMillen of the Surveys and Cooperative Systems Group of NCES.

### Endnotes

<sup>1</sup> Respondents were asked about public libraries as follows: These next questions are about (or We are interested in) public libraries. This does not include school or college libraries, or special research libraries.

<sup>2</sup> Interviews were conducted from January through April 1996.

<sup>3</sup> Some differences between state rates of public library use and the national rate that are of similar magnitude to those discussed in the text are not significant because of the differences in sample sizes.

<sup>4</sup> For additional information on telephone coverage issues and estimation procedures to correct for coverage bias, see Brick (1996).

### References

Blalock, H.M., Jr. (1972) *Social Statistics*, 2nd Edition. New York: McGraw-Hill.

Brick, J.M. (1996). *Undercoverage Bias in Estimates of Characteristics of Adults and 0- to 2-year-olds in the 1995 National Household Education Survey*. NCES Working Paper No. 96-29. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Brick, J.M., Collins, M.A., Celebuski, C.A., Nolin, M.J., Squadere, T.A., Ha, P.C., Wernimont, J., West, J., Chandler, K., Hausken, E.G., and Owings, J. (1992). *National Household Education Survey Adult and Course Data Files User's Manual*. NCES Publication No. 92-019. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Miller, R.G., Jr. (1981) *Simultaneous Statistical Inference*, 2nd Edition. New York: Springer-Verlag.

U.S. Department of Education, Office of Educational Research and Improvement. (1995). *Public Libraries in the United States: 1993*. NCES Publication No. 95-129. Washington, DC.

*U.S. News and World Report*. (1995). "More Americans visit their public library today than

they did in 1978, according to a U.S. News/CNN poll." Press Release, December 2, 1995.

Table 1.--Percent of households in which any member used a public library<sup>1</sup> in the past month and in the past year, by presence of one or more children under age 18 in the household: 1996

Use of a public library in the past month and past year	All households		Households with children under 18		Households without children under 18	
	Estimate	s.e.	Estimate	s.e.	Estimate	s.e.
Estimated number of households (in thousands)	99,088	--	36,225	--	62,863	--
Used a public library in the past month	44%	0.21	61%	0.36	35%	0.27
Used a public library in the past year (including the past month)	65%	0.22	82%	0.29	54%	0.30

<sup>1</sup>To assess public library use, respondents were asked a series of six questions meant to cover all important ways in which a public library might be used. These included: "going to a public library to borrow or drop off books or tapes"; "going to a public library for any other purpose, such as a lecture or story hour, or to use their equipment"; "using a home computer to link to a public library"; "calling to public library to renew books or for information other than library hours or directions"; "having library materials mailed or delivered to your home"; and, "visiting a bookmobile". A positive response to any of the six items placed the household in the "used a public library" category.

NOTE: s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), spring, 1996



Table 2.--Percent of households in which any member used a public library in selected ways in the past month, by presence of one or more children under age 18 in the household: 1996

Way of using a public library in the past month	All households		Households with children under 18		Households without children under 18	
	Estimate	s.e.	Estimate	s.e.	Estimate	s.e.
Estimated number of households (in thousands)	99,088	--	36,225	--	62,863	--
Going to a public library to borrow or drop off books or tapes	36%	0.21	53%	0.34	26%	0.28
Going to a public library for any other purpose, such as a lecture or story hour, or to use the equipment	18%	0.17	26%	0.33	14%	0.19
Calling the public library to renew books or for information other than library hours or directions	14%	0.15	18%	0.29	12%	0.18
Using a home computer to link to a public library	4%	0.08	5%	0.15	3%	0.10
Having library materials mailed or delivered to the home	2%	0.07	3%	0.13	2%	0.09
Visiting a bookmobile	2%	0.07	4%	0.16	1%	0.06

NOTES: s.e. is standard error. Percents do not add to 100 because households could report multiple ways of using a public library, and some households reported no public library use in the past month.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), spring 1996

Table 3.--Percent of households in which any member used a public library for selected purposes in the past month, by presence of one or more children under age 18 in the household: 1996

Purpose for using a public library in the past month	All households		Households with children under 18		Households without children under 18	
	Estimate	s.e.	Estimate	s.e.	Estimate	s.e.
Estimated number of households (in thousands)	99,088	--	36,225	--	62,863	--
For enjoyment or hobbies, including to borrow books or tapes or to attend activities	32%	0.19	45%	0.35	24%	0.27
To get information for personal use, such as consumer or health issues, investments, and so on	20%	0.20	22%	0.31	18%	0.24
For a school or class assignment	19%	0.18	38%	0.39	7%	0.14
For a work assignment or to keep up to date at work	8%	0.11	10%	0.19	7%	0.15
To get information to help find a job	5%	0.09	5%	0.16	5%	0.14
For a program or activity designed for children age 6 to 12	4%	0.09	7%	0.21	2%	0.08
For an activity for children under 6, such as story hour or other introduction to books and reading	4%	0.08	8%	0.20	1%	0.06
To work with a tutor or take a class to learn to read	1%	0.05	2%	0.10	1%	0.05

NOTES: s.e. is standard error. Percents do not add to 100 because households could report multiple purposes for using a public library, some households did not affirm any of the selected purposes offered, and some households reported no public library use during the past month.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), spring 1996

Table 4.--Percent of households in which any member used a public library<sup>1</sup> in the past month and in the past year, by state: 1996

State	Estimated number of households (in thousands)	Use of a public library in the past month and past year			
		Used public library in past month		Used public library in past year (includes past month)	
		Percent	s.e.	Percent	s.e.
Total	99,088	44	0.21	65	0.22
Alabama	1,579	37	1.78	56	1.56
Alaska	212	56	2.07	76	2.16
Arizona	1,550	47	2.12	69	2.14
Arkansas	968	32	2.39	51	2.28
California	11,236	45	0.64	67	0.66
Colorado	1,503	50	2.03	71	2.03
Connecticut	1,235	49	1.96	68	2.18
District of Columbia	259	39	2.02	58	2.60
Delaware	267	36	2.19	59	2.21
Florida	5,644	41	1.03	62	1.00
Georgia	2,618	41	1.40	64	1.23
Hawaii	393	48	2.74	68	2.29
Idaho	421	44	2.30	65	2.31
Illinois	4,443	46	1.17	65	0.95
Indiana	2,332	48	1.64	68	1.57
Iowa	1,112	43	2.10	61	1.93
Kansas	986	49	2.05	66	1.91
Kentucky	1,495	38	1.74	54	1.81
Louisiana	1,588	44	1.50	62	1.55
Maine	491	45	2.53	61	2.45
Maryland	1,881	51	1.74	73	1.42
Massachusetts	2,295	48	1.30	69	1.39
Michigan	3,592	44	1.15	66	1.16
Minnesota	1,777	47	1.79	70	1.49
Mississippi	1,017	40	2.21	61	2.46
Missouri	2,085	41	1.49	60	1.85
Montana	332	42	2.24	62	2.15
Nebraska	607	43	2.39	63	2.31
Nevada	580	48	2.56	66	2.01
New Hampshire	453	47	2.13	67	1.92
New Jersey	2,904	51	1.46	68	1.29
New Mexico	604	48	2.39	66	2.26
New York	6,995	48	0.86	67	0.86
North Carolina	2,789	43	1.27	63	1.14
North Dakota	247	39	1.87	58	2.04

Table 4.--Percent of households in which any member used a public library<sup>1</sup> in the past month and in the past year, by state: 1996--Continued

State	Estimated number of households (in thousands)	Use of a public library in the past month and past year			
		Used public library in past month		Used public library in past year (includes past month)	
		Percent	s.e.	Percent	s.e.
Ohio	4,321	53	1.15	70	1.02
Oklahoma	1,280	43	2.53	62	2.24
Oregon	1,228	43	2.58	65	2.25
Pennsylvania	4,601	36	1.19	57	1.14
Rhode Island	398	46	1.88	66	1.92
South Carolina	1,331	45	1.69	63	1.82
South Dakota	271	40	2.23	59	2.18
Tennessee	2,138	35	1.41	56	1.86
Texas	6,654	39	0.93	60	0.94
Utah	637	56	2.06	75	2.04
Vermont	242	45	2.58	66	2.23
Virginia	2,517	46	1.47	66	1.31
Washington	2,104	52	1.80	75	1.54
West Virginia	747	39	2.09	58	1.76
Wisconsin	1,942	47	1.71	68	1.58
Wyoming	185	53	2.23	73	2.00

<sup>1</sup>To assess public library use, respondents were asked a series of six questions meant to cover all important ways in which a public library might be used. These included: "going to a public library to borrow or drop off books or tapes"; "going to a public library for any other purpose, such as a lecture or story hour, or to use their equipment"; "using a home computer to link to a public library"; "calling to public library to renew books or for information other than library hours or directions"; "having library materials mailed or delivered to your home"; and, "visiting a bookmobile". A positive response to any of the six items placed the household in the "used a public library" category.

NOTE: s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey (NHES), spring 1996