INSTITUTE of Museum and Library SERVICES

InterConnections: The IMLS National Study on the Use of Libraries, Museums and the Internet

Overview

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Introduction

The on-line information environment has changed dramatically since the earliest on-line systems emerged in the early 1960s. Growth has occurred both in the number of users of on-line information as well as in the number of on-line information resources and providers. The rate of growth in each of these areas increased exponentially with the availability of the public Internet and the World Wide Web. These foundational technological developments created an environment in which almost anyone can "publish" or function as an information provider and have virtually instantaneous access to massive volumes of information.

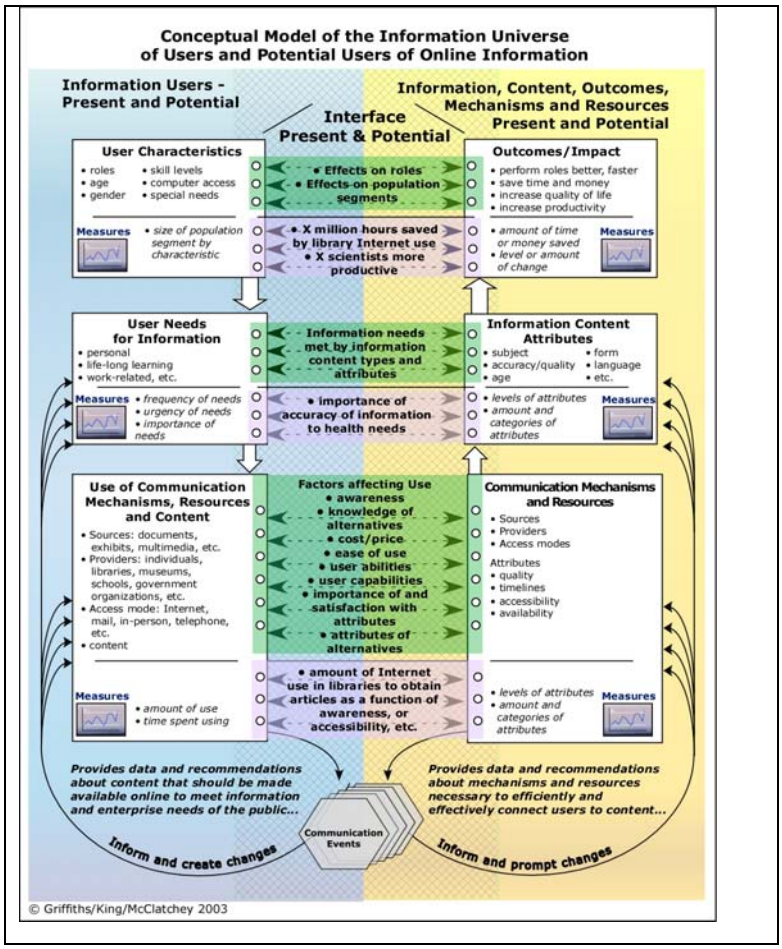
Museums and libraries have long been sources of recreation, learning and information for personal, family, educational and workplace purposes. However, the Internet, Web and other technologies have become an increasingly used source of information that some believe will largely replace their physical counterparts. On the other hand, some have speculated that the Internet and related technologies will actually enhance and increase museum and library use. There is no solid evidence to support either assertion, particularly considering the wide range in types of museums and libraries.

Both museums and libraries of all types have adapted to the Internet by providing access to information through the Internet, as well as creating and promoting unique information content for users. They also provide access to their services through the Internet. This Institute of Museum and Library Services (IMLS) solicited and funded "National Study of Users and Potential Users of Online Information" has a primary goal to: "Conduct a national survey of the information needs of users and potential users of on-line museum and public library information and the Internet." This is an overview from several reports including:

- Museum Report
- Public Libraries Report
- Internet Report, and
- General Information Report

Conceptual Model

In order to effectively structure the study and survey instruments we designed an initial conceptual model to address the size and complexity of the universe of users and potential users of online information and information providers. This model also enabled us to look at the relationships between the various components of the online environment, so that we could ascertain survey sample and questionnaire parameters that would provide the most information with the best response rate and usable data.



While the model reflects hundreds of relevant studies we have worked on, we did not intend it to be final, but rather a starting point from which to characterize this universe. And we have, indeed, made some modifications as we have proceeded. The model is based on two critical components:

- information users – present and potential
- information content, mechanisms and resources that are (or could be) utilized by the users

The user component (blue rectangle) includes characteristics of the user population; their needs for information (e.g., a health problem, a school homework assignment, a work-related research need, recreational interest, cultural attraction); and use of various sources of information (e.g., documents, exhibits), providers of these sources (e.g., libraries, museums), and modes of access (e.g., Internet, personal observation). The information component (yellow rectangle), starting from the bottom includes the communication mechanisms and resources by which the information is accessed, and their attributes; information content attributes; and the outcomes/impact derived by

users having the information. Perhaps the most significant insights have to do with the relationships between the boxes (the arrows between each box), e.g. how the user characteristics of teachers shape their need for information which in turn impacts their use of the resources, which in turn will affect the resources themselves, their content attributes and ultimately the outcomes and impact, both for the user and the information resource.

The model shows that the sources, providers, and modes of access possess important attributes (e.g., availability, accessibility, price). The use of sources, providers and modes of access are influenced by several factors, such as user awareness of them, ease of use, and attributes. Amount of use can be estimated as a function of these factors, including user perception of attributes. Information content also has important attributes that are related to meeting the users' information needs. For example, accuracy and currency are essential to meeting many health-related needs, language is important to various population segments – for people with different native languages, those learning languages, etc. Finally, use of information results in some outcomes (or impact) such as improved student learning, time saved, etc. Outcomes can be related to specific segments of the population. While there are many possible ways of characterizing the information universe, we have found this model to be very useful in our studies of a range of information sources, providers, and access modes (particularly the Internet).

The distinction above is made because information users make choices from information sources, providers and means of access when information needs or wants arise. These choices depend on such factors as user perceptions of quality, trustworthiness, etc. of information available from sources and providers and ease of use or cost of using. The surveys are designed to observe choices made from among many alternatives.

We made the decision to segment our inquiry by the information provider, so that we looked at the use of museums, for example, separately from other information providers like public libraries. The remainder of this paper is based on that segment of the National Study specifically related to museums as physical and virtual information providers.

Methods

UNDERLYING PHILOSOPHY

We defined the underlying philosophy of this study to shape our surveys as follows:

- There are basic needs for information such as for addressing personal (or family) situations, recreation or informal learning, formal education as teachers and students, or workplace activities. In addition, some information is wanted for entertainment and other such reasons.
- Information needs (or wants) can be addressed though a variety of sources such as publications, videos, exhibits, websites, presentations, family, friends, and so on.
- The sources of information are available from various providers such as libraries, museums, the Internet, bookstores, television, and so on.
- Information sources such as exhibits provided by museums can be accessed/obtained in-person, through the Internet or even on television.

The distinction above is made because information users make choices from information sources, providers and means of access when information needs or wants arise. These choices depend on such factors as user perceptions of quality, trustworthiness, etc. of information available from sources and providers and ease of use or cost of using. The surveys are designed to observe choices made from among many alternatives.

SURVEYS

The components of the National Study involved five household telephone surveys of adults (18 and over) including:

- A general information survey to place a context on the extent of use and factors affecting use of a range of sources and providers prior to examining use of library, museum, and Internet provision of sources of information. This survey had a total of 1,557 completed interviews.
- A survey of museum in-person and remote visits to their websites through the Internet with a total of 1,047 completed interviews.
- A survey of public library in-person and remote visits through the Internet with a total of 1,049 completed interviews.
- A survey of Internet use with a total of 1,607 completed interviews.
- A survey of the use of specific sources such as books, newspapers, etc. and other types of libraries including academic, special and school with a total of 1,361 completed interviews.

These numbers of completed interviews do not include approximately 1,500 "overflow" interviews that are included in final results for the general information and Internet surveys. A total of 5,251 interviews are common to overall museum, public library and Internet use and demographics.

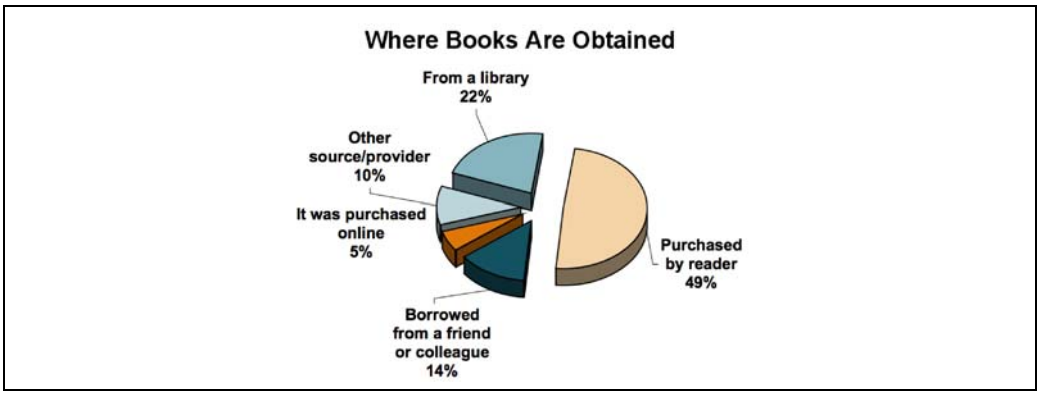
Surveys	Number of Completed Interviews
General Information	1,557
Museum in-person and remote visits	1,047
Public library in-person and remote visits	1,049
Internet use	1,607
Use of specific resources (e.g., books, newspapers, etc.)	1,361
Overflow interviews	1,500

Use of Books, Magazines, Newspapers, and Professional Trade or Scholarly Journals is Extensive

385 million public library visits by adults used books, magazines or newspapers in the library in 2006.

USE OF BOOKS BY ADULTS

Adults were asked where they obtained the last book they read or are reading.



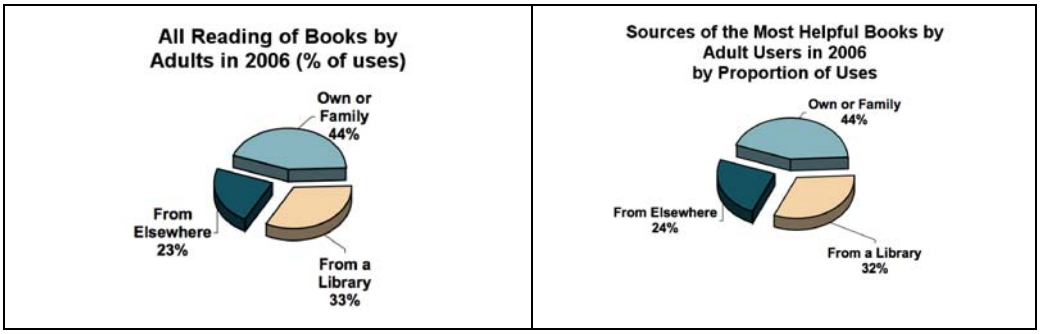
While the largest proportion of books were purchased by the reader or family member (49%), 21.7 percent of these books were obtained from a library. There are 385 million adult visits to public libraries involving using books, magazines or newspapers in the library in 2006 and 485 million visits in which a book or books are checked out. The National Center for Education Statistics (2005) shows that public libraries had about 2.1 billion items checked out (including CDs, videos, etc.) to patrons of all ages. The public library circulation has increased from 6.1 items included per capita in 1992 to 7.1 in 2005. The Public Library Survey showed that 71% of occurrences of circulation is of books.

Museum visits often result in the purchase or ordering of books for later study: 13.4% of in-person visits, and 4.3% of remote visits. This represents about 3.7% of books obtained from all sources.

Adults were also asked about their last important situation for which they needed information from another source in order to make a decision or solve a problem. They were then asked from what sources they used to obtain information for this situation. Books were mentioned, among other sources, in 33.8 percent of important situations.

Books were said to be the most helpful source for 9.2 percent of the situations. Book users were asked from what sources they obtained their last used book

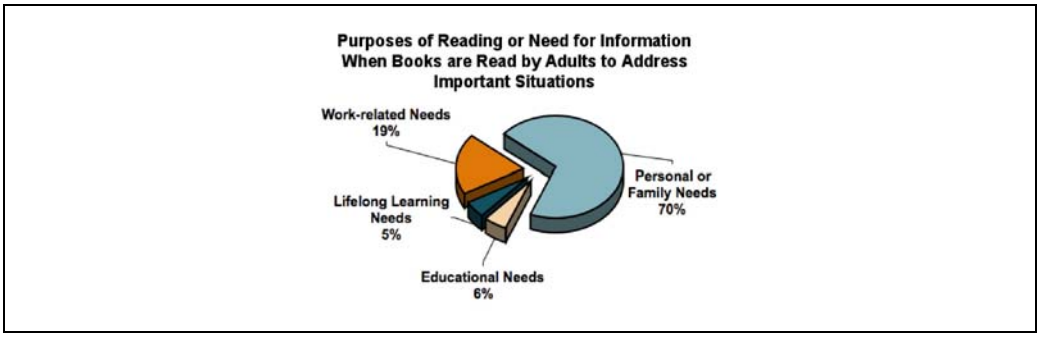
including: their own or a family member's, from a library or from somewhere else.



In both instances about one-third of book uses are from libraries.

Adults were asked for what purpose they used the last book: Recreation is the most frequent purpose although a book can be used for multiple purposes including educational needs of students and teachers and for lifelong learning.

When a book is used to address an important situation, the purpose of use or need for information is somewhat different.

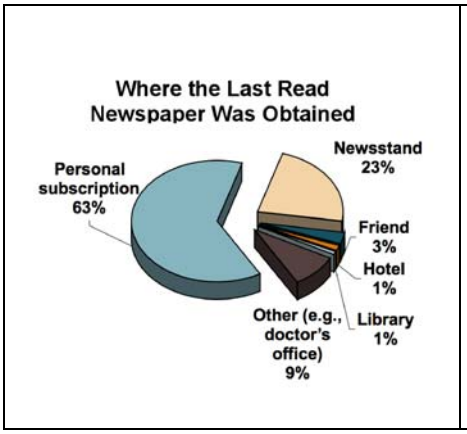


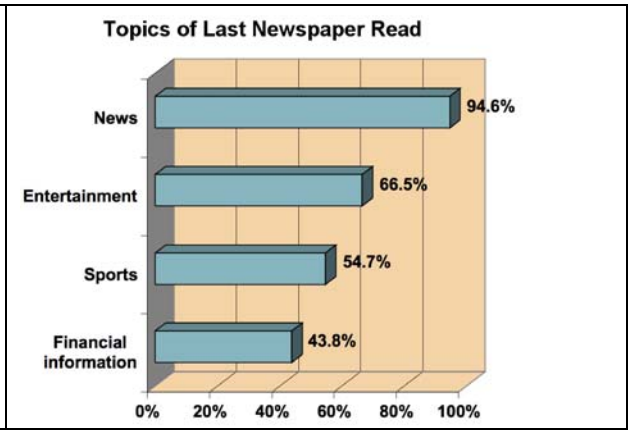
These situations mostly involve personal or family needs such as health, purchasing, finance, etc. (70.0%) and work-related needs such as research (medical, science, etc.), administration, marketing or sales, etc. (19.1%).

NEWSPAPER AND MAGAZINE USE BY ADULTS

Adults were asked how many newspapers they normally read.

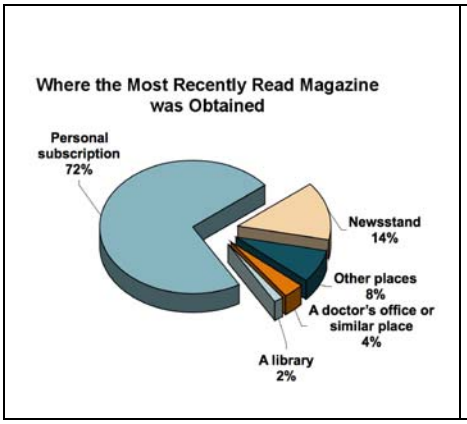
- 79% of adults say they normally read an average of 1.5 newspapers.
- 7.9% of the last newspaper read was in electronic format.

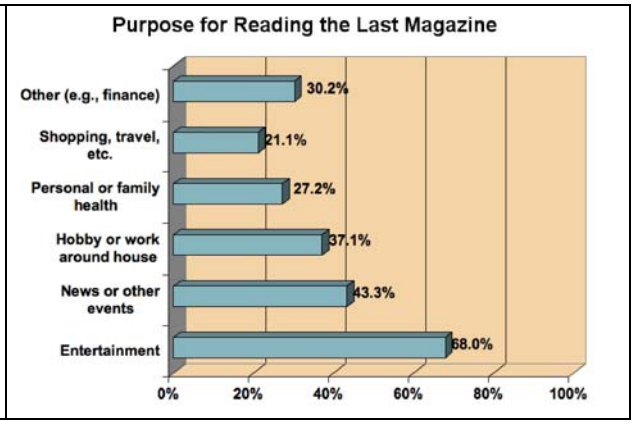




Adults were asked how many magazines they read regularly (not including professional trade or scholarly journals).

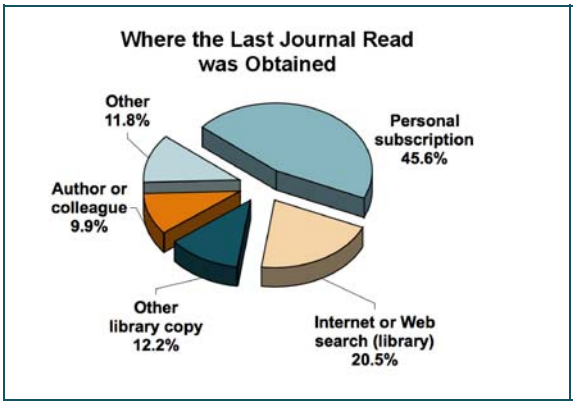
- 77% of adults say they read regularly from magazines and they average reading regularly from three such magazines.
- Only 2.3% of the last magazines read were in electronic format.

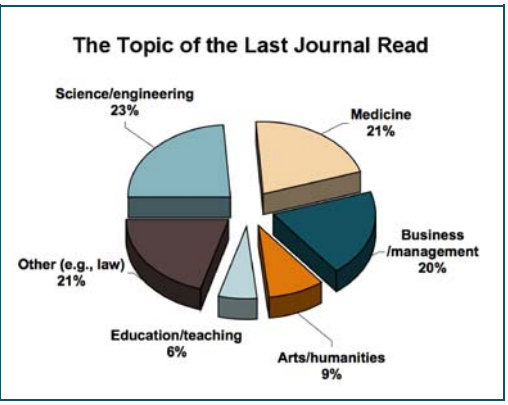




USE OF PROFESSIONAL TRADE OR SCHOLARLY JOURNALS

Adults were asked if they ever read professional trade or scholarly journals. 27% of adults said they read such journals and average reading from 3.2 of them. 25.2% of last journals read were in electronic format.



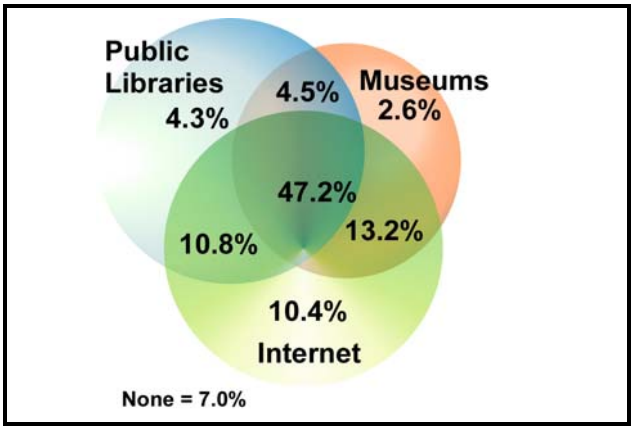


Libraries, Museums and the Internet are All Major Providers of Information

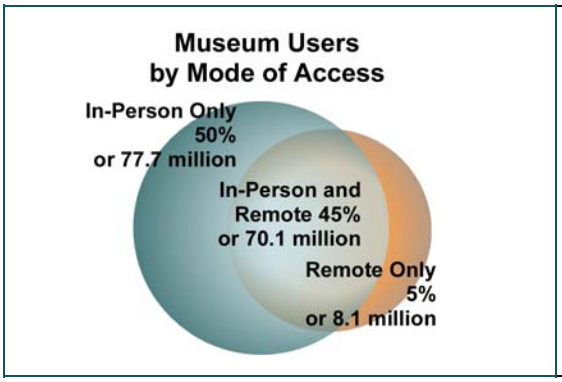
This study focuses on three primary providers of information: public libraries, museums and the Internet. While the Internet is clearly the dominant provider in terms of total amount of use, museums and public libraries continue to be used by a majority of U.S. adults. The Internet accounts for an increased use of museums and public libraries and there is evidence that online this access stimulates physical in-person use as well.

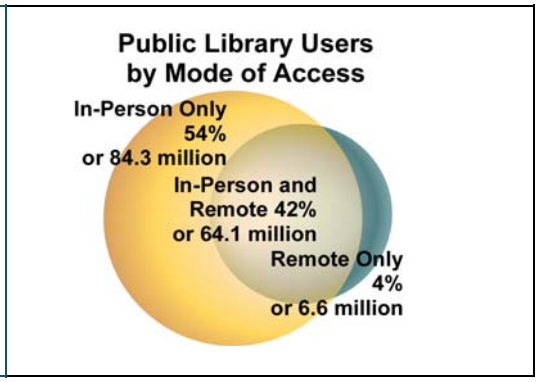
NUMBER OF VISITORS/USERS

Libraries, museums and the Internet are each used by the majority of adults in the U.S. Of the approximately 233 million U.S. adults, an estimated 155.3 million (70%) visited a public library, 155.9 million (70%) visited a museum, and 185.9 million (83%) used the Internet in 2006. Evidence shows that there is considerable overlap in the users of these information providers.



Visitors to museums and public libraries can visit the facilities in person or remotely via the Internet. Some, visitors use both modes of access. The proportions of visitors to museums and public libraries using either or both in-person and or remote access are as follows:

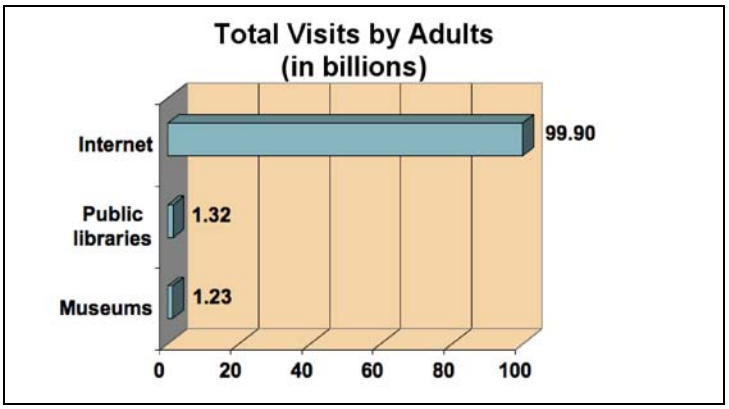


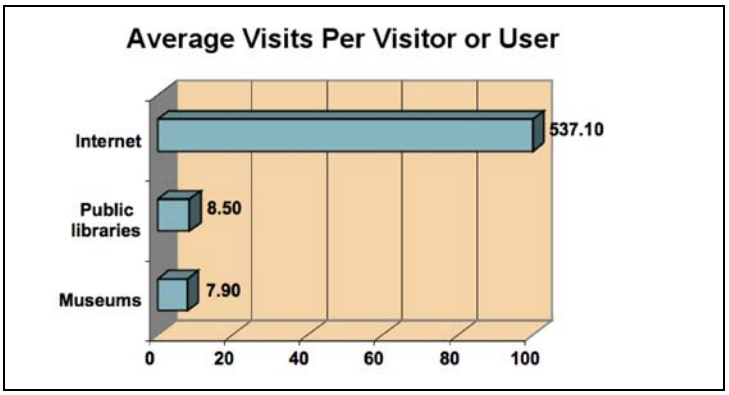


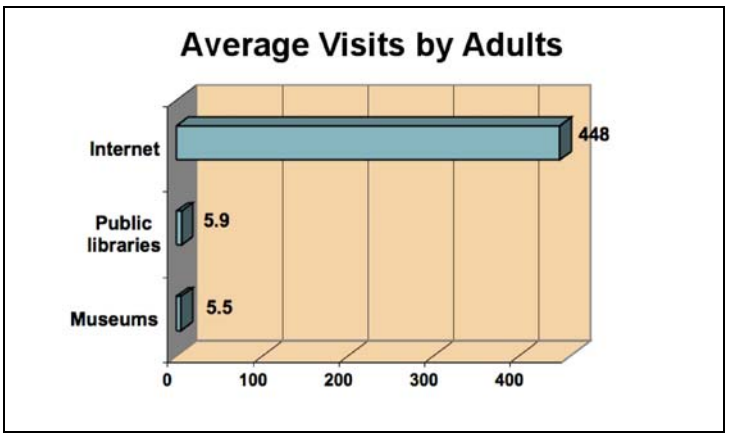
Clearly, the majority of visitors to museums and public libraries visit either in person or in-person and remotely. This is an indication that the Internet is not replacing in-person visits.

NUMBER OF VISITS/USES

The total number of visits or uses of museums, public libraries and the Internet by U.S. adults in 2006 was 102.5 billion, with the Internet clearly dominating usage:

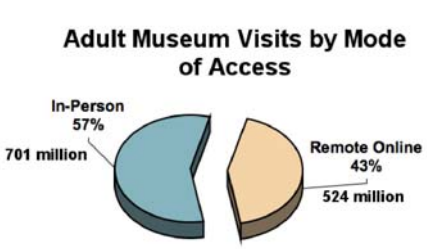


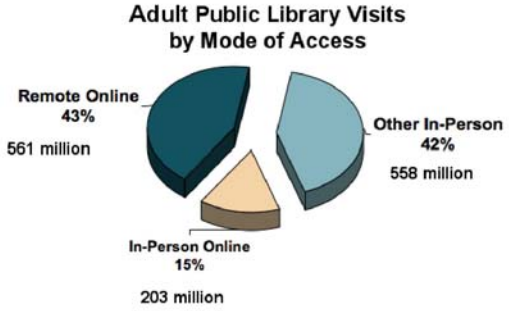




The same proportion of museum and public library visits are made in-person (57%). However, 58% of public library visits are online when remote online and in-person online are added together.

For each mode of access, adults were asked whether in the past 12 months they had visited more often, less often or about the same as previously. For each mode of access, responses indicating increased use exceeded those indicating decreased use, although the difference was small for in-person visits and substantial for remote visits.





THE USE OF ACADEMIC SCHOOL AND SPECIAL IN-HOUSE WORKPLACE LIBRARIES

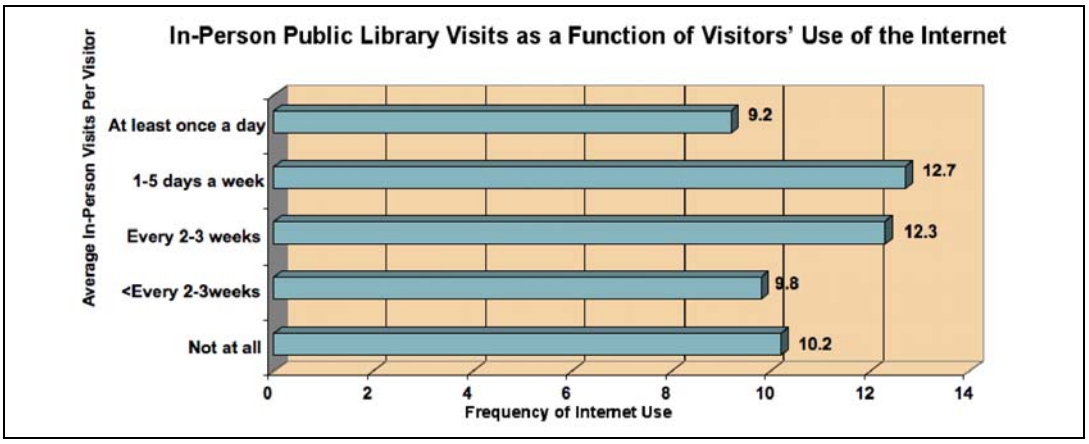
Adults were asked if they made any visits in the past 12 months to other kinds of libraries. A total of 38.1 million adults (students and faculty) visited academic libraries for a total of 705 million in-person visits and 1.39 billion online visits. 37% said they visited these libraries more and 20% indicated less than in the past. School (K-12) libraries had 22 million adult visitors who visited 432 million times in-person and 290 million times online in 2006. They also tended to visit more (28%) than less (18%) often. Special in-house workplace libraries were visited by 20 million visitors with 697 in-person visits and 836 million online visits. These visitors tended to visit more often (26%) than less often (8%).

Has the Internet Replaced the Need for Public Libraries and Museums?

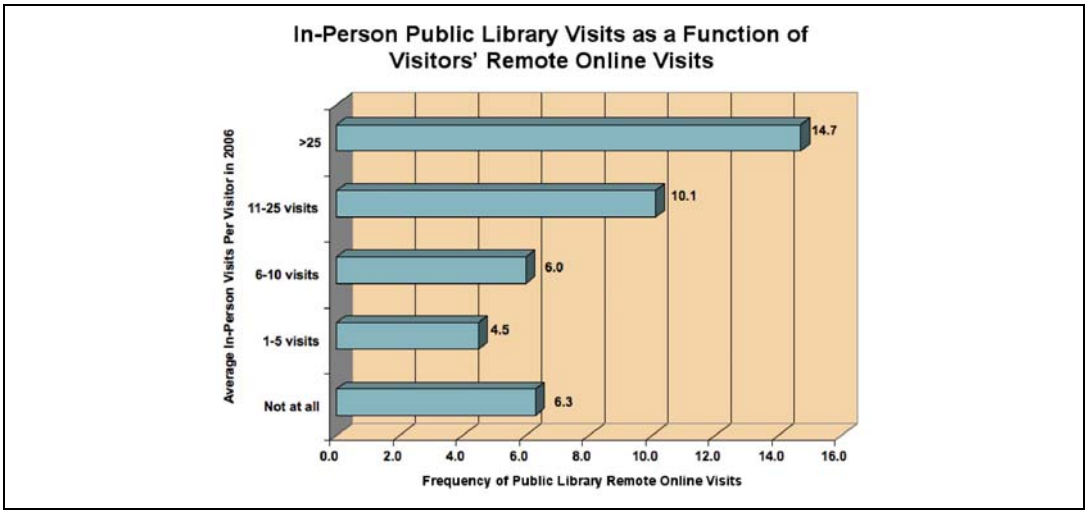
PUBLIC LIBRARIES

Evidence suggests that, if anything, public library use has been enhanced by the introduction of the Internet in the past 10-15 years.

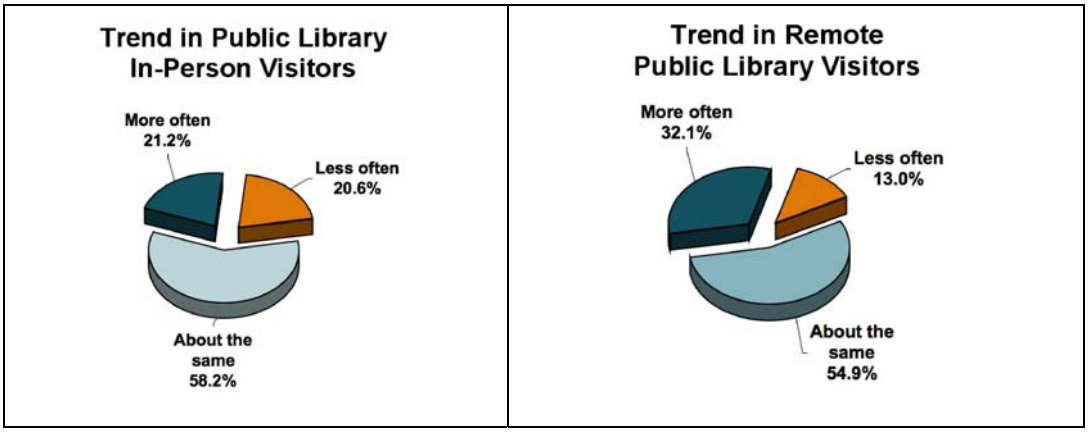
- Public library visits continue to increase: according to the National Center for Education Statistics (NCES) the number of visits per capita increased from 3.8 in 1992 to 4.8 visits per person in 2005. Thus, the Internet does not appear to result in declining public library visits.
- There appears to be very little difference in average number of public library visits per visitor compared with their use of the Internet. Thus, overall, Internet use by visitors has only a small effect, if at all, on number of public library visits.



Where the Internet has clearly had an effect on in-person visits is by use of remote online visits. As remote online visits increase the average number of in-person visits increase.



Adults were asked if they visit public libraries more often, less often or about the same as done previously.

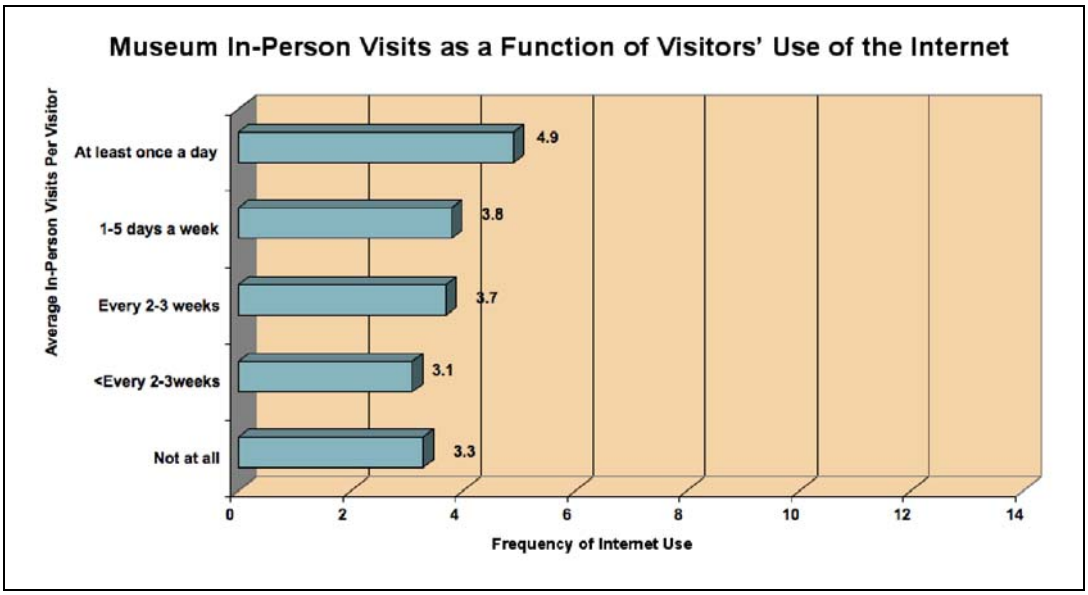


The trend in in-person visiting is up some, but is up substantially for remote visiting. Adults who visit both in-person and remotely have a somewhat more positive trend in in-person visits compared with those who did not visit remotely online:

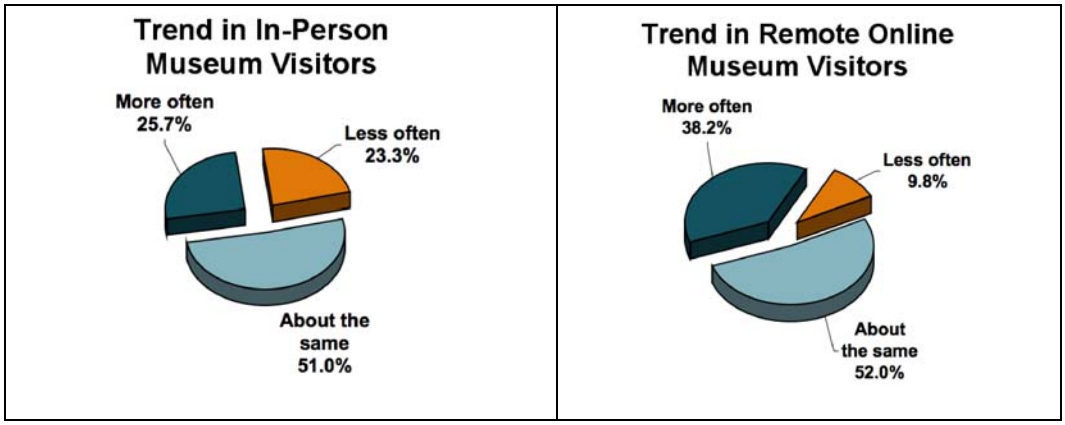
- Most remote online visitors (91%) also visit in-person.
- Internet use has led to additional information sources, including libraries of all kinds, with 1.3 billion such occurrences in 2006.

MUSEUMS

- In-person visits to museums seem to be correlated with the visitors' overall use of the Internet. Thus, the Internet does not appear to affect museum use, but may actually stimulate in-person visits.



- The trend in in-person museum visits is up some and up substantially in remote visits.



- The trend for in-person visiting is much higher for in-person and remote visitors than for in-person only visitors.
- A high proportion (90%) of remote museum visitors are also in-person visitors.
- Internet use has led to 3.2 million occurrences of need for or use of museum information.

Who Uses Museums, Public Libraries and the Internet

The demographics of adults who use museums, public libraries and the Internet show that there are some differences in use by age, sex, and race and substantial differences by education level. These differences are more marked when considering mode of access to museums and public libraries (in-person or online). Charts depicting some of these differences can be found at the end of this report.

AGE AND SEX

Men are more likely than women to visit museums (71% versus 69%) and the Internet (86% versus 81%); whereas women are more likely to visit public libraries (74% versus 65%). Adult use of museums, public libraries and the Internet all tend to fall as age increases, except that those aged 25-44 years tend to use museums more than younger adults. Adults aged 18-24 are most likely to visit art museums (37%), those aged 25-44 are most likely to visit zoos or aquaria (49), those aged 45-64 are most likely to visit historic houses or sites (39%) and those over 64 are most likely to visit art museums.

While more women than men visit museums in-person (70 million versus 66 million), men on average tend to visit more often (5.07 versus 4.43 visits/year). While a similar number of men and women visit museums remotely (36 million each), men tend to visit more on average than women (7.25 versus 6.15 visits/year). Men aged 25-44 visit museums both in-person and remotely most frequently on average (5.33 in-person and 9.33 remote visits per visitor); whereas women over 64 years of age visit most frequently (5.87 in-person and 8.68 remote visits per visitor).

A greater proportion of women than men visit public libraries (74% versus 65%). As people age, the proportions that visit public libraries tend to decrease. Interestingly, at the lowest and highest age ranges (18-24 and over 64) higher proportions of men than women visit public libraries. These patterns hold true for both in-person and remote online visits to public libraries. Higher proportions of women than men tend to use both forms of access except for the over 64 age category. Younger adults tend to use workstations in the library (71% of visits by 18-24 years olds), while older adults tend not to use remote or in-library Internet access (64% of adults over 64).

Younger men and women use the Internet more than older ones (94% of men and 93% of women aged 18-24 versus 64% of me and 48% of women over 64). More men, on average, use the Internet than women (86% versus 81%). While the youngest adults are more likely to be Internet users, they do not use the Internet with the frequency that 25-44 and 45-64 year olds do (545 uses per male Internet user per year versus 599 and 574 for 25-44 and 45-64 year olds, respectively; 510 uses per female Internet user per year versus 538 and 488 for 25-44 and 45-over 64, respectively).

RACE AND ETHNICITY

Hispanic/Latino and white adults are more likely to visit museums, public libraries and the internet than Black/African Americans. Asian adults are more likely than the other groups to use the Internet. It is clear that Black/African Americans are the least likely of all racial/ethnic groups to use museums, public libraries or the Internet. The racial/ethnic group most likely to visit museums is Asian (72%) followed by Hispanic/Latino (70%); the least likely to visit museums is Black/African American (55%). Public libraries are most likely to be visited by Hispanic/Latinos (68%) and least likely by Black/African Americans (65%). The Internet is most likely to be used by Asians (92%) and least likely by Black/African Americans (67%). White adults and Black/African American adults are most likely to visit zoos or aquaria (35% and 29%, respectively). Asian and American Indian adults are most likely to visit art museums (37% and 32% respectively).

There do not appear to be any significant differences in the proportion of adults visiting public libraries by major racial/ethnic categories (all in the 65% - 68% range). However, when comparing those who visit public libraries in-person with those who visit remotely via the Internet, Black/African Americans are under-represented (18% versus 32% - 37% for other categories). Visits by adults of Hispanic/Latino origin are more likely to involve use of Internet workstations in the public library than visits of other racial/ethnic groups (53% versus 29% - 37%). Visits by Black/African Americans, while not very likely to involve remote access (6%), do involve use of Internet workstations in the libraries about the same as visit by White adults (34% and 37%, respectively), and are much more likely not to involve Internet access at all (60% versus 29% - 48% for other racial/ethnic groups).

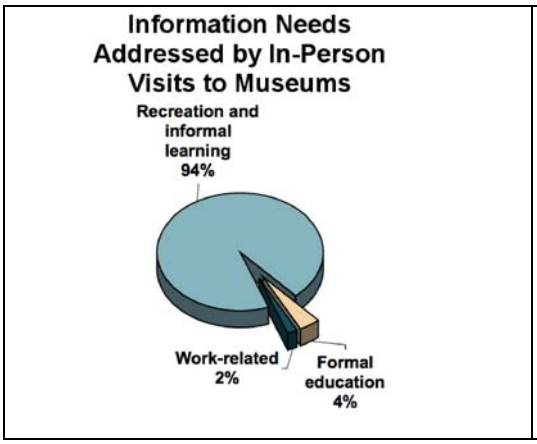
EDUCATION LEVEL AND HOUSEHOLD INCOME

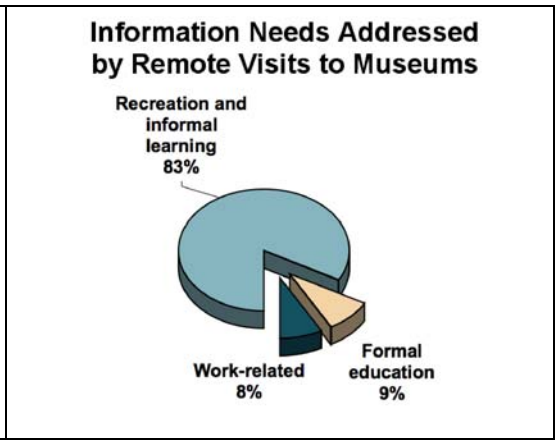
There is a clear and strong trend showing that the higher the education level attained by adults, the more likely they are to use museums, public libraries and the Internet. Approximately one third of adults with less than a high school education use museums, public libraries and the Internet (36%, 31% and 31%, respectively) compared with those having more than a four-year college degree (85%, 86%, and 91%, respectively). The figures for household income (available for public library and Internet users) follow a similar pattern, as educational achievement is positively correlated with household income.

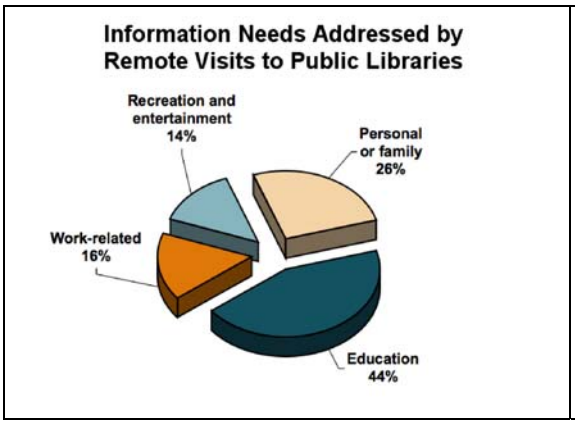
INFORMATION NEEDS

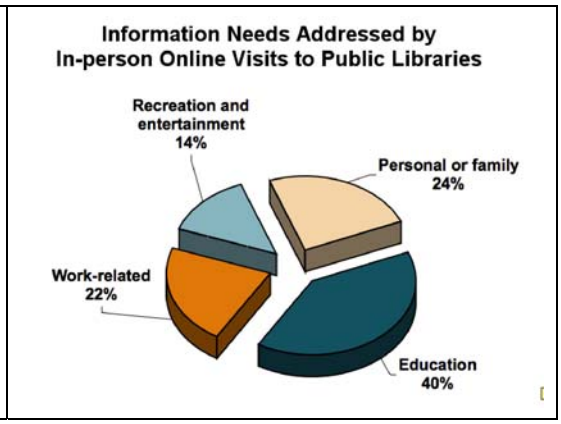
People's information needs addressed by museums, public libraries and the Internet varied by provider chosen. Museums are overwhelmingly used to address recreational and informal learning needs (89%). With public libraries, information needs vary dramatically depending on the mode of access. Recreation is the dominant need for other in-person visits (47% of visits), but education needs are most common for remote online visits (44%) and for in-

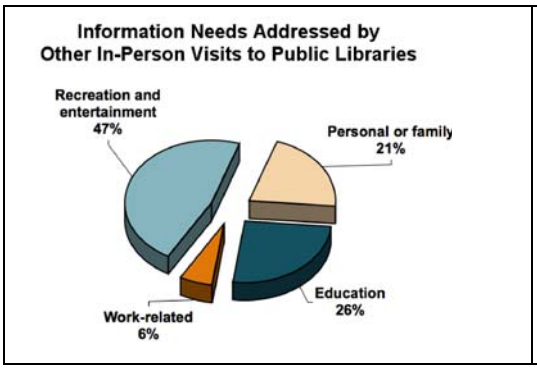
person online visits (40%). Across all modes of access, education is the most common information need (36%), followed by recreation and entertainment (28%), personal or family needs (23%) and work-related needs (13%). The Internet is use mostly to address personal or family information needs associated with important situations (89%).

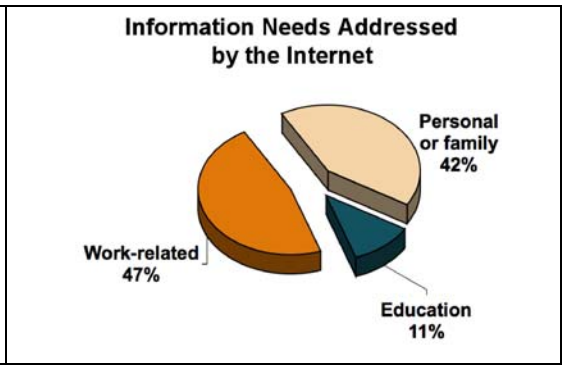






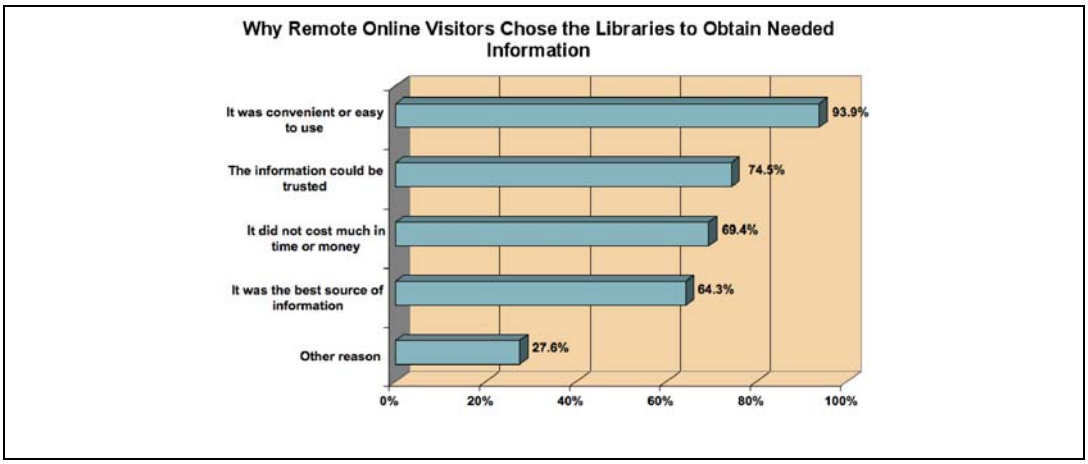


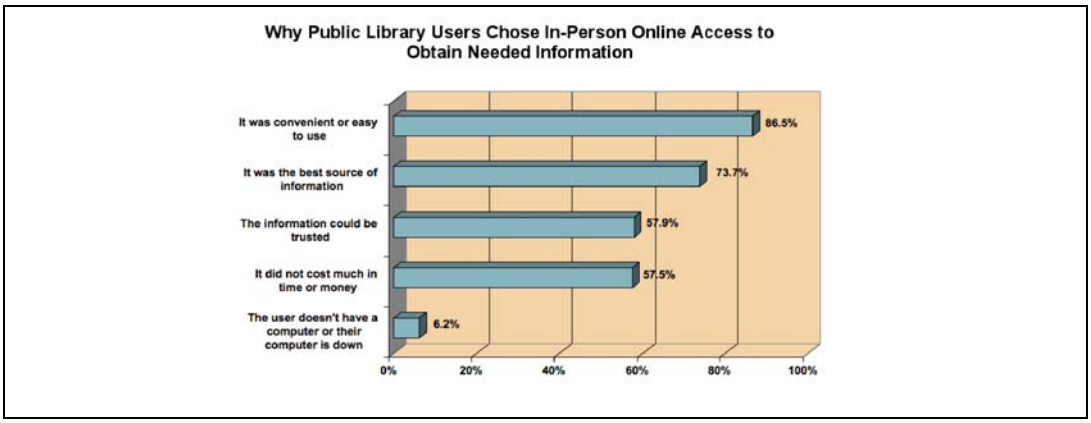


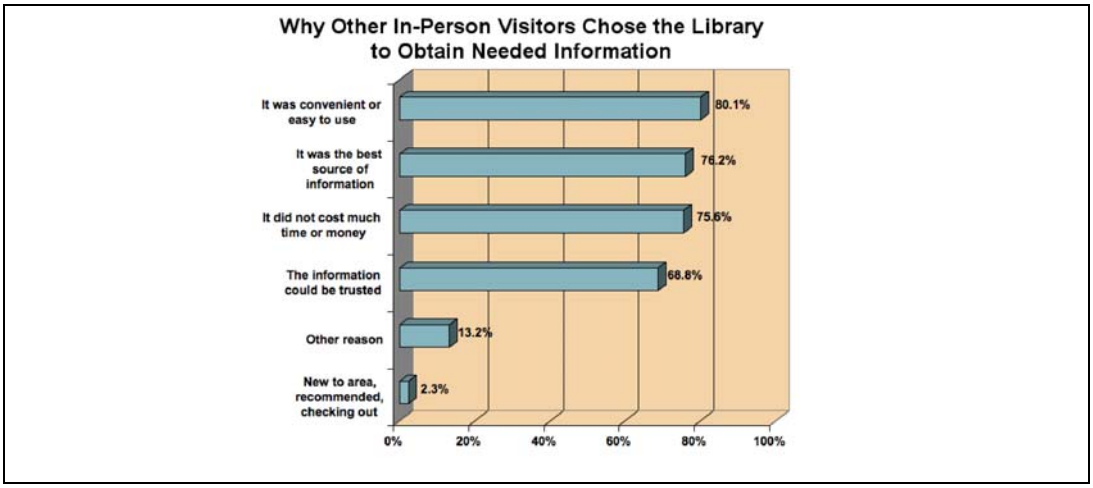


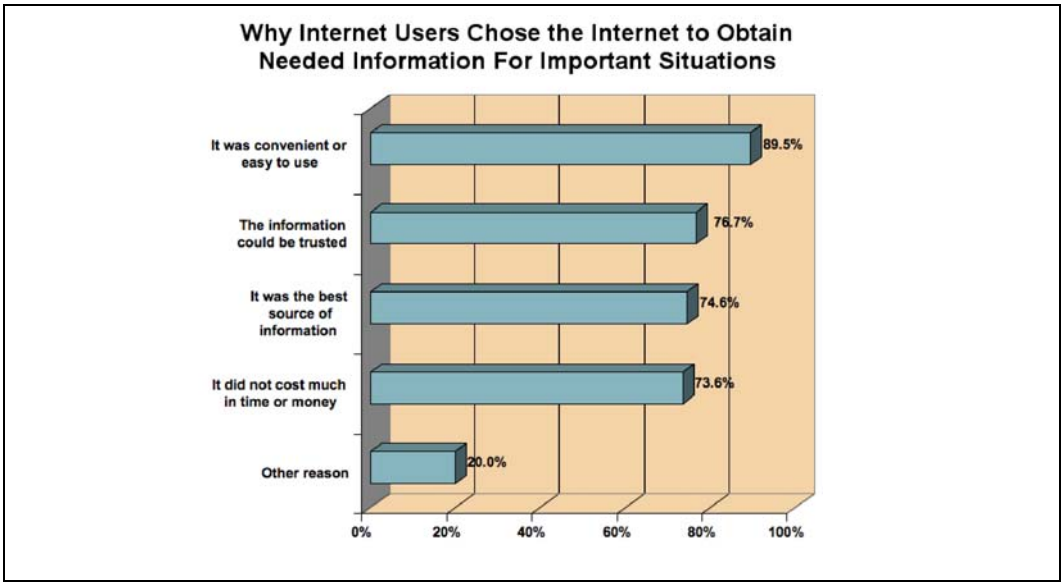
WHY MUSEUMS, PUBLIC LIBRARIES AND THE INTERNET WERE CHOSEN AS INFORMATION PROVIDERS

There are a number of reasons why people choose the information providers they do and the mode of access to their selected provider. As shown above, the nature of the need is clearly one factor. Other factors include convenience/ease of use (the most common reason given for choice of all providers), cost (in time and money) of use, quality, trustworthiness, and so on.









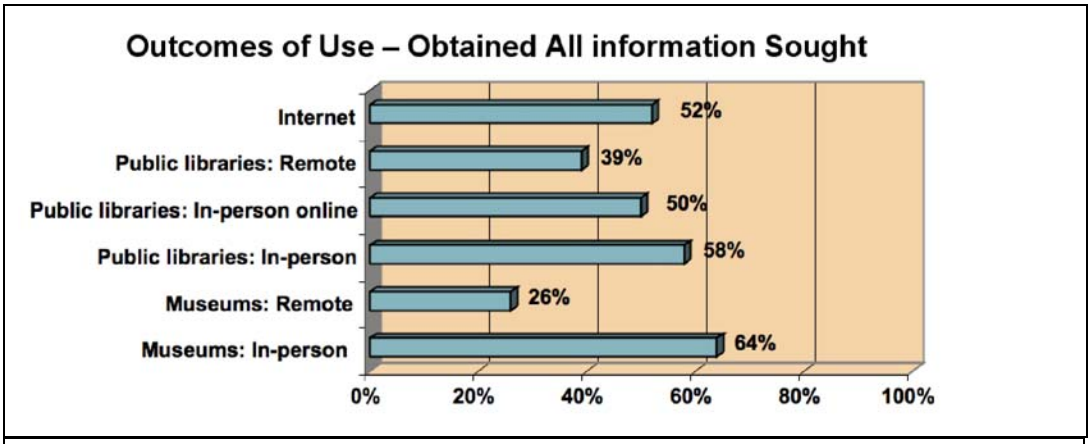
OUTCOMES FROM USE OF MUSEUMS, PUBLIC LIBRARIES AND THE INTERNET

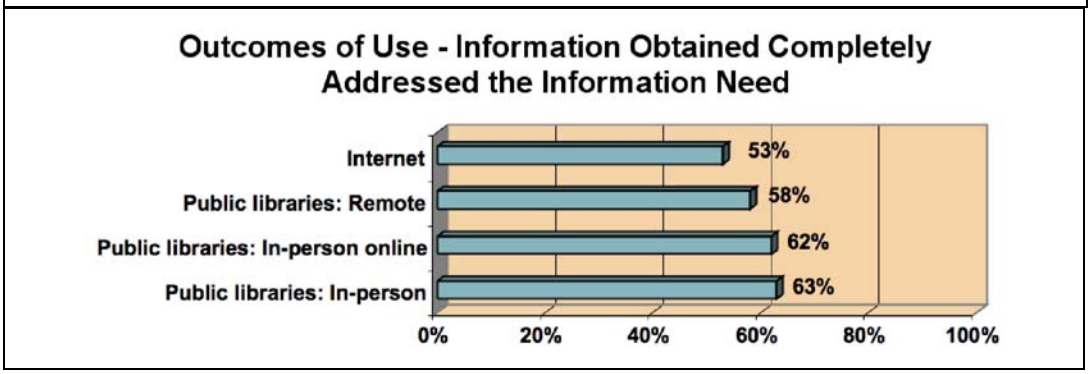
Outcomes from use of the chosen information provider and from the information provided were assessed using a variety of indicators. These included ratings of various attributes of information obtained from the provider. In-person visits are tend to rate higher in quality and trustworthiness of information provided; whereas online tends to rate higher on timeliness/currency of the information and the importance of the situation.

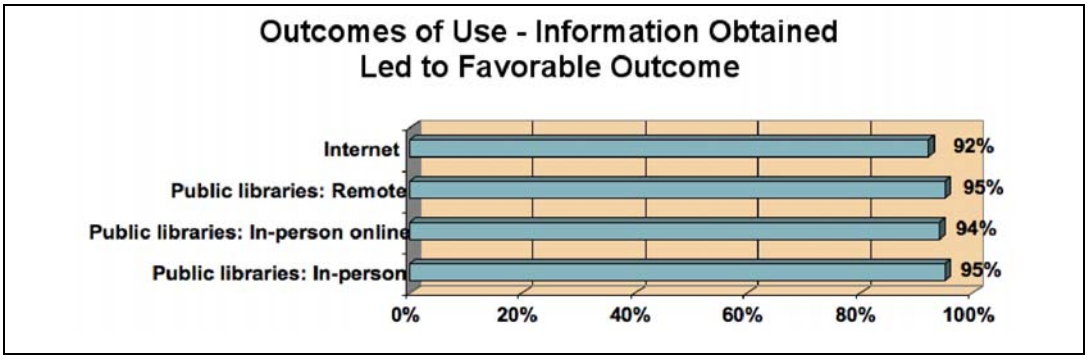
Attributes of Information	Ratings of Attributes of Information (rating scale: 1 - worst, 5 - best)					
	Museums		Public Libraries			Internet
	Remote	In-Person	Remote	In-Person Online	Other In-Person	
Quality	3.96	4.40	4.20	4.38	4.34	4.32
Completeness			3.99	4.21	4.27	4.15
Timeliness/Currency			4.23	4.39	4.25	4.42
Trustworthiness	4.54	4.62	4.48	4.35	4.62	4.38
Novelty			3.85	3.86	3.74	3.79
Importance			4.21	4.12	4.13	4.27
Overall experience	4.03	4.37		4.20		
Exhibits	3.84	4.36				
Oral presentations re displays	3.68	4.30				
Hours of availability of workstations				4.14		
Number of available workstations				3.87		
Amount of time allowed in single workstation session				3.67		

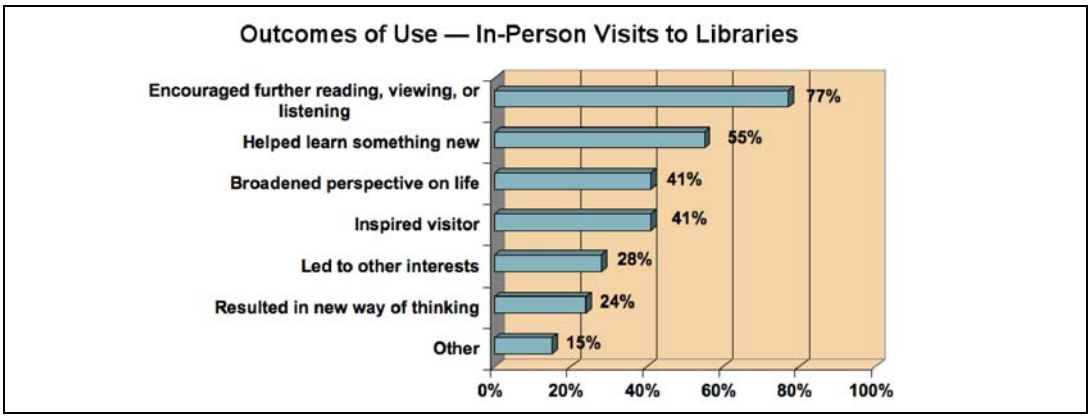
Other outcomes included whether or not all or part of the needed information was provided, whether the information provided completely or somewhat addressed the information need, whether the information provided led to a favorable outcome, any time or cost savings, and other benefits from use of the provider or the information provided.

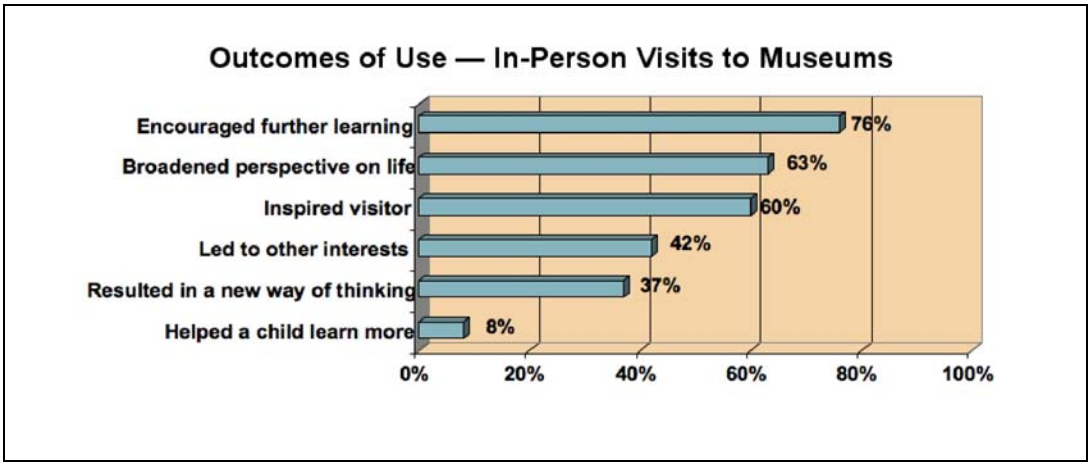
In-person visits outperform all online accesses in terms of providing all the information sought. Of the types of online accesses, the Internet completely delivered the information sought more often that public libraries and museums. Similarly, in-person uses of museums, Public libraries and the Internet tended to more often completely address the information need. All uses of public libraries and the Internet had high success levels in terms of leading to favorable outcomes.


Outcomes of Use – Obtained All information Sought
Internet
Public libraries: Remote
Public libraries: In-person online
Public libraries: In-person
Museums: Remote
Museums: In-person
52%
39%
50%
58%
26%
64%
0%
20%
40%
60%
80%
100%


Outcomes of Use - Information Obtained Completely Addressed the Information Need
Internet
Public libraries: Remote
Public libraries: In-person online
Public libraries: In-person
53%
58%
62%
63%
0%
20%
40%
60%
80%
100%


Outcomes of Use - Information Obtained Led to Favorable Outcome
Internet
Public libraries: Remote
Public libraries: In-person online
Public libraries: In-person
92%
95%
94%
95%
0%
20%
40%
60%
80%
100%





What Would Happen If We Didn't Have Public Libraries, Museums or the Internet from Which to Obtain Needed Information?

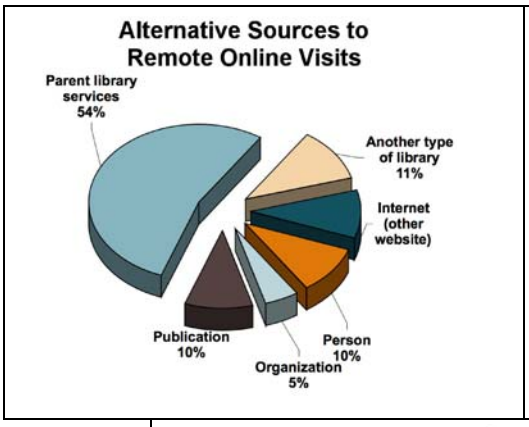
Adults were asked what they would do to address their last important situation in which they had an information need if a provider such as the public library, museum or Internet were not available to them. They were given three options:

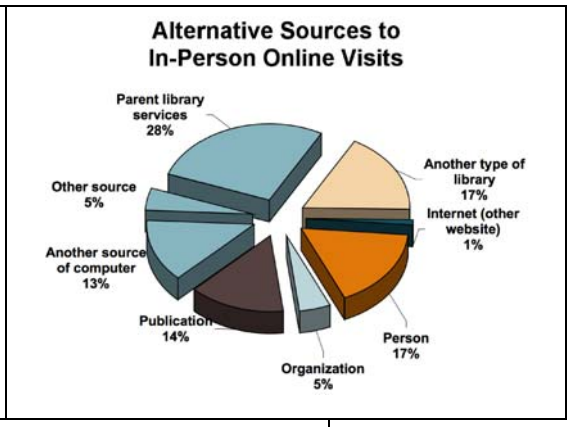
- Would not bother to do anything (tends to be less than 10% of uses or visits)
- Need the information but do not know where else to get it (typically involves less than 10% of uses or visits)
- Would get the information from another source (typically more than 85% of uses or visits)

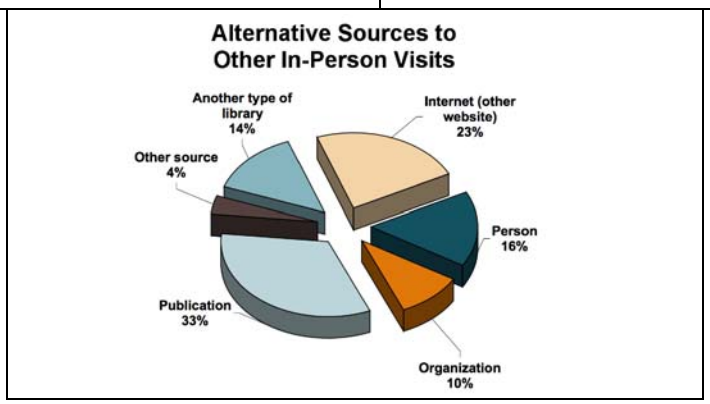
The latter response is followed up by questions about the source that would be used, and the amount of time and/or money that would be required to use it.

WHAT SOURCE WOULD BE USED IF THE THREE MODES OF ACCESS TO PUBLIC LIBRARIES WERE NOT AVAILABLE?

The three modes of access to public libraries (remote online, in-person online and other in-person) and cost to use them varies somewhat. Adults indicated they would seek another source for about 85% of visits across all three access modes. The alternative sources they would use are:







The current average time to use remote online is 63 minutes and the time to use the alternative would be 160 minutes, thus the average additional time would be 97 minutes. The other additional costs in time and money to use an alternative source (i.e., net benefit) are as follows for the three access modes:

	Remote Online	In-Person Online	Other In-Person
Average additional time/visit (min)	97	58	47
Average additional cost/visit ($)	$22.50	$41.30	$30.70
Total savings in time (million hours)	790	170	460
Total savings in $ ($ billions)	**$11**	**$7**	**$18**

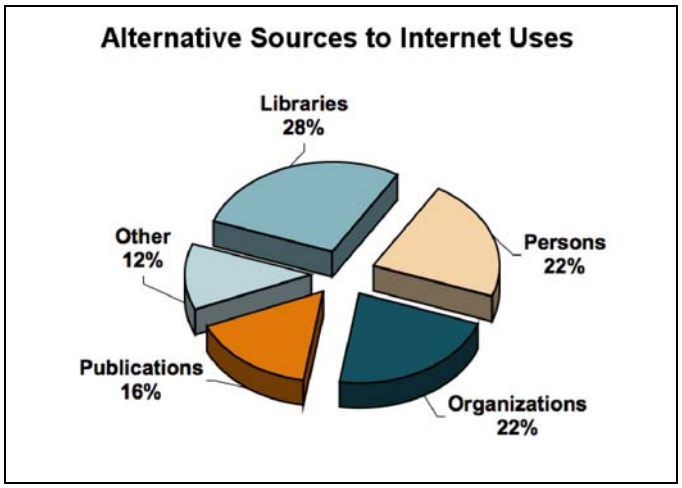
A large proportion of remote online visitors said they chose this mode of access to public library services because it was convenient (94%) and did not cost much in time or money (69%). These reasons are supported in that visitors save 97 minutes and $22.50 per visit. Having all three modes of access to public library services saves U.S. adults a total of 1.4 billion hours and $36 billion.

WHAT WOULD HAPPEN IF WE DIDN'T HAVE MUSEUMS?

The issue of choosing alternative sources for specific visits to museums is somewhat different from public libraries or the Internet in that the purposes for museum visits are largely recreation and lifelong learning, and each museum is unique in its exhibits and displays. Thus, visitors might choose to go to movies, sports events, or other museums if a specific museum were not available. On the other hand, the favorable outcomes of museum visits are abundantly clear and in total contribute substantially to recreation and lifelong learning, education and work-related activities. If museums did not provide benefits, visitors would not be "willing to pay" an average of 5 hours of their time travelling to and from the museum, spending time in the museum, and also pay $41.10 in travel, fees and other costs for in-person visits, and 45 minutes for remote visits.

WHAT WOULD HAPPEN IF WE DIDN'T HAVE THE INTERNET TO ADDRESS IMPORTANT SITUATIONS?

Internet users indicated they would seek alternative sources of information in 87% of their uses for obtaining needed information for important situations. The alternative sources they would use are:



The libraries were not specified by type, although the reports suggest that most would be public libraries. The fact that libraries would be chosen as the alternative source over one-fourth of the time suggests their continued value in Internet users' minds. However, this also suggests that they would have been used if the internet were not available. The additional cost in time to use the alternative sources is 41 minutes per use and the additional dollar cost is $68 per use. The total additional costs to use alternatives to the Internet are 24 billion hours and $2.4 trillion. It is clear why users seeking information choose the Internet as a source of information, even though trustworthiness of that information is low, as shown below, compared with that provided by other sources of the information.

Trust and Quality – the Information Edge

THE IMPORTANCE OF TRUST IN THE USE OF INFORMATION SOURCES AND PROVIDERS

Trust is an important factor in deciding which providers and sources of information to use to address information needs. People have different perspectives on the trustworthiness of the information available and obtained through different sources and providers. Adults were asked to rate the trustworthiness of different information providers (using a 5-point scale from 1 - "not at all trustworthy" to 5 – "extremely trustworthy"). The average ratings for the different providers are:

Libraries	4.58

Museums	4.33
Archives/Hist. Assn.	4.21
Genealogical Soc.	3.71
Government website	3.00
Commercial websites	2.54
Private indiv. Websites	2.14

The stark difference in ratings among these information providers is an indication of user awareness of and concern with the information they provide.

Trust is essential from two standpoints of information sources and providers:

- Adults were asked why they chose sources and providers to obtain needed information. One response was that "the information could be trusted."
- Following the use of a source or provider, users were asked to rate various attributes of information obtained. One information attribute is "the trustworthiness of the information obtained" with ratings as described above.

From these observations, it is clear that trust varies among sources and providers, but more so depending on the specific type of information needs or purpose of use of the source or provider.

TRUSTWORTHINESS OF PUBLIC LIBRARY REMOTE ONLINE, IN-PERSON ONLINE AND OTHER IN-PERSON SERVICES

Frequency of uses for which trustworthiness is given as a reason for choosing a service is lowest for in-person online (58% of visits versus 75% for remote online and 69% for other in-person). The reason is confirmed in that the rating of the trustworthiness of information obtained is by far the lowest (4.35 for in-person online versus 4.48 for remote online and 4.62 for other in-person visits).

The ratings of trustworthiness of information obtained seem to be related to the time spent using the services:

	Rating	Time
In-person online	4.35	29 minutes
Remote online	4.48	63 minutes
Other in-person	4.62	52 minutes

TRUSTWORTHINESS OF PERSONS, BOOKS, NEWSPAPERS OR MAGAZINES AND THE INTERNET AS SOURCES OF INFORMATION

One survey asked adults about important situations they have experienced in which they need information to make a decision or solve a problem. In each situation they need to choose among sources of information such as books, newspapers or magazines, the Internet or other sources such as television. Sometimes they use several sources to address the situation. The results below deal with the source that was the most helpful.

The Internet is consistently chosen because:

- it was considered convenient or easy to use (consistently over 90% of the situations)
- it was perceived as not costing much in time or money (about 70% of situations)
- it was perceived as the best source of information (about 75% of situations)

However, reason "the information could be trusted" is nearly always the least common reason given for the selection of sources.

Thus, sometimes trustworthiness with Internet use appears to be sacrificed for convenience or cost. This result is confirmed by ratings of the trustworthiness of the information obtained from the different sources. Ratings of trust in information obtained tend to reflect the time spent using the source:

	Rating	Time
Persons	4.78	145 minutes
Books	4.70	332 minutes
Newspapers/Magazines	4.18	28 minutes
Internet	4.36	95 minutes

Issues of trust vary substantially by the type of information need. Some examples of important situations involving information needs are personal/family health/wellness or financial/legal needs, and workplace research needs (medicine, science, law, etc.).

Health or Wellness Needs

	Persons	Books	Newspapers/ Magazines	Internet
Chosen because of trust (%)	90.0	84.0	81.8	71.1

Rating of trustworthiness of information	4.83	4.69	3.91	4.27

Financial or Legal Needs

	Persons	Books	Newspapers/ Magazines	Internet
Chosen because of trust (%)	88.9	66.7	----	67.5
Rating of trustworthiness of information	4.71	4.63	4.17	4.35

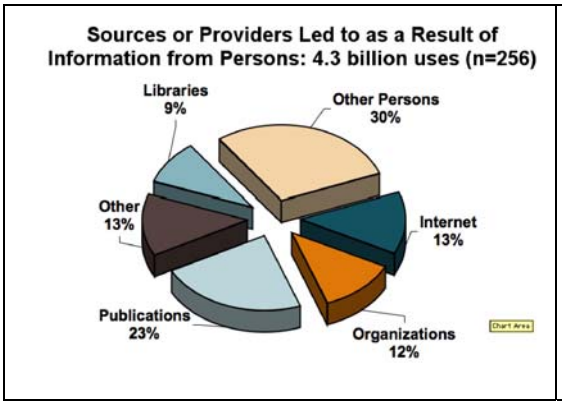
Work-Related Research Needs

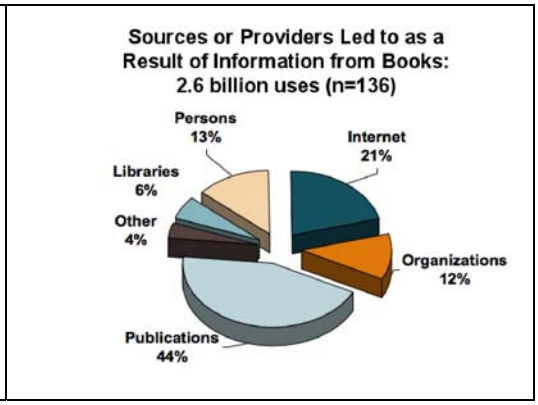
	Persons	Books	Newspapers/ Magazines	Internet
Chosen because of trust (%)	92.9	83.3	----	79.2
Rating of trustworthiness of information	4.85	4.83	----	4.51

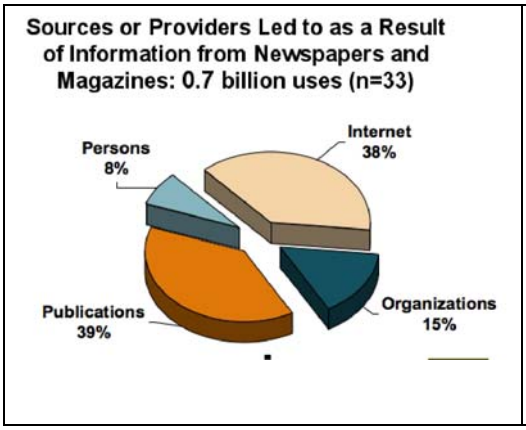
Persons and books tend to be chosen based on trust and they are rated much higher than the Internet or newspapers/magazines. Trust tends to be a stronger consideration for these important needs than for many other less important needs

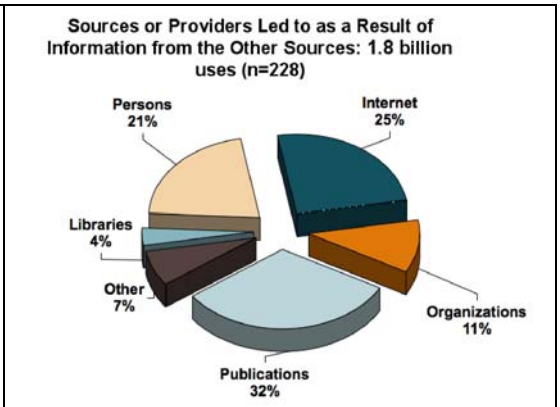
Interconnections: Information from Sources and Providers Lead to Other Sources and Providers

When people are seeking information, they make choices as to which sources of information to use. In the process of using those sources, they are often led to additional sources and providers:



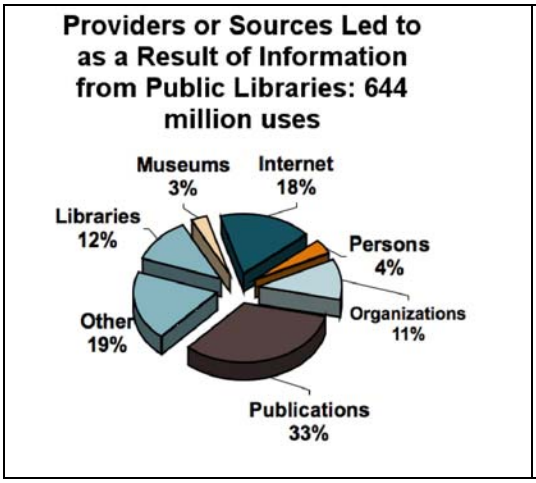


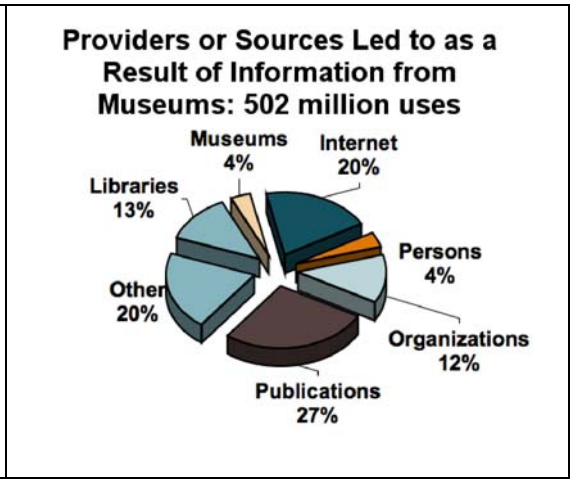


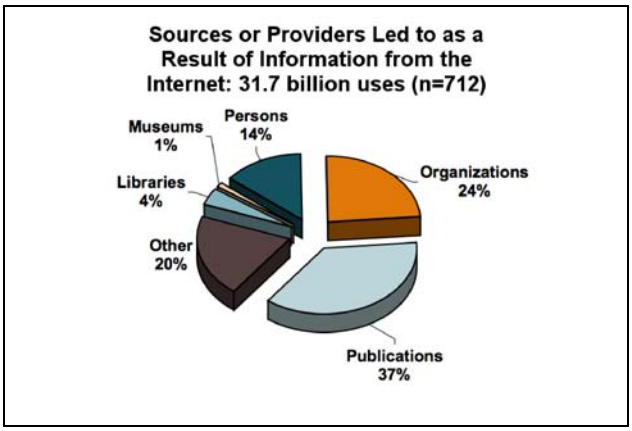


Interconnections: Information from Providers Leads to Other Providers

In the same way that different sources of information can lead to other sources and providers, so too can information from public libraries, museums and the Internet.

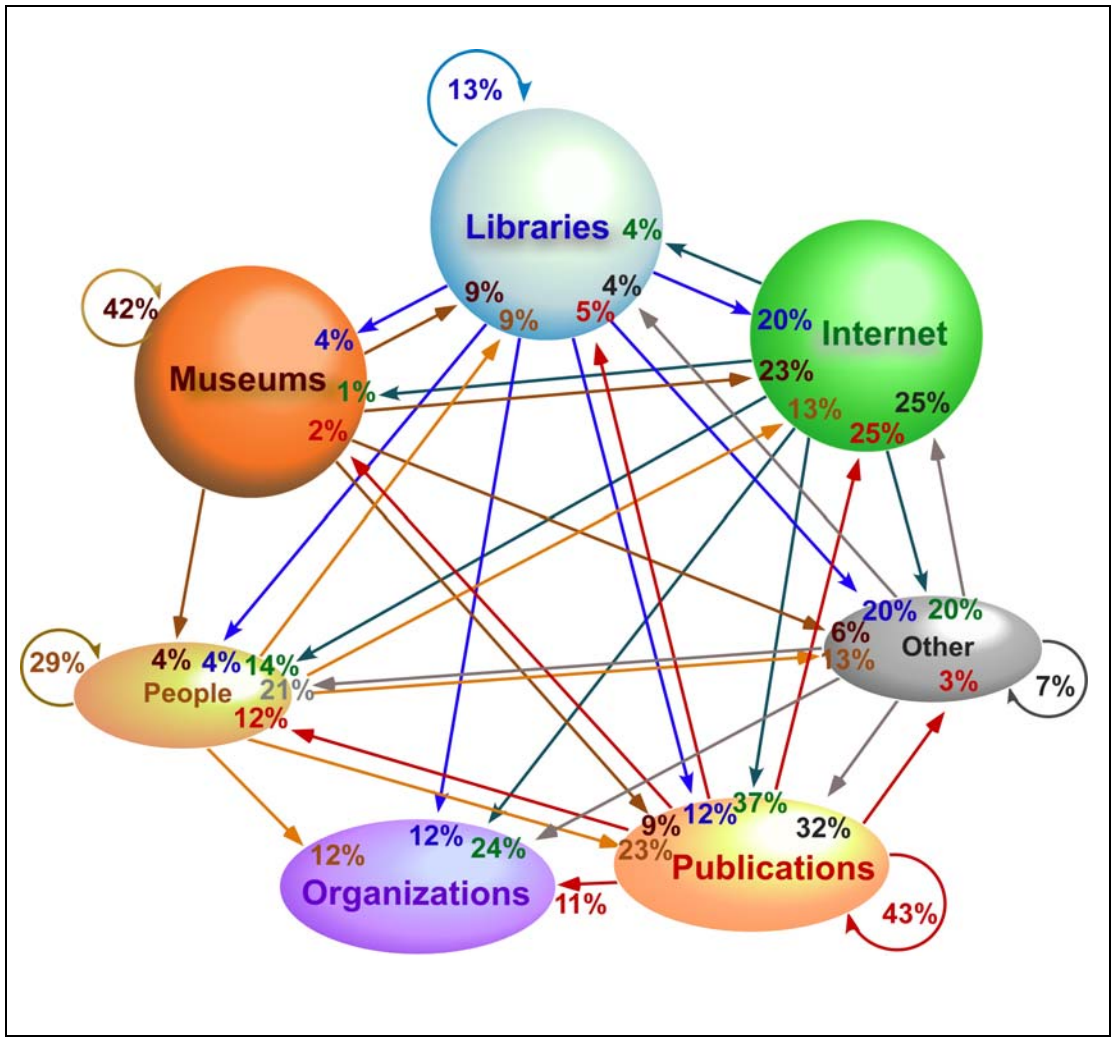




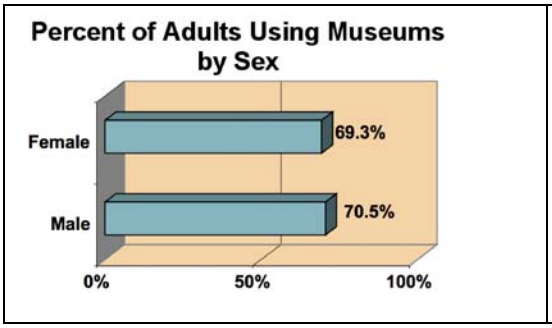

Sources or Providers Led to as a Result of Information from the Internet: 31.7 billion uses (n=712)
Museums 1%
Persons 14%
Organizations 24%
Libraries 4%
Other 20%
Publications 37%

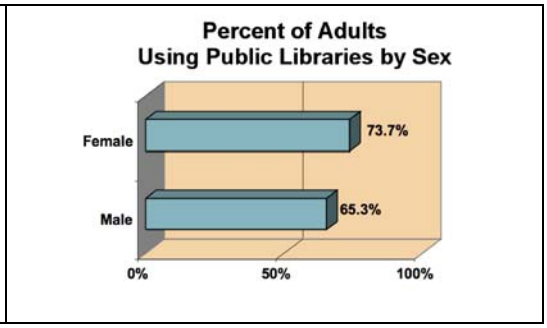
InterConnections – A Rich Web of Information Resources Reinforcing Use

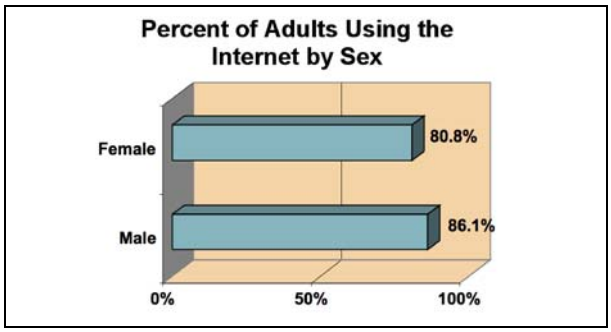
It is clear that people's choice of information sources, providers and modes of access are driven by their different information needs, and by factors such as convenience, importance, quality, trustworthiness and cost. However, people use multiple sources and providers in their efforts to obtain needed information and the use of any one source or provider often leads to others. The Internet seems to function not only as a source/provider of information but also as a stimulus to identify additional resources.

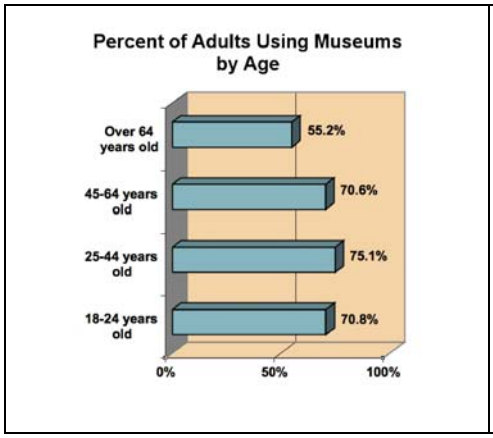


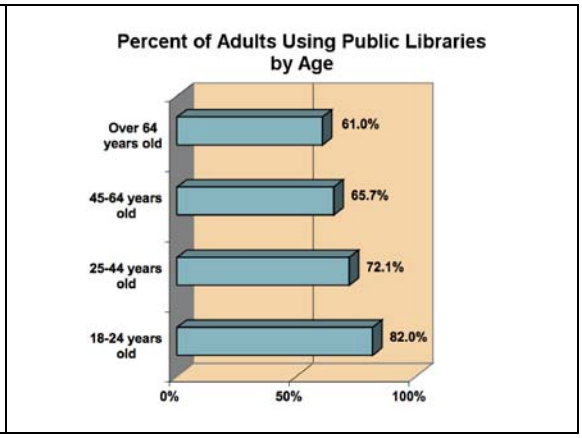
Demographics of Users of Libraries, Museums and the Internet

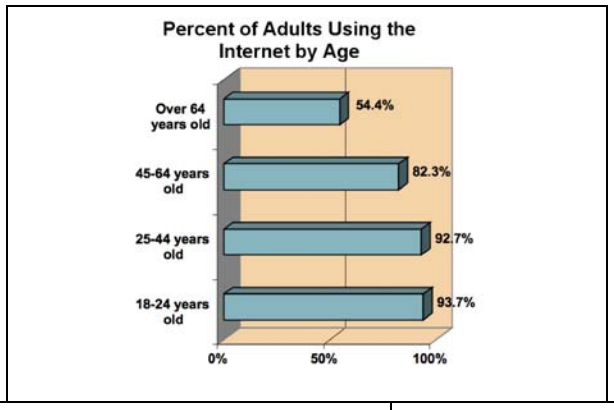


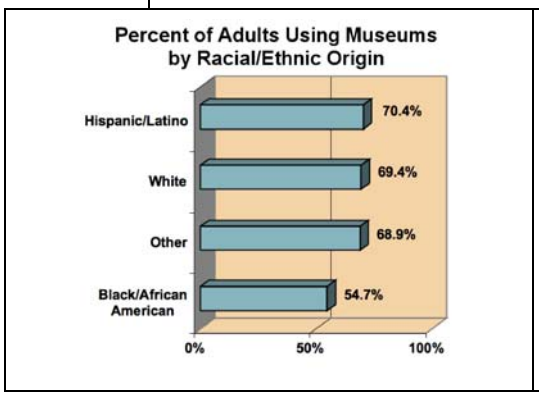


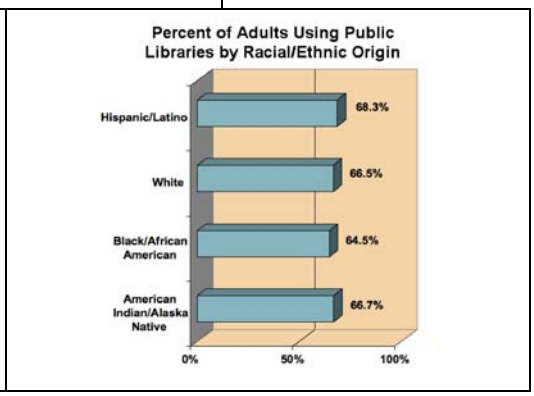


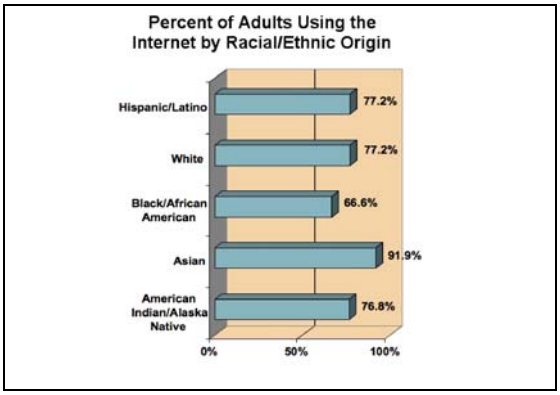


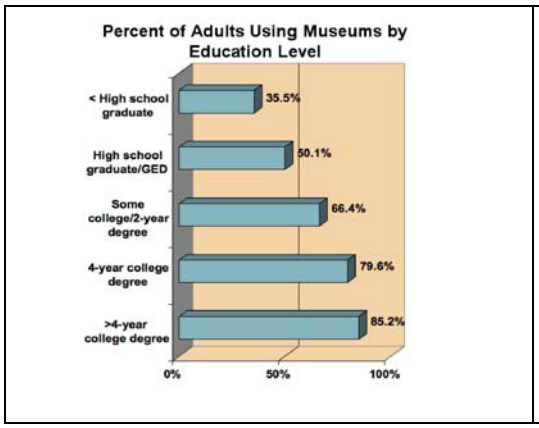


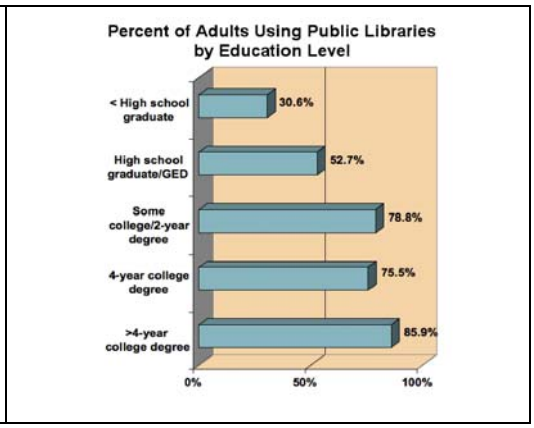

Percent of Adults Using the Internet by Age
Over 64 years old
54.4%
45-64 years old
82.3%
25-44 years old
92.7%
18-24 years old
93.7%
0%
50%
100%

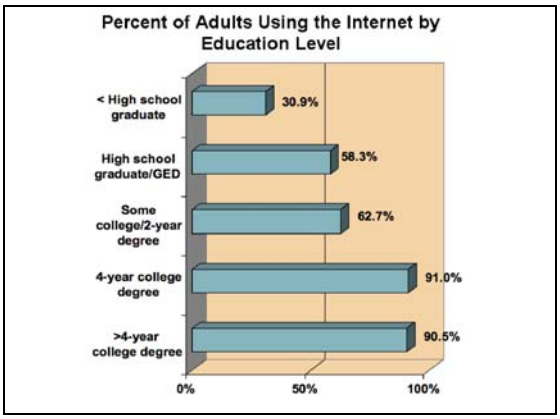

Percent of Adults Using Museums by Racial/Ethnic Origin
Hispanic/Latino
70.4%
White
69.4%
Other
68.9%
Black/African American
54.7%
0%
50%
100%

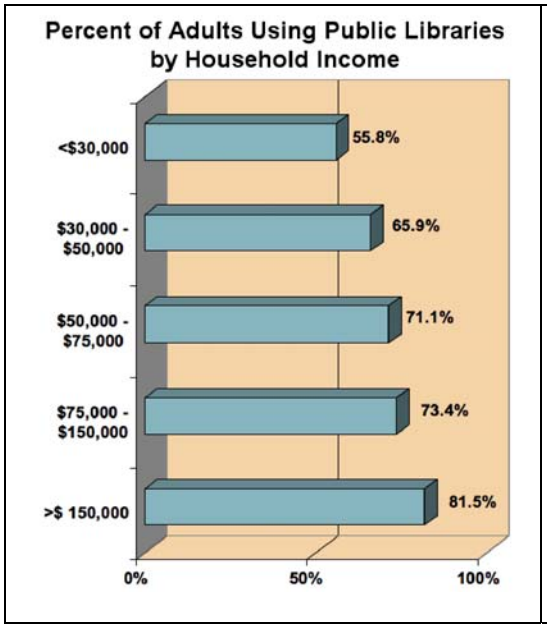

Percent of Adults Using Public Libraries by Racial/Ethnic Origin
Hispanic/Latino
68.3%
White
66.5%
Black/African American
64.5%
American Indian/Alaska Native
66.7%
0%
50%
100%

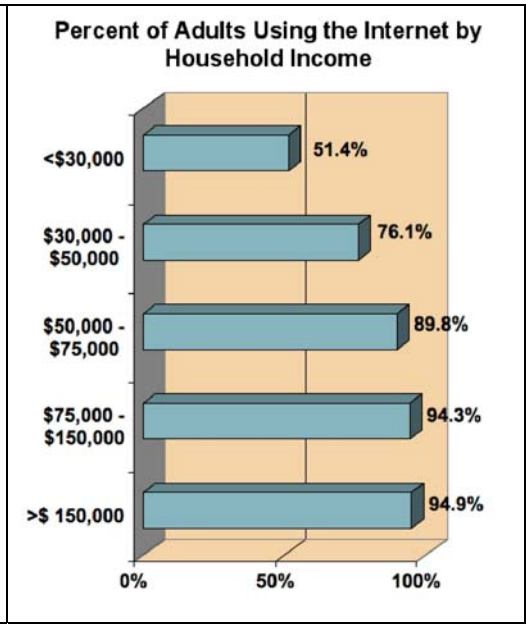

Percent of Adults Using the Internet by Racial/Ethnic Origin
Hispanic/Latino
77.2%
White
77.2%
Black/African American
66.6%
Asian
91.9%
American Indian/Alaska Native
76.8%
0%
50%
100%

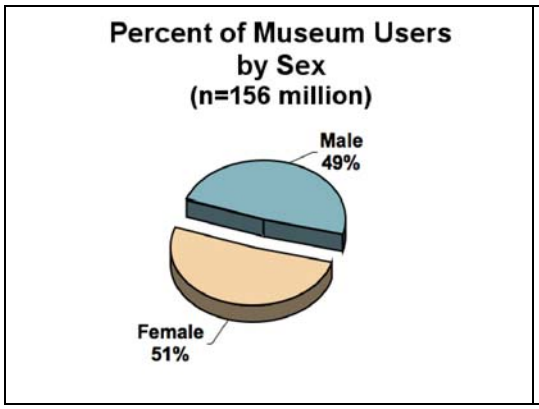

Percent of Adults Using Museums by Education Level
< High school graduate
35.5%
High school graduate/GED
50.1%
Some college/2-year degree
66.4%
4-year college degree
79.6%
>4-year college degree
85.2%
0%
50%
100%

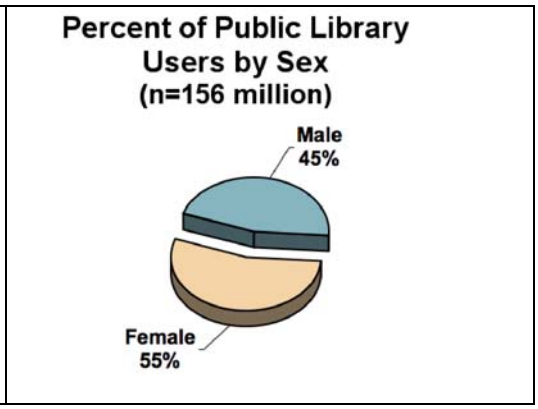

Percent of Adults Using Public Libraries by Education Level
< High school graduate
30.6%
High school graduate/GED
52.7%
Some college/2-year degree
78.8%
4-year college degree
75.5%
>4-year college degree
85.9%
0%
50%
100%

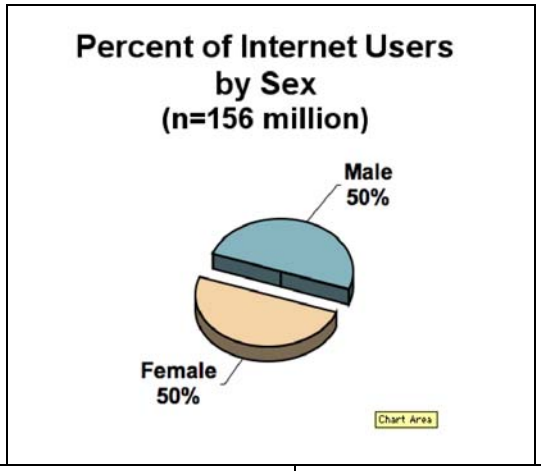

Percent of Adults Using the Internet by Education Level
< High school graduate
30.9%
High school graduate/GED
58.3%
Some college/2-year degree
62.7%
4-year college degree
91.0%
>4-year college degree
90.5%
0%
50%
100%

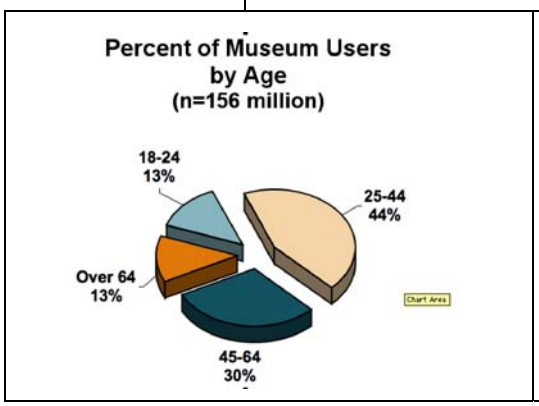

Percent of Adults Using Public Libraries by Household Income
<$30,000
55.8%
$30,000 - $50,000
65.9%
$50,000 - $75,000
71.1%
$75,000 - $150,000
73.4%
>$ 150,000
81.5%
0%
50%
100%

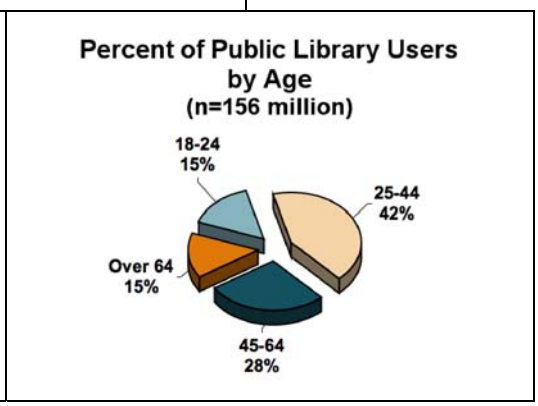

Percent of Adults Using the Internet by Household Income
<$30,000
51.4%
$30,000 - $50,000
76.1%
$50,000 - $75,000
89.8%
$75,000 - $150,000
94.3%
>$ 150,000
94.9%
0%
50%
100%

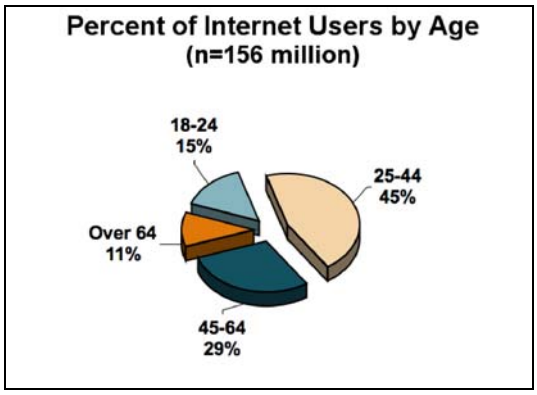

Percent of Museum Users by Sex (n=156 million)
Male 49%
Female 51%

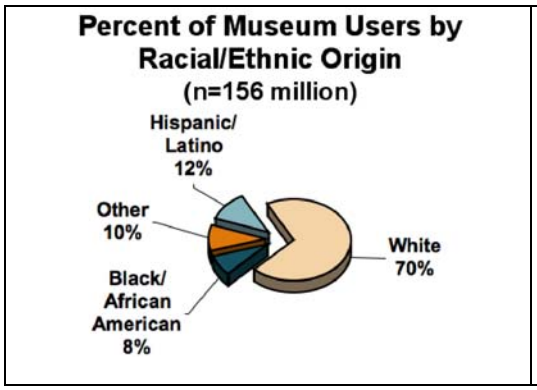

Percent of Public Library Users by Sex (n=156 million)
Male 45%
Female 55%

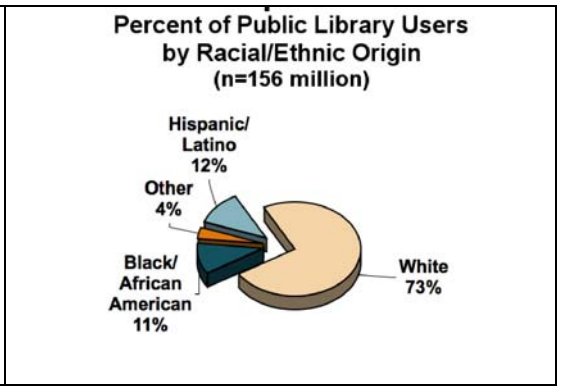

Percent of Internet Users by Sex (n=156 million)
Male 50%
Female 50%
Chart Area

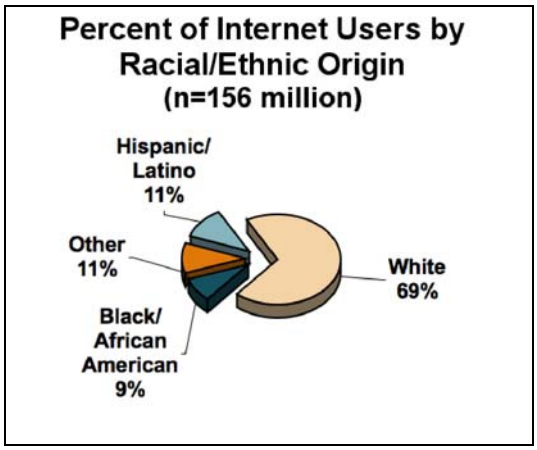

Percent of Museum Users by Age (n=156 million)
18-24 13%
25-44 44%
Over 64 13%
45-64 30%
Chart Area

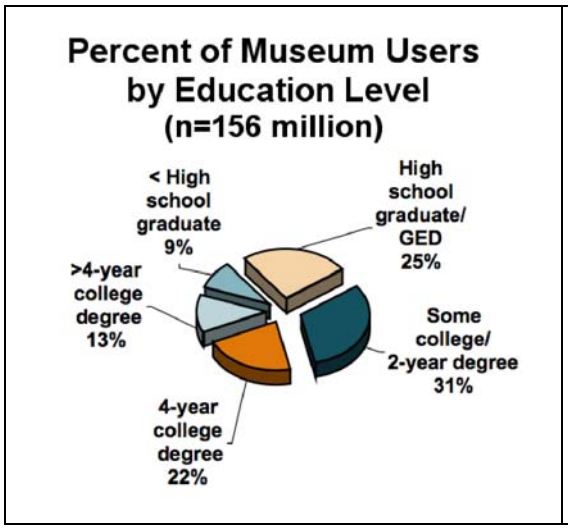

Percent of Public Library Users by Age (n=156 million)
18-24 15%
25-44 42%
Over 64 15%
45-64 28%

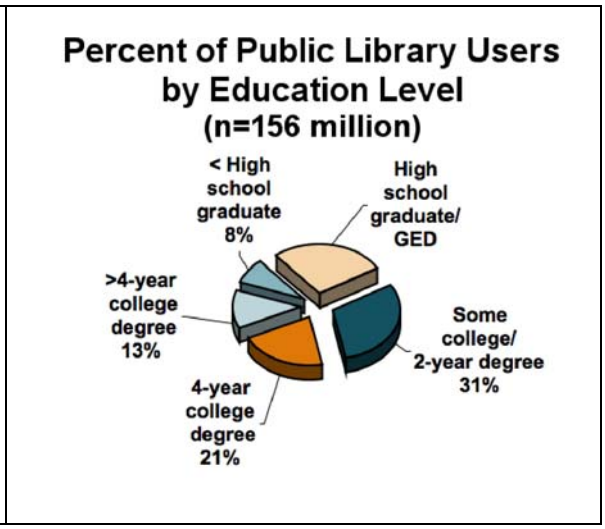

Percent of Internet Users by Age
(n=156 million)
18-24
15%
25-44
45%
Over 64
11%
45-64
29%

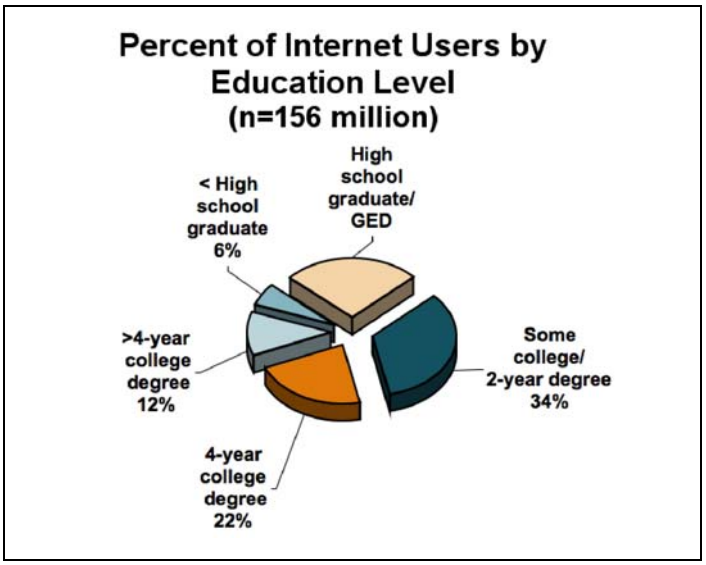

Percent of Museum Users by
Racial/Ethnic Origin
(n=156 million)
Hispanic/
Latino
12%
Other
10%
White
70%
Black/
African
American
8%


Percent of Public Library Users
by Racial/Ethnic Origin
(n=156 million)
Hispanic/
Latino
12%
Other
4%
Black/
African
American
11%
White
73%


Percent of Internet Users by
Racial/Ethnic Origin
(n=156 million)
Hispanic/
Latino
11%
Other
11%
White
69%
Black/
African
American
9%


Percent of Museum Users by Education Level (n=156 million)
< High school graduate 9%
High school graduate/ GED 25%
>4-year college degree 13%
Some college/ 2-year degree 31%
4-year college degree 22%


Percent of Public Library Users by Education Level (n=156 million)
< High school graduate 8%
High school graduate/ GED
>4-year college degree 13%
Some college/ 2-year degree 31%
4-year college degree 21%


Percent of Internet Users by Education Level (n=156 million)
< High school graduate 6%
High school graduate/ GED
>4-year college degree 12%
Some college/ 2-year degree 34%
4-year college degree 22%