



Placing an Economic Value on the Services of Public Libraries in Suffolk County, New York

A Research Report by the
Long Island Association

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June 2005



Funded by Suffolk Cooperative Library System

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The Economic Value of Public Libraries in Suffolk County, New York

**By Dr. Pearl M. Kamer
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Executive Summary

Libraries confer both direct and indirect benefits to the communities in which they are located. For example, the use of libraries helps to create a literate population, which is an indirect benefit. While it is difficult to measure indirect benefits, direct benefits to library users are measurable.

This study determines the value of the direct services provided by the public libraries in Suffolk County, New York as compared with the tax dollars used to support them. It also measures the secondary economic impact of library expenditures on the community. The key findings are as follows:

- Library users in Suffolk County received almost four dollars worth of library services for every tax dollar invested in their public libraries. In absolute terms, \$131,647,566 in tax dollars generated \$517,125,736 in library services. This is equivalent to \$3.93 in library services for every tax dollar invested. This finding is similar to the results of an analysis of services provided by the St. Louis Public Library. The 1998 St. Louis study found that library users received \$4.38 in direct benefits for every \$1 of tax revenues invested in the library.
- The libraries in Suffolk County are also major employers. Their wages, operating and capital expenditures are injected into the local economy and undergo several rounds of respending so that their ultimate impact is a multiplier of the original expenditure. This is the so-called ripple or multiplier effect.
- Application of an input-output model of the Long Island economy, which contains the relevant multipliers for output, earnings and employment, showed that operating and capital expenditures by libraries in Suffolk County caused the total output of goods and services on Long Island to expand by more than \$258 million. These expenditures caused total Long Island earnings to rise by more than \$50 million and resulted in the creation of almost 1,250 Long Island jobs.

The Economic Value of Public Libraries in Suffolk County, New York¹

Introduction

Most public libraries do not receive extensive funding from outside their immediate region. Because they are local in nature they tend to recycle local tax dollars. Libraries confer both direct and indirect benefits to the communities in which they are located. It is difficult to measure indirect benefits. For example, the use of libraries helps to create a literate population, which is an indirect benefit. The direct benefits to library users are measurable.

This study analyzes the cost of operating the public libraries of Suffolk County, New York. Its goal is to determine the value of the direct services provided by the public libraries as compared with the tax dollars used to support them. The study also measures the secondary economic impact of library operating expenditures on the community. Libraries confer secondary economic benefits to their communities, which are measurable to some extent. The wages they pay, the services they purchase and the buildings they construct or remodel tend to recycle local tax dollars and have a ripple effect on the economy.

Part I of this study compares the cost of operating the public libraries of Suffolk County with the measurable direct benefits to library users.

Part II of this study examines additional economic benefits.

PART I: Direct Benefits to Library Users

Methodology

Several frequently used library services have been selected for analysis. They fall under these general categories: library collections, circulation and reference transactions, programming, and electronic resources. The frequency of use of these services in 2003 was quantified by using the New York State Annual Reports for Public and Association Libraries. Each of the services has been assigned a market value: that is, the dollar amount that users of the particular service would have paid had the resources of the public libraries been unavailable. By multiplying the number of uses by the market value of each service, it is possible to compute the total value of library services to their users during 2003. This figure was then compared with the total cost of operating public libraries in Suffolk County during 2003. The result is a cost-benefit analysis that pin-points the value of the tax dollars used to operate the public libraries. This method was used by the St. Louis Public Library² in its

¹ Suffolk County, New York, with a population of 1.4 million is located at the eastern end of Long Island. The 56 public libraries in the county are primarily supported by local tax dollars. The Suffolk Cooperative Library System (SCLS) provides consulting and selected centralized services to the public libraries. The SCLS is supported by New York State and Member Library funds. The county does not provide support to public libraries.

²Holt, Glen E. , Elliott, Donald, and Moore, Amonia. Placing a Value on Public Library Services. 1998.

seminal study of the value of its services to users. The results showed the direct return on annual taxpayer investment in library services.

The Value of Library Collections

It is important to recognize that the Suffolk public libraries have large and diverse collections that have a significant market value in and of themselves. The estimated value of the combined collections and the manner in which it was derived is shown below in Table 1. The results show that the collections of Suffolk public libraries are valued at more than \$338 million. The value of the collections can be measured in terms of their relationship to state and local tax dollars needed to operate the libraries in a given year. For 2003, that figure was \$131,647,566 (See Table 6, page 7). This means that the collections are valued at 2.57 times the tax dollars needed to operate the libraries. Given the diversity and dollar value of the current collections, it would be difficult to replicate the collection in the private sector. It is unlikely that there would be a sufficient financial incentive for one or more private firms to amass such a collection of materials if it were not available through the public sector.

Table 1: Value of the Collections

Materials Owned	Number	Estimated Value Per Item	Total Estimated Value	Source of Value Estimate
Adult Fiction Books	1,491,587	\$27.56	\$ 41,108,138	Bowker Annual Library Almanac
Adult Nonfiction Books	3,210,625	62.84	201,755,675	Bowker Annual Library Almanac
Children’s Fiction Books	1,190,296	24.37	29,007,514	Bowker Annual Library Almanac
Children’s Nonfiction Books	1,158,330	24.37	28,228,502	Bowker Annual Library Almanac
Print Serials (volumes)	371,221	4.83	1,792,997	Library Journal
E-Journals	23,030	303.62	6,992,368	Bowker Annual Library Almanac
E-Books	3,100	25.00	77,500	NetLibrary
Audio Recordings (Music)	297,541	17.00	5,058,197	School Library Journal
Audio Recordings (Books)	169,322	75.00	12,699,150	School Library Journal
Video Recordings (DVD’s)	553,285	20.00	11,065,700	School Library Journal
Other (CD-ROM, software)	27,895	31.66	883,156	Average Price paid by Suffolk Libraries
Total	8,496,232		\$338,668,897	

Sources: Suffolk Cooperative Library System; LIA

The Value of Library Services: Circulation and Reference Transactions

The two greatest values for users of library services are the circulation of the libraries' collection of books, music, videos and other materials and the reference transactions performed by librarians.

The number of transactions conducted in 2003 by Suffolk public libraries and the estimated market value of these transactions are shown below in Table 2. Each of these transactions has been assigned an estimated market value. They indicate that the market value of transactions involving the circulation of library materials and reference help by library staff exceeded \$449 million in 2003.

- In 2003 Suffolk County public libraries circulated more than 15,900,000 items to their users. Among the most popular circulation categories were adult fiction and non-fiction publications, children's fiction, adult and children's videos.
- Almost 2.3 million reference transactions were conducted in 2003.
- Just over 141,000 Interlibrary Loans were received.

Table 2: Estimated Value of Circulation & Reference Transactions, 2003

Item Circulation	Circulation	Proxy Dollar Value Per User	Total Proxy Dollar Value	Source of Proxy Value Estimate
Adult Fiction	2,565,636	\$27.56	\$70,708,928	Bowker Annual Library Almanac
Adult Nonfiction	2,024,074	62.84	127,192,810	Bowker Annual Library Almanac
Children's Fiction	2,901,469	24.37	70,708,800	Bowker Annual Library Almanac
Children's Nonfiction	1,094,904	24.37	26,682,810	Bowker Annual Library Almanac
Other Adult Material				
Audio Recordings, Books	556,955	75.00	41,771,625	School Library Journal
Audio Recordings, Music	684,259	17.00	11,632,403	School Library Journal
Video	3,787,292	4.00	15,149,168	Blockbuster Rental Price
Other (CD-ROM, software)	363,624	7.00	2,545,368	Blockbuster Rental Price
Other Children's Material				
Audio Recordings Books	31,826	75.00	2,386,950	Av. Price, Books on Tape
Audio Recordings Music	63,651	17.00	1,082,067	CD Purchase Price
Video	1,082,084	4.00	4,328,336	Blockbuster Rental Price
Other (CD-ROM, software)	757,219	7.00	5,300,533	Blockbuster Rental Price
Total Circulation	15,912,993			
Reference Transactions	2,269,150	29.00	65,805,350	Average Price, Google Answers
ILL Materials Received*	141,317	27.00	3,815,559	Av. Cost of Interlibrary Loan--Assn. of Research Libraries
Grand Total	18,323,460		\$449,110,707	

*Materials received from other libraries. Sources: Suffolk Cooperative Library System, LIA

The Value of Library Services: Programming Services

Suffolk County public libraries also provide extensive entertainment, educational and other programs for library users. These include cooking, yoga, literacy, computer classes, movies, concerts, art displays and story times for children. More than 800,000 library users participated in these programs in 2003. These library programs have a measurable dollar value to users. The St. Louis Public Library study estimated the dollar value of such services at \$9.00 per program per user. Correcting for inflation, this figure in 2003 was \$10.42. This guideline suggests that the programs provided in 2003 were worth some \$8.3 million dollars.

Table 3: Value of Library Programming, 2003

Type Of Service	Participants	Proxy Dollar Value Per User	Total Proxy Dollar Value	Source of Proxy Value Estimate
Adult Programs	240,456	\$10.42	\$2,505,552	St. Louis Public Library
Young Adult Programs	47,971	10.42	499,858	St. Louis Public Library
Children's Programs	488,319	10.42	5,088,284	St. Louis Public Library
Other Programs	23,600	10.42	245,912	St. Louis Public Library
Total	800,346		\$8,339,606	

Source: Suffolk Cooperative Library System; LIA

The Value of Library Services: Electronic Resources

Suffolk County public libraries provide a broad array of electronic resources to users. One of them is SuffolkNet, a source of dial-up Internet access for library cardholders. For many library patrons it is their only source of Internet access. Other electronic services include database searches, full text magazine and newspaper articles, Live Librarian chat sessions and librarian responses to e-mail questions. Utilization of these electronic resources makes it possible for library users to receive answers to their reference questions regardless of whether or not their libraries are open.

The number of transactions involving electronic services is shown below in Table 4 along with the estimated dollar value of these services to each user. The analysis shows that Suffolk public libraries provided electronic services valued at over \$59 million to more than one million users in 2003. This is the amount that users would have paid in the absence of these library services.

Table 4: Value of Library Electronic Services, 2003

Type of Service	Number of Users	Proxy Dollar Value Per User	Total Proxy Dollar Value	Source of Proxy Value Estimate
SuffolkNet Service	106,087	\$288.00	\$30,553,056	Annual Cost, AOL
Database Searches	664,436	29.00	19,268,644	Average Cost, Google Answers
Full Text Retrievals	349,719	27.00	9,442,413	Av. Cost, ILL Article (Association of Research Libraries)
Ebook "Circulations"	11,998	25.00	299,950	Median Cost, NetLibrary
Live Librarian Chat Sessions	3,122	29.00	90,538	Average Cost, Google Answers
Live Librarian E-Mail Questions	718	29.00	20,822	Average Cost, Google Answers
Total	1,136,080		\$59,675,423	

Sources: Suffolk Cooperative Library System; LIA

Cost-Benefit Analysis of Services

The foregoing analysis indicates that Suffolk County public libraries conducted approximately 20 million individual transactions in 2003 and provided services valued at more than \$517 million to their users as indicated in Table 5.

Table 5: Estimated Dollar Value of Services Provided in 2003

Type of Service	Number of Uses	Total Proxy Dollar Value
Circulation & Reference Transactions	18,323,460	\$449,110,707
Programming	800,346	8,339,606
Electronic Services	1,136,080	59,675,423
Total	20,259,886	\$517,125,736

Sources: Suffolk Cooperative Library System; LIA

Since the libraries are funded by both state and local tax dollars, it is useful to compare the dollar value of services provided during 2003 with the tax dollars used to generate those services. This comparison is called a cost-benefit analysis. It measures the value of benefits provided per tax dollar. In 2003, Suffolk County public libraries received state and local tax revenues totaling \$131,647,566. Of this amount, \$130,811,518 came from local property tax revenues and \$836,048 came from state aid.

Table 6: State and Local Tax Revenues Going to Suffolk County Public Libraries, 2003

Type of Tax Revenue	Dollar Amount
Local Property Taxes	\$130,811,518
State Aid	836,048
Total Tax Revenue	\$131,647,566

Source: Suffolk Cooperative Library System

In effect, \$131,647,566 in tax dollars generated \$517,125,735 in library services. Put another way, each tax dollar going to Suffolk County Public Libraries generated \$3.93 in library services, a ratio of almost 4-to-1. Thus, library users received almost four dollars worth of library services for every tax dollar invested in their public libraries. This finding is similar to the results of an analysis of services provided by the St. Louis Public Library. The 1998 St. Louis study found that library users received \$4.38 in direct benefits for every \$1 of tax revenues invested in the library.

PART II: Additional Economic Benefits Attributable to Suffolk County Public Libraries

Introduction

The foregoing cost-benefit analysis expresses the economic benefits of Suffolk public libraries in the terms of tax dollars invested in them. However, the libraries are also a major employer in their own right. Most library employees live within or close to their respective communities. They tend to spend their wages on Long Island. These wages are injected into the Long Island economy and undergo several rounds of re-spending so that the ultimate impact of these wages is a multiple of the original expenditure. This is the so-called ripple or multiplier effect. For example, library employees spend their wages at local retailers, who in turn buy goods and services from other Long Island businesses so that the process continues. Operating and capital expenditures made by the libraries are also injected into the economy and undergo the multiplier process. There is some leakage out of the system, as when wages are spent off Long Island. However, as a general rule, most wages generated by the libraries remain within the Long Island economy and are subject to the multiplier process.

Methodology

The use of an input-output model of the Long Island economy makes it possible to estimate the secondary economic impact of operating and capital expenditures made by Suffolk public libraries. The Long Island Association commissioned such a model from the Bureau of Economic Analysis of the U.S. Commerce Department. The model is called the Regional Input-Output Modeling System or RIMS II. It is specific to the Long Island economy and reflects inter-industry relationships on Long Island. That is, it shows the industries from which Long Island businesses purchase their inputs and the industries to which they sell their output.

The model contains multipliers for output, earnings and employment. The output multipliers show how much Long Island's total output of goods and services, its gross metropolitan product, increases in response to each dollar of spending by the Suffolk public libraries. The earnings multipliers show how much overall Long Island earnings increase in response to such spending. The employment multipliers show how many secondary jobs are created for every one million dollars of spending by the libraries.

The Secondary Economic Impact of Library Operating Expenditures.

In 2003, total operating fund spending less debt service by Suffolk public libraries was \$127,309,542. Public libraries fall under the general category of state and local government enterprises.

- The Long Island output multiplier for public libraries supported by state and local government is 1.8250. This means that each dollar of library operating expenditures supports almost \$1.83 in economic activity throughout the Long Island economy.

- The relevant earnings multiplier is 0.3414, which means that every dollar of library operating expenditures generates an additional 34 cents in Long Island earnings.
- The employment multiplier is 8.3859, which means that every million dollars in library operating expenditures supports 8.4 secondary jobs throughout the Long Island economy.

The multipliers are industry specific, which makes it possible to demonstrate the economic impact of public library spending on specific Long Island industries. As Table 7 indicates, 2003 operating expenditures of \$127,309,542 caused total Long Island output to expand by \$232,339,914 including the original expenditure. This is equivalent to a net output increase of more than \$105 million. Long Island earnings increased by almost \$43.5 million and almost 1,100 additional jobs were created throughout the Long Island economy. The greatest impact occurred in various service industries. However, virtually all Long Island industries benefited from this spending, including construction and real estate.

Table 7: Output, Earnings and Employment Gains by Industry Resulting from 2003 Operating Expenditures

Increase	Output Increase	Earnings Increase	Employment Increase
Agriculture, Forestry, Mining	\$ 1,031,207	\$ 496,507	24
Construction	24,736,244	7,523,994	186
Manufacturing	9,548,216	2,240,648	53
Transportation	4,010,251	1,158,517	34
Communications	2,113,338	407,391	5
Utilities	5,703,467	942,091	10
Wholesale Trade	5,270,615	1,464,060	28
Retail Trade	5,907,163	1,935,105	88
Finance	7,218,451	1,845,988	23
Insurance	2,431,612	712,933	12
Real Estate	10,974,083	560,162	18
Hotels & Lodging Places	1,069,400	318,274	15
Personal Services	751,126	292,812	16
Business Services	11,394,204	4,264,870	99
Restaurants & Eating Places	1,795,065	547,431	34
Health Services	5,181,498	2,113,338	52
Miscellaneous Services	133,203,974	16,575,702	366
Households	0	63,655	5
Total	\$232,339,914	\$43,463,478	1,068

Source: LIA computations based on RIMS II Input-Output Model of the Long Island Economy

The Secondary Economic Impact of Library Capital Expenditures.

Suffolk County public libraries made \$13,732,194 in capital expenditures during 2003. RIMS II multipliers for the construction industry were applied to this figure to determine the secondary economic impact of capital spending.

- The output multiplier for Long Island's *construction industry* is 1.8853. This means that each dollar of library construction spending supports almost \$1.89 in economic activity throughout the Long Island economy.
- The earnings multiplier is .5055, which means that each dollar of library *construction* spending generates an additional 51 cents in Long Island earnings.
- The employment multiplier is 13.1, which means that each million dollars in library *construction* spending supports 13 additional jobs throughout the Long Island economy.

The industry impact of 2003 library construction spending is shown below in Table 8. The findings show that 2003 capital spending of \$13.7 million caused total Long Island output to expand by almost \$26 million including the original expenditure. This is equivalent to a net output increase of almost 12.2 million. Long Island earnings increased by almost \$7 million and 180 secondary jobs were created throughout the Long Island economy. The greatest impact occurred in the construction industry itself but there were substantial benefits in virtually all Long Island industries including manufacturing, retail trade, and real estate and business services.

Table 8: Output, Earnings and Employment Gains by Industry Resulting from 2003 Capital Expenditures

Increase	Output Increase	Earnings Increase	Employment Increase
Agriculture, Forestry, Mining	\$ 118,097	\$ 52,182	3
Construction	13,903,846	3,630,792	86
Manufacturing	2,065,322	479,254	12
Transportation	400,980	127,709	4
Communications	287,003	54,929	1
Utilities	201,863	34,330	0
Wholesale Trade	964,000	267,778	5
Retail Trade	1,222,165	399,607	18
Finance	755,271	189,504	2
Insurance	464,148	135,949	2
Real Estate	1,326,530	54,929	2
Hotels & Lodging Places	168,906	49,436	2
Personal Services	113,977	45,316	3
Business Services	2,254,826	832,171	19
Restaurants & Eating Places	277,390	83,766	5
Health Services	829,425	340,558	8
Miscellaneous Services	535,556	152,427	7
Households	0	10,987	1
Total	\$25,889,305	\$6,941,624	180

Source: LIA computations based on RIMS II Input-Output Model of the Long Island Economy

Aggregate Impact of Library Spending, 2003.

By aggregating the foregoing tables, it is possible to ascertain the secondary economic impact of operating and capital spending by Suffolk County public libraries on the Long Island economy. Those results are shown below in Table 9. They indicate that total 2003 spending of \$141,041,736 caused the total Long Island output of goods and services to expand by \$258,229,219 including the original expenditure. This is equivalent to a net output increase of more than \$117 million. Long Island earnings increased by more than \$50 million and more than 1,200 additional jobs were created throughout the Long Island economy.

Table 9: Output, Earnings and Employment Gains by Industry Resulting from Total 2003 Expenditures

Increase	Output Increase	Earnings Increase	Employment Increase
Agriculture, Forestry, Mining	\$ 1,149,304	\$ 548,689	27
Construction	38,640,090	11,154,786	272
Manufacturing	11,613,538	2,719,902	65
Transportation	4,411,231	1,286,226	38
Communications	2,400,341	462,320	6
Utilities	5,905,330	976,421	10
Wholesale Trade	6,234,615	1,731,838	33
Retail Trade	7,129,328	2,334,712	106
Finance	7,973,722	2,035,492	25
Insurance	2,895,760	848,882	14
Real Estate	12,300,613	615,091	20
Hotels & Lodging Places	1,238,306	367,710	17
Personal Services	865,103	338,128	19
Business Services	13,649,030	5,097,041	118
Restaurants & Eating Places	2,072,455	631,197	39
Health Services	6,010,923	2,453,896	60
Miscellaneous Services	133,739,530	16,728,129	373
Households	0	74,642	6
Total	\$258,229,219	\$50,405,102	1,248

Source: LIA computations based on RIMS II Input-Output Model of the Long Island Economy

Conclusions

- *Suffolk County public libraries use the tax dollars they receive to good effect. For every tax dollar they receive, they provide user services valued at approximately \$3.93.*
- *Operating and capital expenditures by Suffolk County public libraries result in increased output, earnings and employment on Long Island. Since the model works downward as well as upward, Long Island's output of goods and services would shrink by more than \$258 million, its payrolls would decline by more than \$50 million and more than 1,200 jobs would be lost if the public libraries would cease to exist.*

Comparison with Other Studies

The foregoing analysis was predicated on a cost-benefit study performed by researchers studying the St. Louis Public Library in the spring of 1998. Although the current study was considerably less elaborate than the St. Louis study, the results were nevertheless similar. The following summarizes the St. Louis study as well as a similar one performed for Florida's public libraries in September 2004.

The St. Louis Public Library Study

The study conducted by Glen E. Holt, Donald Elliott and Amonia Moore for the St. Louis Public Library broke new ground in analyzing the value of public library services to the local community.³ The researchers first had to select a methodology for determining that value. The two methods they considered were a cost-benefit analysis and an economic impact analysis.

An economic-impact analysis presumes that a given public institution attracts new dollars from outside the immediate region. This is true, for example, of museums. Those visiting a museum stay at local hotels, eat at area restaurants and shop in area malls. However, libraries generally do not attract new dollars into a region. The wages they pay, the services they purchase, and the buildings they construct or renovate generally recycle local tax dollars. Although they generally do not attract tourists, libraries nevertheless perform an essential community function. Like school districts, community colleges and area universities, libraries are critically important to the long-term economic health of the regions they serve. That is, they sustain the human capital that a given region needs to compete economically.

Given these considerations, the St. Louis Public Library researchers concluded that economic impact analysis was the wrong tool to measure the vital contribution that libraries make to the community. Instead, they selected cost-benefit analysis as the appropriate methodology. Economists who evaluate the benefits of such services as education and pollution control commonly use cost-benefit analysis.

Libraries provide two types of benefits: direct benefits to users and indirect benefits to society at large. Those who read library books obtain a direct benefit. However, other good things happen in the community when people use the services that libraries provide. For example, when a library user obtains information on starting a business and subsequently hires the unemployed, the community as a whole benefits. Unfortunately, these indirect benefits are virtually impossible to measure.

The St. Louis Public Library researchers used three methods to measure the direct benefits of the St. Louis Public Library to users: consumer surplus measures, contingent valuation measures and cost-of-time measures. *Consumer surplus* measures the value that consumers place on the consumption of a good or service in excess of what they must pay to

³ Dr. Glen Holt is Executive Director of the St. Louis Public Library. Professor Donald Elliott is Chair, Economics Department, Southern Illinois University, Edwardsville. They served as principal researchers for the St. Louis Public Library study. Amonia Moore, a graduate student at Southern Illinois University, served as research associate throughout much of the project.

get it. Many alternatives to library services, such as books, are sold in the marketplace. Therefore, it is possible to assign a market value to many library services. *Contingent valuation* measures are more controversial. In deriving such measures, researchers ask respondents how much they would pay to have something they currently do not have or how much they would accept to give up something they already have. In the case of libraries, respondents were asked how much they would be willing to pay to enjoy the library privileges they currently have. *Cost-of-time* measures place a value on patrons' time in traveling to a library and in actually using library services.

Calculation of the direct benefits conferred by the St. Louis Public Library using the consumer surplus method involved an extensive user survey. Researchers first identified classes of library customers such as general users, teachers and businesses. The services used by each class of customer were then identified. The result was a service/user matrix incorporating 15 library services: children's books, adult books, videos/films, audio/music, magazines, newspapers, toys, parent-teacher materials, reference and research services, special events, craft & activity programs, social skills/etiquette training, computer skills training, encyclopedias and dictionaries and almanacs.

Implementation of the consumer surplus methodology required that researchers measure the library usage of each service and compare that usage with hypothetical purchases of similar services at market prices. The pricing of market alternatives required considerable research. Whenever possible, the research team used the published prices of comparable items or services available from other providers. Library services were priced conservatively. Some library activities, such as special events, were valued at zero because researchers could not find a suitable market alternative.

The researchers selected a sample of cardholders from the St. Louis Public Library. The sample totaled 2,850 persons. Each received a letter asking if they were willing to be interviewed in a telephone survey about library services. To entice them to participate, they were offered premiums such as tote bags or coffee mugs. Sixteen percent of general users, 83% of invited teachers and 86% of invited businesses agreed to participate. Interviewers completed 322 "general" interviews, 75 "teacher" interviews and 25 "business" interviews. This was equivalent to a response rate of 87.0% for general users, 83.3% for teacher users and 86.2% for business users. The researchers found that this response rate would yield a statistically valid result.

The researchers then summed the benefits to library patrons relative to the current level of tax support for the St. Louis Public Library, which was \$15.3 million.

- The *consumer surplus method* showed an aggregate benefit of \$67 million. This was equivalent to a benefit of \$4.38 for every \$1 spent in taxes.
- The *contingent valuation measures* produced somewhat different results. Patrons were willing to accept \$156 million to give up the library services they currently had. In effect, they said that they are receiving \$10 in library services for every dollar spent. However, when asked what they would be willing to pay for library services if they currently had no such services, the figure was only \$35 million. This implies that library services are worth \$2 for every tax dollar spent.

- The *cost-of-time measures* revealed that users put an aggregate value of \$110 million on their consumption of services from the St. Louis Public Library. This implies that they received \$7 in library services for every tax dollar spent.

Since the consumer surplus method gave the most credible results, the researchers concluded that patrons of the St. Louis Public Library received \$4.38 in benefit for every tax dollar spent. These benefits are produced not only by tax-funded operating outlays but also by past public investments in buildings and collections. In effect, the ratio of benefits to current annual tax support reflected how much the community is reaping from past and current investment and annual operating expenditures.

These results were relatively similar to those obtained in this benefit-cost study of the Suffolk County Public Libraries.

The Florida Public Libraries Study

Florida's public libraries were widely recognized as offering a wide range of services to the public in their quest for knowledge, information and enlightenment. However, relatively little was known about how Florida's public libraries contributed economically to their users, the communities they served or the state as a whole.

A comprehensive study of the economic contribution and return on taxpayer investment in Florida's public libraries was conducted over the period December 2003 through September 2004.⁴ The study used a variety of data collection and analytic methods including data reported to the state by its libraries, a statewide household telephone survey of adults, in-library user surveys of adults, a follow-up survey of the libraries, surveys of organizations, and an input-output econometric model.

The household interviews and in-library survey of visitors collected information about cost to use the library, services used, reasons for using the services, importance of the services, ways in which the services were important, what visitors would do to obtain the needed information if there were no public library, and likely cost in time and money to use the alternatives. The organization survey determined use of public library services, cost to use these services and savings resulting from the use of these services. The follow-up survey of libraries obtained some information about use by tourists and school age children, interlibrary lending and borrowing, expenditures and income and business-like operations run by the library, outside persons or vendors.

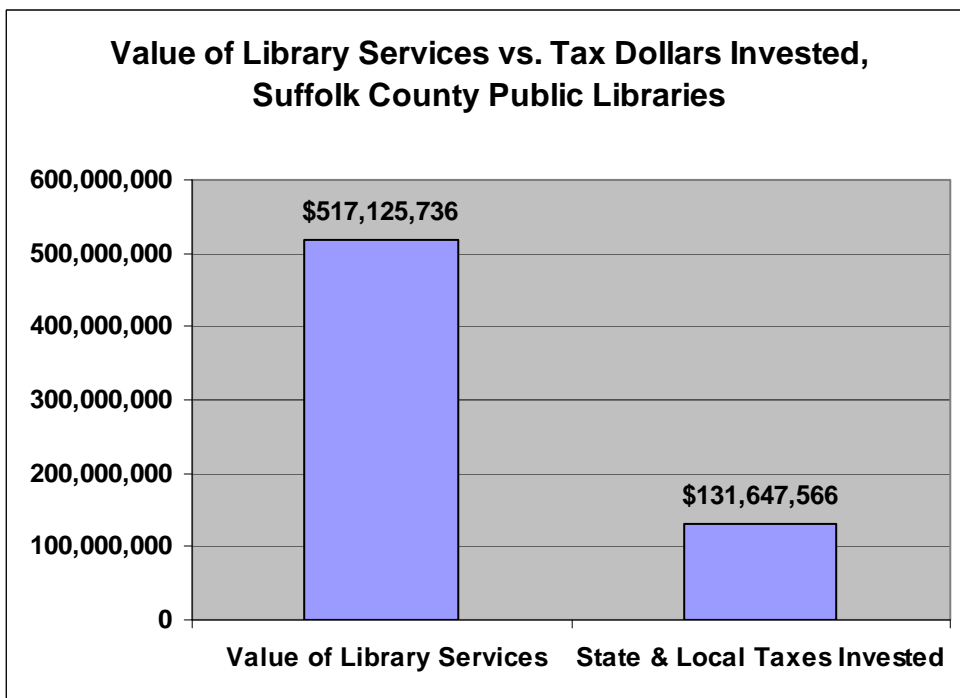
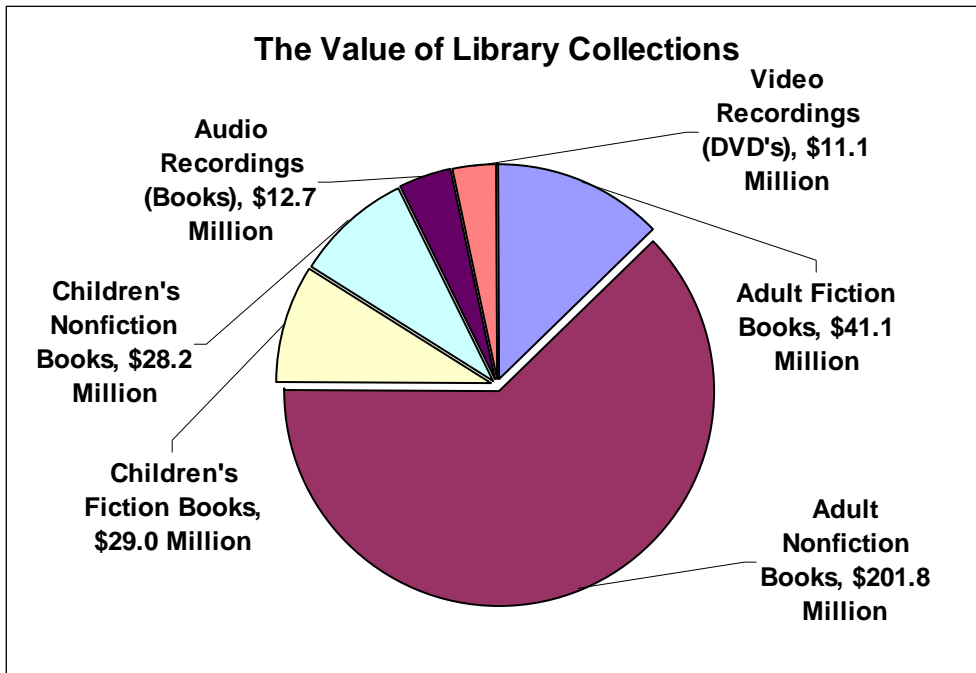
The study found that over all, Florida's public libraries return \$6.54 for every \$1.00 invested in them from all sources. This ratio was calculated as follows: the dollar value of

⁴ The principal researchers were Dr. Jose-Marie Griffiths, Dean and Professor, School of Information and Library Science, University of North Carolina at Chapel Hill, Dr. Julie Harrington, Assistant Director, Center for Economic Forecasting and Analysis, Florida State University, Donald W. King, Research Professor, School of Information Sciences, University of Pittsburgh, Dr. Tim Lynch, Director, Center for Economic Forecasting and Analysis, Florida State University and Dr. Christinger Tomer, Associate Professor, School of Information Sciences, University of Pittsburgh.

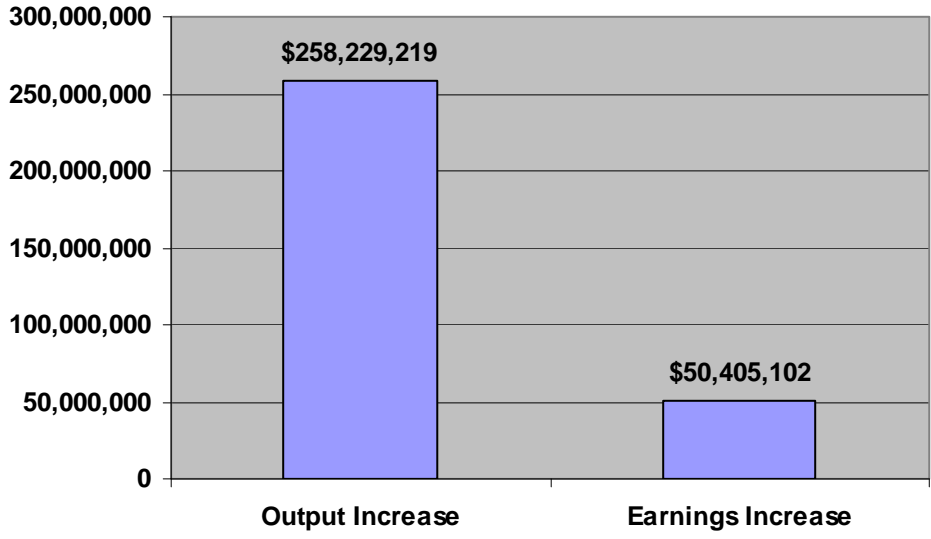
the services provided by Florida's library system was estimated to be \$2,933.66 million; the investment in Florida's library system was put at \$448.903 million.

This ratio is slightly higher than that found in the St. Louis Public Library Study and in the current analysis of costs and benefits associated with the public libraries of Suffolk County.

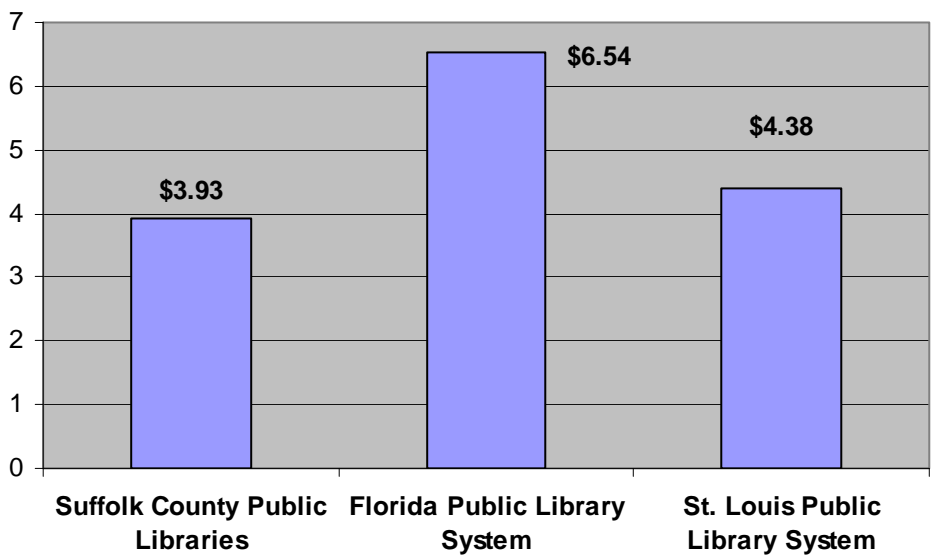
Charts



Impact of Spending by Suffolk County Public Libraries on Long Island Output & Earnings, 2003



Dollar Value of Library Benefits for Every Dollar of Taxes Invested, Selected Library Systems



About the Long Island Association

The Long Island Association, Long Island's largest business organization, is currently celebrating its 79th year. It is Long Island's chamber of commerce and the largest business-to-business networking organization in the region. Its networking events include trade shows and seminars geared to the needs of small, medium and large businesses. Its issue-oriented committees deal with housing, taxation, transportation and environmental matters. They develop agendas for change that are communicated to the New York State legislature and the governor's office. Thus, the LIA is much more than a chamber of commerce. It lobbies for social and economic changes that benefit all Long Islanders. The LIA can be reached by telephone at 631-493-3006 or by email at www.longislandassociation.org.

Dr. Pearl M. Kamer, the LIA's Chief Economist, monitors national, regional and local economic trends and publishes regular reports concerning the area's changing business environment. She also prepares special studies for local businesses, governments and non-profit organizations on a fee-for-service basis.

Dr. Kamer joined the LIA in 1995. She earned her M.B.A. and Ph.D. degrees at New York University and received her B.A. from Queens College, where she was elected to Phi Beta Kappa. Dr. Kamer has taught at various area colleges. Her fields of specialization include international business, regional economics, and public and corporate finance. She is the author of two books: *The U.S. Economy in Crisis: Adjusting to the New Realities* and *Crisis in Urban Public Finance: A Case Study of Thirty-Eight Cities*. She has also authored numerous business articles and is widely quoted in the media.

Dr. Kamer is past president of the New York Metropolitan Economic Association and the Regional Economist's Society. She currently serves on the Board of Directors of the Broadhollow Bioscience Park at Farmingdale State University and the Health and Welfare Council. She is Vice-Chair of the Route 110 Redevelopment Corporation and serves on the Technical Advisory Committee of the Long Island Index. Dr. Kamer was recently appointed as an economic advisor to the Ways and Means committee of the New York State Assembly.