PROGRAM INFORMATION SHEET - PAGE ONE

1. Applicant Information
   a. Legal Name (5a from Face Sheet): University of South Carolina Research Foundation
   b. Organizational Unit (if different from Legal Name): School of Library and Information Science
   c. Organizational Unit Address
      Street1: 1501 Greene St.                                  Street2: 
      City: Columbia                                             County: Richland
      State: South Carolina                                      Zip+4/Postal Code: 29208
   d. Web Address: http://libsci.sc.edu
   e. Type of Institution (check one):
      ☐ Academic Library                                      ☐ Library Association
      ☐ Aquarium                                               ☐ Library Consortium
      ☐ Arboretum/Botanical garden                             ☐ Museum Library
      ☐ Art Museum                                              ☐ Museum Services Organization/Association
      ☐ Children’s/Youth Museum                                ☐ Native American Tribe/Native Hawaiian Organization
      ☐ Community College                                       ☐ Natural History/Anthropology Museum
      ☐ Four-year College                                       ☐ Nature Center
      ☐ General Museum*                                         ☐ Planetarium
      ☐ Graduate School of Library and Information Science      ☐ Public Library
      ☐ Historic House/Site                                     ☐ Research Library/Archives
      ☐ Historically Black College or University                ☐ School Library, or School District applying on behalf of a School Library or Libraries
      ☐ History Museum                                          ☐ Science/Technology Museum
   *A museum with collections representing two or more disciplines equally (e.g., art and history)
   **A museum with collections limited to one narrowly defined discipline (e.g., textiles, stamps, maritime, ethnic group)

2. Grant Program or Grant Program Category
   a. 21st Century Museum Professionals
   b. Conservation Project Support
      ☐ General Conservation Survey
      ☐ Detailed Conservation Survey
      ☐ Environmental Survey
      ☐ Environmental Improvements
      ☐ Treatment
      ☐ Training
      ☐ with Education Component
   c. Laura Bush 21st Century Librarian Program
      ☐ Master’s-level Programs
      ☐ Doctoral-level Programs
      ☐ Pre-professional Programs
      ☐ Research (early career development)
      ☐ Research (other than early career development)
      ☐ Continuing Education
      ☐ Programs to Build Institutional Capacity
   d. Museum Grants for African American History and Culture
   e. Museums for America
      ☐ Engaging Communities
      ☐ Building Institutional Capacity
      ☐ Collections Stewardship
   f. National Leadership Grants
      Select Museum or Library:
      ☐ Museum
      ☐ Library
      Select Grant Category:
      ☐ Building Digital Resources
      ☐ Library and Museum Community Collaboration Grant
      ☐ Research and Demonstration:
      ☐ Research
      ☐ Demonstration
      ☐ Collaborative Planning Grant
   g. Native American Library Services
      ☐ Basic Grant only
      ☐ Basic Grant with Education/Assessment Option
      ☐ Enhancement Grant
      ☐ Native Hawaiian Library Services
   h. Native American/Native Hawaiian Museum Services
      ☐ Programming
      ☐ Professional Development
      ☐ Enhancement of Museum Services
   i. Connecting to Collections:
      Statewide Planning Grants
3. Request Information
a. IMLS funds requested: $169,592.64
b. Cost share amount: $31,153.28

4. Museum Profile (Museum Applicants only)
a. Is the institution either a unit of state or local government or a private not-for-profit organization that has tax-exempt status under the Internal Revenue Code and that is organized on a permanent basis for essentially educational or aesthetic purposes? ☐ Yes ☐ No
b. Does the institution own or use tangible objects, whether animate or inanimate? ☐ Yes ☐ No
c. Does the institution care for tangible objects, whether animate or inanimate? ☐ Yes ☐ No
d. Are these objects exhibited by the institution to the general public on a regular basis through facilities the institution owns or operates? ☐ Yes ☐ No

e. Is the institution open and exhibiting tangible objects to the general public at least 120 days a year through facilities the institution owns or operates? ☐ Yes ☐ No
   Institution’s attendance for the 12-month period prior to the application: Onsite: ________ Offsite: ________
   Year the institution was first open and exhibiting to the public: ________
   Total number of days the institution was open to the public for the 12-month period prior to application: ________

f. Does the institution employ at least one professional staff member, or the full-time equivalent, whether paid or unpaid, who is primarily engaged in the acquisition, care, or exhibition to the public of tangible objects owned or used by the institution? ☐ Yes ☐ No
   Number of full-time paid institution staff: ________ Number of full-time unpaid institution staff: ________
   Number of part-time paid institution staff: ________ Number of part-time unpaid institution staff: ________

g. Fiscal year
   Revenue/Support income Expenses/Outlays Budget deficit (if applicable)* Budget surplus (if applicable)*
   Most recently completed FY _____ _____ _____ _____
   Second most recently completed FY _____ _____ _____ _____
   *If institution has a budget deficit or surplus for either of the two most recently completed fiscal years, please explain the circumstances of this deficit or surplus in the Text Responses section of the application.

5. Public Broadcasting Licensee Information (Partnership for a Nation of Learners Grants only)
a. Nonfederal financial support (NFFS) for the most recently completed fiscal year: $___________.00
b. CPB CSG ID# ________________________________

6. Native Hawaiian Organization Eligibility (Native American/Native Hawaiian Programs only)
Is the institution an eligible not-for-profit organization that primarily serves and represents Native Hawaiians (as defined in Title 20 U.S.C. Section 7517; if yes, see Proof of Eligibility requirements)? ☐ Yes ☐ No
Abstract

Assessing the Economic Value of Public Library Services: A Review of the Literature and Meta-Analysis (META) is a two year University of South Carolina School of Library and Information Science project designed to summarize and integrate recent assessments of the economic value of public library services. While interest in this topic continues to rise, the value of the growing number of state and system based studies is limited by the absence of the resources required to aggregate and integrate their findings. As a result, little is known concerning the consistency of these estimates, their predictable magnitude, or the contextual factors that figure in their variation. The impact of the individual studies is also lessened, and it is unclear whether current research is making substantial progress toward the understandings required to further national and local advocacy efforts. META is a three-phase study designed to address this problem. Phase 1 will result in preliminary specification and annotated bibliographic description of the literature that assesses public library value from an economic perspective. During Phase 2, benefit measures will be extracted from these studies, and data that meet selection criteria will be organized, coded, and subjected to meta-analysis. During Phase 3, a comprehensive literature review will be completed, and this review and the results of the meta-analysis will be shared with the research community through presentations and publications. The results will also be integrated into a set of educational modules that will be made publicly available to practitioners and others to support and extend current public library advocacy efforts.

The specific goals of the project are:

Critically appraise the economic benefit assessments reported in recent public library studies. During Phase 1, the research team will use multiple sources to identify and retrieve studies that report assessments of the economic effectiveness of public library services. These sources will include bibliographic databases such as LISA and Eric, experienced investigators, and organizations with an interest in valuation studies. During Phase 2, the research team will review these studies for provenance and contextual factors and parse their measurements into groups corresponding to four assessment strategies: contingent valuation, cost-benefit analysis, regional impact analysis, and externality estimates. This step is needed for creation of the literature review and subsequent analysis, but it will also facilitate the identification of anomalies, relationships, gaps, and contradictions that merit future analysis.

Contribute to a more comprehensive and integrated understanding of the economic benefits associated with public library services. During Phase 2, the research team will also design and employ a meta-analysis model that explores 1) the provenance and contextual factors that lead to variations in the benefit effects developed using each assessment strategy, 2) the consistency in the benefit effects within each of these groups, 3) statistical correlations among these groups, and 4) the relative stability of values reported using each assessment strategy.

Further a more effective and cumulative research agenda and contribute to more persuasive public library advocacy platforms. The literature review and the results of the meta-analysis will be presented in research and practice oriented publications, workshops, and presentations at professional meetings. Models for integrating their results into advocacy presentations will be developed and incorporated into publicly available educational materials.
Assessing the Economic Value of Public Library Services: A Review of the Literature and Meta-Analysis

Assessment of Need

As Robert T. Behn (2003) indicates, there are many reasons to measure organizational performance. They typically begin with the basic question, “Is my organization doing what it is intended to do?” Beyond this point they can be used to guide the allocation of funds, motivate and direct employees, identify needs for improvement, and foster organizational culture. In the public sphere, perhaps even more importantly, performance measures are also a powerful tool for communicating programmatic value and accomplishments to both stakeholders and constituents.

Over the past several years, the value of this type of dialog and the measurements needed to sustain it have been recurring themes in public library discussions (Durance and Fisher, 2005; McCook, 2000, 2004; Usherwood, 1999), including those that center on making the case for the public library in economic terms (Holt, 1998; Morris, Sumson, and Hawkins, 2002; Elliott, 2005; Imholtz and Arns, 2007). Arguments made by Glen Holt and Donald Elliott have figured prominently in these discussions. Forums hosted by The Americans for Libraries Council have also pointed to the importance of this dialog, as have The Urban Libraries Council, OCLC, State Librarians, and many practitioners. In response, there are now multiple examples of studies that have used a variety of methodologies to create a picture of the contributions that public libraries make in American communities.

Much less progress has been made in systematically analyzing and consolidating the results of these efforts (Imholtz and Arns, 2007), and as a consequence, there is much to be learned concerning the 1) consistency of the benefit estimates, 2) their predictable magnitude, and 3) the contextual factors that figure in their variation. It is also, if not a waste of scholarly resources, almost impossible to build a cumulative research agenda or make significant strides toward more comprehensive assessments without this type of information (Wolf, 1996).

Impact

Assessing the Economic Value of Public Library Collections and Services: A Review of the Literature and Meta-Analysis (META) is a two year research project designed to provide insight into these questions and a more robust model of the economic value of public libraries. The results should be useful on many levels.

- Building national research capacity: The results of the project will help clarify a number of issues for researchers, including the effectiveness of different means of assessing the economic performance of public libraries, measurements that can withstand analysis and testing for homogeneity, and profitable directions for new empirical studies that build cumulative knowledge.

- Facilitating community engagement: The transferable value estimates and communication models produced by the project will allow practitioners to provide
new and relatively reliable information concerning the likely impact of library services and library volunteer efforts in their communities. As well as providing a new sense of value, this type of information makes a clear argument for both institutional ownership and citizen engagement.

- Strengthening local advocacy capacity: The project’s findings will strengthen library advocates’ ability to present a multi-faceted argument for the value of public libraries. While economic analysis rarely stands on its own as a convincing agent, its absence is noted when it is unspoken or unavailable to those who must assess compelling departmental and funding priorities.

Diversity

This project will be of particular value to small public libraries with operating budgets and service priorities that are likely to preclude local economic assessment and modeling. In the many cases where these libraries are centered in remote, rural, and diverse communities, the librarians and community members will have a stronger argument for becoming involved in public libraries and improving library services without incurring time and fiscal expenses that might typically exceed their grasp.

Project Design and Evaluation

Theoretical Perspective

Assessments of the economic value of public library collections and services are complicated by their hybrid nature. Although they are not in themselves public goods, the information they provide generally approaches this definition. In most cases, this commodity, like the light that flows from a fireworks display, is not depleted as it is consumed. Nor does its use by one person preclude its use by another, and for these reasons public libraries seem to fit within the classification of goods that should be provided by the public sector because there is no profitable private market for them. There is also an historical explanation for this location – that public libraries, like public schools, are of sufficient cultural importance to be guarded from the whims of political influence and the dangers associated with market fluctuations (Joeckel, 1935; Garceau, 1949; Foster, 1997). Over time, the advantages of this position have been sufficient to maintain this situation, but they also deprive public libraries of the advantages gained through a marketplace that can reach equilibrium and demonstrate market value.

Within this theoretical framework, four types of measurements suggest themselves for theoretically supported evaluation ad meta-analyses (Chen & Rossi, 1992). The first, contingent valuation, is widely used to value non-market goods within both the public and private sectors. These analyses provide an estimate of the demand for public goods and services, and they serve as a useful tool for aggregating perceptions concerning the benefits derived from these products and endeavors. Examples of studies using contingent valuation measurements are readily available in the fields of public health, environmental protection, national security, and public works (Champ, 2003).

The second type of measurement, cost benefit analysis, provides a well-recognized organizational framework for estimating the value of public services and the rate of return that accrues from public investments. Like contingent valuation estimates, cost
benefit measurements have been used for several decades to assign economic value to
the results of efforts ranging from medical procedures to natural habitat protection
(Fugitt & Wilcox, 1999).

The third type of measurement is obtained by using economic models that generate
assessments of the regional impact of policy initiatives. The benefits captured in these
assessments typically include income streams such as those created through public
service employment and public expenditures that flow through local economies. This
type of assessment has been used to characterize economic benefits for several
decades, and examples of its use can be found in assessments of the economic impacts
of activities in the environmental, cultural, medical, and transportation industries (Anas,
2001).

The last and most difficult measurement available to assess the value of non-market
goods focuses on community-wide economic externalities (Cornes & Sandler 1996).
These types of benefits are often associated with health care interventions, such as
in inoculations and tuberculosis treatment, which contribute to the well-being and health of
those who do not actually receive these services. In some cases the monetization of
these benefits is straightforward, but in other cases the major challenge lies in linking
these important value measurements to appropriate constructs (Usherwood, 1999). In
the case of public libraries, the community capital and sustainability models currently
being developed to capture the returns on community-wide investments appear to be
particularly promising (Morrissey, McGinn, & McDonnell 2003).

Research Questions

Over the past years, many studies of the economic impact of public libraries have been
performed both here and abroad. Almost all of these studies concentrated on two basic
questions: 1) whether there is evidence that public libraries contribute to the economic
prosperity of the communities they serve, and 2) how these benefits might be reliably
characterized. These studies show considerable diversity in the populations studied,
which range from national (The British Library, 2003; Aabo, 2005; Fitch & Warner, 1999)
to major metropolitan library systems (Berk & Associates, 2005), to small urban areas
(Kamer, 2005) and state-wide studies (Griffiths et. al., 2004; Potomac Inc. 2003; Barron
et. al, 2005). The methodologies are equally varied. The St. Louis, Florida, and
Norwegian studies make extensive use of contingent valuation techniques and indirect
economic impact measures. The South Carolina and Long Island studies use attributed
valuation of service measures and indirect economic impact measures. Some of the
studies rely extensively on interviews and focus groups while others use locally or
nationally collected statistical data.

This project differs significantly from these efforts while making extensive use of their
findings. Its wide scope will not be population or locality specific and, rather than
collecting new data, it will use meta-analysis techniques to draw conclusions developed
by integrating the results of these and other studies and probing them for patterns that
will:

1. Improve our understanding of the economic effects of public library services
2. Point out weaknesses and strengths of the methodologies used in earlier studies
3. Contribute to theory development about the economic benefits of public libraries
Data Collection and Organization

The Meta-analysis proposed for this project may be characterized as a methodological approach that allows a researcher to “integrate results from existing studies to reveal patterns of relatively invariant underlying relationships and causalities, the establishment of which will constitute general principles and cumulative knowledge” (Hunter, Schmidt, and Jackson, 1982, p.26).

- Work Plan Phase 1:

The first step in this process will be the identification and assembly of a comprehensive international collection of empirical studies that report economic benefit measures developed using the four approaches previously indicated: contingent valuation, cost-benefit analysis, economic modeling techniques, and externality assessments. As these are assembled, the research team will create bibliographic records for each study as well as meta-data that indicate the elements used to create these measurements, the type of benefit reported, the size of the benefit effect, and additional contextual variables that are likely to influence the size of the benefit effects reported. These descriptive and contextual elements will be drawn primarily from the meta-analysis eligibility criteria developed by Lipsey and Wilson (2001), but exemplary meta-analysis research studies conducted in the medical, environmental, and public policy domains will also be reviewed in order to develop a wide and theoretically supported coding scheme. The MLS student specified in the grant will take the lead with the PI in identifying eligible studies and obtaining copies for review.

These data will be entered into a master database of studies and their content will be later used to create an annotated literature review that clarifies and summarizes the contributions that these studies have made, as well as their progress toward a comprehensive research agenda. Both of these products, the database and the literature review, are intended to create a firm foundation for the META project, but when they are made available, they will also minimize the scholarly resources required for a wide range of subsequent economic assessment studies. Dr. Robert Williams, the lead author on the South Carolina economic impact study will advise and work with the PI and the MLS student specified in this grant on this phase of the project.

Once the research team has created the master database, the doctoral student will take the lead with the PI in parsing the benefit estimates into four additional data files, each of which will contain benefit effect findings produced using the four previously described assessment strategies. In contrast to the master database, these data files will have one record for each benefit effect reported and each benefit effect will be coded using the same metric. In cases where a study has used more than one assessment strategy, the study and its descriptive elements will appear in more than one data file. The coding and data entry will be performed by the doctoral student under the supervision of the PI.

Data Analysis

- Work Plan Phase 2
Phase 2 efforts will focus on the development of a rigorous meta-analysis model that explores the size and underlying relationships that characterize the selected economic value assessments. The calculations will treat the measurements in each file separately since the effect measures in the files are methodologically distinct (Lipsey and Wilson, 2001). Although the model calculations cannot be developed without reference to the data, it is expected that it will treat the benefit estimates in each file as "single variable relationships" similar to measurements that record test scores and other observations with values that are represented with a single variable (Lipsey and Wilson, 2001, p. 38).

Once the model is developed, it will be used to systematically explore the consistency of the economic value estimates, their predictable magnitude, and the contextual factors that figure in their variation. The results of these analyses will provide a clearer picture of value estimates that might be used to characterize the economic value of public libraries at a national level, identify some of the relative merits of typically used assessment strategies, and expose some of the factors that might be manipulated in order to increase the return on public library investments.

One of the statistical consultants attached to the team, Dr. Roumen Vesselinov, will take the lead with the PI on model development. Dr. Vesselinov has specific expertise in both meta-analysis and econometric modeling. He is currently based in the University of South Carolina's Department of Statistics. A second consultant, Dr. Catherine Zimmerman, will provide additional assistance. Dr Zimmerman is currently a Senior Research/Statistical Consultant with the University of North Carolina Odum Institute for Research in Social Science. Dr. Zimmerman will provide assistance with data management and statistical analysis that falls outside the area of meta-analysis.

Although meta-analysis has not been used frequently in LIS research, it has been used for some time in other disciplines, including education (Allen et al., 2004; Shelley & Schuh, 2001), medicine (Bourdies, Boffetta, and Paisani, 2000; Schell & Rathe, 1992), environmental science (Root et al., 2005), technology management (Chan & Lim, 1998; Tornatzky & Klein, 1982), public policy (Puerto, 2007; Noonan, 2003; Ware & Dupagne, 1994), and commerce. It has also been singled out as a promising approach for LIS research (Trahan, 1993; Ankenm, K., 2005; Saxton, 2006), and several studies demonstrate its potential in this area (Smith & Stokesbarger, 1994; Smith, 1996; Saxton, 1997; Ankenm, 2005 & 2006; Chen & Yu, 2000; Holzemer, et. al., 2004; Griffiths, 2004; Hwang, Saeed, & Yi, 2003; Straub & Zheng, 2005; Koutogiannakis & Wiebe, 2006).

Results and Dissemination

- Work Plan Phase 3

Phase 3 efforts will focus on two related objectives. Once completed, the proposed analyses will provide new insight concerning public libraries’ contributions to the economic prosperity of the communities they serve and the levels of economic benefit that are likely to accrue from public library services. Ongoing dissemination of these results within the academic and research communities can be expected to produce a sharper focus on these issues while encouraging cooperative dialog and peer assessments. In order to accomplish these objectives, progress reports will be made
while the project is ongoing, and the results of the study will be presented in research and practice oriented publications, workshops, and presentations at professional meetings. 

The second Part 3 objective focuses on the development of continuing education, workshop, and curricular resources that provide models for the integration of results of the literature review and meta-analysis into effective advocacy presentations. The need for these materials was recently raised in at an October 2007 Council of State Library Agencies in the Northeast (COSLINE) workshop, and development of these web-based materials falls within the ongoing relationship between the University South Carolina Center for Teaching Excellence and University South Carolina School of Library and Information Science (SLIS). SLIS has long been a leader in developing distance education products, and these teaching modules will be made nationally available on the SLIS website. Diantha Schull, President of the Americans for Libraries Council, will bring over a decade of advocacy experience and workshop development to this part of the META project.

**Bibliography**


Lydenberg, S. D. *Building the business case for libraries*. (Remarks to ALC Economic Panel meeting, November, 2005).


McCork, K. P. *Introduction to Public Librarianship*. New York: Neal Schuman


