



Measuring Economic Impacts of Historic Preservation

A report to the Advisory Council on Historic Preservation
by PlaceEconomics



Measuring Economic Impacts of Historic Preservation

A report to the Advisory Council on Historic Preservation by PlaceEconomics

November 2011
(Second ed. September 2013)

Donovan R. Rypkema and Caroline Cheong
PlaceEconomics
Washington, DC
and
Randall F. Mason, PhD
School of Design, Historic Preservation Program
University of Pennsylvania



Preserving America's Heritage

An independent federal agency, the Advisory Council on Historic Preservation (ACHP) promotes the preservation, enhancement, and sustainable use of our nation's diverse historic resources and advises the President and Congress on national historic preservation policy. It also provides a forum for influencing federal activities, programs, and policies that affect historic properties. In addition, the ACHP has a key role in carrying out the Preserve America program.

Milford Wayne Donaldson, FAIA, of Sacramento, California, is chairman of the 23-member ACHP, which is served by a professional staff in Washington, D.C. For more information about the ACHP, contact:

Advisory Council on Historic Preservation

1100 Pennsylvania Avenue, NW

Suite 803

Washington, DC 20004

Phone: 202-606-8503

Web site: www.achp.gov and www.preserveamerica.gov



*Front cover photography:
Historic downtown Rutland, Vermont*

TABLE OF CONTENTS

Acknowledgements	v
Executive Summary	vi
Background	vi
The Study	vi
Findings	vii
Recommendations	vii
Introduction	1
<i>Persons Interviewed for This Report</i>	5
Interviews	5
Findings and Issues from the Interviews	5
Detailed Summary of Interviews	7
Interviewee Comments on Data	8
Interviewee Comments on Methodology	9
Interviewee Comments on Further Study	10
Interviewee Comments on the Federal Rehabilitation Tax Incentive	10
Symposium	12
Current Data, Methodologies, and Programs	13
Missing the Qualitative Side	13
Jobs and Household Income	14
<i>Table 1: Recommended Economic Measures for Historic Preservation</i>	14
Heritage Tourism	17
<i>Tourism Measurements</i>	18
<i>Table 2: Measuring Heritage Tourism</i>	19
Property Values	21
Main Street/Downtown Revitalization	25
Historic Preservation, the Environment, and Sustainability	27
Effectiveness of State Historic Preservation Programs	29
Social Impacts of Historic Preservation	30
<i>Qualitative Measurements of Historic Preservation</i>	32
<i>Table 3: European Livable Cities Project</i>	34
Recommendations on Metrics for Future Data and Methodologies	35
Broad Categories for Which We Should Have Annual Data	35
Metric 1 – Jobs	35
Metric 2 – Property Values	37

Metric 3 – Heritage Tourism	38
Metric 4 – Environmental Measurements.....	40
Metric 5 – Downtown Revitalization/Main Street	40
Conclusions	42
Appendix A: Symposium Summary	45
Appendix B: Economic Analysis Methods—RIMS II, IMPLAN, and PEIM.....	48
Appendix C: Walk Score.....	53
Appendix D: Literature Review – Update.....	55
Appendix E: Data and Programs Included in Economic Impact Studies.....	71

ACKNOWLEDGEMENTS

The Advisory Council on Historic Preservation (ACHP) wishes to extend its appreciation and thanks to the Department of Commerce, Economic Development Administration (EDA) for providing funding for this study. The report responds in part to Presidential Executive Order 13287, “Preserve America,” which directed the Secretary of Commerce “working with the Council and other agencies” to “assist States, Indian tribes, and local communities in promoting the use of historic properties for heritage tourism and related economic development in a manner that contributes to the long-term preservation and productive use of those properties” (E.O. 13287, March 5, 2003, Sec. 5). The report also follows a specific recommendation for a methodological study that came out of the Preserve America Summit held in New Orleans, Louisiana, in October 2006 as part of the commemoration of the 40th anniversary of the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq., as amended).

In addition to other individuals named in the report, we also wish to single out the following persons who actively participated in the research, writing, review, and production of this report:

Donovan R. Rypkema, Principal, PlaceEconomics
(principal investigator and principal author)

Caroline Cheong, PlaceEconomics (co-author)

Randall F. Mason, Ph.D., Historic Preservation Program, School of Design,
University of Pennsylvania (contributor)

Bradford J. White, Chair, ACHP Preservation Initiatives Committee

John M. Fowler, Executive Director, ACHP

Ronald D. Anzalone, Director, Office of Preservation Initiatives, ACHP
(project director)

Frank Monteferrante, Intergovernmental Affairs Specialist, EDA,
U.S. Department of Commerce

Jamie Lipsey, Office of Chief Counsel, EDA, U.S. Department of Commerce

Ralston Cox, Director, Office of Administration, ACHP

Susan Glimcher, Director, Office of Communications, Education, and
Outreach, ACHP

Shayla Shrieves, Senior Writer-Editor, Office of Communications, Education,
and Outreach, ACHP

Susan Zarriello, Principal, Night Owl Design Studio

EXECUTIVE SUMMARY

BACKGROUND

This study, commissioned by the Advisory Council on Historic Preservation (ACHP), seeks to identify a finite number of indicators that can be used to regularly, consistently, meaningfully, and credibly measure the economic impact of historic preservation over time.

This interest in the economic aspects of historic preservation is a reflection of how the preservation movement has evolved. The historic preservation movement began in the United States a century and a half ago. Many of the philosophical and legal approaches to preservation in America were taken from countries in Western Europe. But over the last 150 years American historic preservation has responded to the particular American political and economic context.

Today historic preservation is a complex matrix of laws, incentives, policies, and advocacy groups at the national, state, and local level. There is active participation from the public, private, and non-profit sectors. This network of interests spans geographical, political, social, and economic perspectives.

More importantly, however, historic preservation has become a fundamental tool for strengthening American communities. It has proven to be an effective tool for a wide range of public goals including small business incubation, affordable housing, sustainable development, neighborhood stabilization, center city revitalization, job creation, promotion of the arts and culture, small town renewal, heritage tourism, economic development, and others.

It was to better understand the economic roles and impact of historic preservation that this study was commissioned.

THE STUDY

In meeting the goals for this study five specific steps were taken:

1. An extensive literature review of the preservation/economics link was undertaken to understand what has been measured, by whom, how, and what have been the general findings.
2. Interviews were conducted among knowledgeable parties in the public, private, and non-profit sectors. Interviewees were selected based on two criteria:
 - a. their knowledge, expertise, and/or experience in historic preservation
 - b. the likelihood that they would be potential users of historic preservation economic data if it were available.



Downtown Kissimmee, Florida

3. An international symposium was held to better understand the current best practices in preservation economics analysis and to receive recommendations from scholars and practitioners in the field.
4. Interim briefings and updates were provided to the Advisory Council on Historic Preservation for comments and suggestions.
5. The final report and two related documents – a brief “popular report” and a PowerPoint presentation were prepared and delivered to the ACHP.

FINDINGS

Based on the lessons learned from existing studies and publications, interviews, and a symposium convened at the University of Pennsylvania School of Design in February 2011, seven conclusions were reached:

1. Various aspects of historic preservation have substantial economic benefits as well as economic costs. While many may argue that the benefits to society, both financial and otherwise, outweigh the costs, the relationship between preservation and the economy as well as overall societal benefit remains imperfectly understood and only partially documented.
2. Research into the relationship between economics and historic preservation is critically needed.
3. There are multiple constituencies for this information, many of whom need the data and information presented in different forms.
4. Information must be consistent and credible, and its collection and dissemination ongoing.
5. While the research and methodologies require scholarly robustness, the information needs to be presented in non-academic terms.
6. While government needs to play an important role in data collection, analysis, and dissemination, it will probably be necessary for a number of private as well as public institutions to gather and evaluate the data.
7. However, there will need to be one entity that is responsible for annually releasing relevant metrics on a predictable basis.

RECOMMENDATIONS

The table on page 14 summarizes the recommendations for what should be measured including Jobs/Household Income, Property Values, Heritage Tourism, Environmental Measurements, and Downtown Revitalization. It also suggests why it should be measured, suggested methodology, and the reason the current approaches are inadequate.

This study was commissioned in order to: 1) understand what has been learned to date about the nexus of historic preservation and economics; 2) learn what

specific information would be most valuable to preservation advocates and how that information would be used; and 3) receive recommendations on specifically what should be measured and by whom.

It was also expected, however, that the report would identify the next steps that should be taken in order to reach the goal of regularly, consistently, meaningfully, and credibly measuring the economic impact of historic preservation over time.

1. Identify and reach agreement with responsible parties to undertake the ongoing research and data collection for each of the recommended indicators.

Because of the diverse nature of the proposed research as well as costs and other issues, it is recommended that there be a collaboration of several entities each committed to conducting a portion of this research. Among these research partners might be: ACHP, National Park Service, Department of Commerce, General Services Administration, Department of Defense, National Trust for Historic Preservation, the nascent Ellis Island Preservation Resource Center, and universities including Rutgers, the University of Pennsylvania, the University of Maryland, and others.

2. In conjunction with the responsible parties, create a long-term research, evaluation and reporting plan.

At the outset, the research partners will need to reach agreement as to: (1) who will conduct which research; (2) how and when will that research be provided; (3) who will aggregate the individual research projects into a single report; and (4) how and when will the results of the research be published and distributed.

3. Establish baseline(s) for each of the recommended indicators.

As it is the hope that the recommended research will be conducted and released annually, there will need to be a base established against which change is measured. As the first step in each research component, the responsible research partner should identify what that base will be and how the data that constitutes that base will be acquired.

4. Work with the identified parties to systematize data collection.

While it will be important that the reports of the research are written in such a fashion as to be understandable by a non-technical audience, the methodologies and research approaches utilized will need to be both transparent and defensible under scholarly scrutiny. Each participating research entity should, therefore, identify a data collection and analysis procedure that is academically robust and replicable from year to year.

Historic preservation will not reach its optimum potential to contribute to the American economy or American society without such research being done.

INTRODUCTION

The historic preservation movement in the United States began with a focus on protecting and restoring individual monuments of national importance. By the time the National Historic Preservation Act (NHPA) was passed in 1966, however, the range of what constituted “heritage” and the purposes that protecting that heritage advanced had widened considerably. The NHPA specifically noted that:

...the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people;

and further that:

...the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans.¹

As in most countries, the beginning of the historic preservation movement in America focused on the preservation of individual monuments. In the case of the United States the beginning of historic preservation is usually identified as the efforts in 1853 of Ann Pamela Cunningham to acquire and preserve Mount Vernon, the home of the first president, George Washington.

Just over 50 years later the federal government first became involved with the passage of the Federal Antiquities Act in 1906. The act was passed in part because of concern

Town green in Keene, New Hampshire

¹ National Historic Preservation Act of 1966 as amended, Section 1(b)

about plundering of Native American sites in the southwest United States. This law was largely confined to federal lands. It authorized the President to declare areas within federal ownership as National Monuments and prohibited the excavation, destruction or appropriation of antiquities on federal lands without a permit.

In the 1920s and 1930s two American cities – Charleston, South Carolina and New Orleans, Louisiana – each adopted what are now known as historic district commissions to protect neighborhoods of historic houses.

These events represent the ongoing evolution of historic preservation in the United States – from monument to archeology to neighborhood. That evolution continues. Today “historic preservation” means attention to cultural landscapes, the role of historic buildings in comprehensive sustainable development, downtown revitalization, heritage tourism, the contribution of historic sites, trails, and corridors to outdoor recreation, and – the focus of this report – economic development.

The structure and focus of today’s historic preservation was codified with the passage of the National Historic Preservation Act in 1966. To celebrate 40 years of progress in historic preservation throughout the country under the National Historic Preservation Act and to look forward to its milestone 50th anniversary in 2016, the ACHP convened the Preserve America Summit in New Orleans in October 2006. Keynoted by then-First Lady Laura Bush, serving as the Honorary Chair of Preserve America, the Summit brought together a wide range of individuals, organizations, and agencies that are committed to promoting historic preservation and its benefits. The Summit resulted in a number of ideas for improving the national historic preservation program and its integration with other important public priorities, including economic and community development.

One of the recommendations emerging from that Summit was to:

Measure and share preservation’s benefits by developing consistent ways to measure direct and indirect impacts (particularly economic) and by pursuing and promoting necessary research.

It was as an outgrowth of that recommendation that the ACHP commissioned the analysis of which this document is the final report. Specifically the purpose of this effort was identified as follows:

The Advisory Council on Historic Preservation (ACHP) is seeking proposals for conducting research on the most effective methods for quantifying and measuring the economic impacts of historic preservation, including both local impacts (e.g., property rehabilitation, job creation, property values, tax incentives, and investment) and regional impacts (e.g., spending from heritage tourism). The ACHP is particularly interested in the best means for measuring and expressing local and regional economic sustainability through the preservation and use of historic assets; the creation of economic base jobs and infrastructure investment; the ripple effect of historic preservation and

heritage tourism through local, statewide, and regional economies; and any indicators of potential success (including leveraging) in future historic preservation investment.

The economic development consulting firm *PlaceEconomics* in conjunction with the graduate program in Historic Preservation at the University of Pennsylvania was selected to undertake this analysis. Between November 2010 and May 2011 the following steps were undertaken to respond to the requirements of the assignment:

1. A literature review was conducted of the analyses, academic papers, impact studies, and other documents that have been completed on the topic and in related fields since the release of the comprehensive literature review completed by Dr. Randall Mason and the Brookings Institution in 2005 entitled *The Economics of Historic Preservation*. http://www.brookings.edu/reports/2005/09metropolitanpolicy_mason.aspx (See Appendix D)
2. All of those economic impact studies of historic preservation were collected, and the areas included in the research and the methodologies used were identified. All studies completed and released subsequent to 2005 were included if the primary focus of the report was on the economic impact of historic preservation. Studies that were primarily tourism studies, for example, but only addressed historic preservation in passing and/or not in a quantifiable manner were not included.
3. An international symposium on the economics of historic preservation was held at the University of Pennsylvania to help inform the analysis and offer insights into fruitful approaches.

Historic car "Cruise Night" in Lemoine, Illinois



4. A series of interviews was conducted with persons in federal agencies, state agencies, the national education/advocacy preservation community and the private sector. The purpose of the interviews was to gain an understanding of the importance of research on the economics of historic preservation and the types of data the interviewee thought might be valuable based on his or her particular experience or insight. Interviewees offered comments and critiques of existing analysis with which the interviewee was familiar and suggestions as to types of methodologies that might be useful in future preservation economic research. Discussions also elicited the ways such research might be used in the future and the desired target audience(s) for this information from each interviewee's perspective.
5. Interim presentations were made to ACHP members and staff to allow comments, suggestions, and interactions prior to the preparation of the final report.
6. Based on all of the above, the consultant team tried to answer the following questions:
 - a. What indicators of economic activity are currently being measured as resulting from historic preservation?
 - b. What are the methodologies that are being used in each area?
 - c. Are the methodologies being used robust, credible, and understandable by ultimate users of the information?
 - d. What are the economic measures that should be evaluated?
 - e. What are the recommended methodologies for those areas?
 - f. Who might be responsible for the collection and analysis of the data in each area?

Based on that construct for this report, the consultant team simplified the assignment as follows:

Identify a finite number of indicators that can be used to regularly, consistently, meaningfully, and credibly measure the economic impact of historic preservation over time.

The report that follows is meant to fulfill that assignment.

INTERVIEWS

In December 2010 and January 2011, we conducted interviews with the persons listed below in order to ascertain the existing perceptions of economic impact analysis within the broader governmental and historic preservation community. Interviewees were selected from the public, non-profit, and private sectors, and each had experience, expertise, or direct responsibilities in historic preservation and had either knowledge about or had utilized historic preservation economic analyses. Participants were asked for their opinions of extant data and methodologies and what, if any, data and methodology they thought would be useful in the future.

PERSONS INTERVIEWED FOR THIS REPORT

Caroline Alderson	General Services Administration	Paul Neidinger	Architect
Serena Bellew	Department of Defense, Strategic Environmental Research and Development Program (Deputy Federal Preservation Officer)	Constance W. Ramirez	National Park Service, Federal Preservation Institute
David Brown	National Trust for Historic Preservation (Executive Vice President)	Douglass Reed	Preservation Associates (Cost Estimator)
Francisco Carillo	Department of the Interior	Dorothy Robyn	Former Deputy Undersecretary of Defense, Installations & Environment
Sarah Cline	Department of the Interior, Office of Policy Analysis	Beth Savage	General Services Administration, Office of the Chief Architect (Federal Preservation Officer)
Jim Galvin	Department of Defense, Strategic Environmental Research and Development Program	David Shiver	Bay Area Economics
Frank Giblin	General Services Administration	Benjamin Simon	Department of the Interior, Office of Policy Analysis (Economist)
Peter Grigelis	Department of the Interior, Office of Policy Analysis	Rhonda Sincavage	National Trust for Historic Preservation, Office of Policy
Erik M. Hein	Preservation Action	Pat Sparks	Sparks Engineering
John Leith-Tetrault	National Trust for Historic Preservation, Community Investment Development Corporation	Al Tetrault	Tetrault & Associates
Jeffrey Jensen	General Services Administration	John Sprinkle	National Park Service, Federal Preservation Institute
Jennifer Martin	Center for Resource Solutions (Environmental Planner/Economist)	Richard Waldbauer	National Park Service, Federal Preservation Institute
Ruth Pierpont	Deputy State Historic Preservation Officer, New York	Amy Webb	National Trust for Historic Preservation
		Cherilyn Widell	Seraph LLC

FINDINGS AND ISSUES FROM THE INTERVIEWS

During our discussions, several themes emerged. These include but are not limited to:

- I. The importance.** There has been substantial if not universal agreement on the need for quantifiable metrics on the economic impact of historic preservation. One interviewee said the need was for information that was usable, sustainable, and annualizable. Whether or not it was possible to obtain information on an annual basis, it certainly should be available on a regular and systematic basis.



Christmas parade in Virginia Hunt Country, Middleburg, Virginia

2. **The audience.** It has become very clear that there is not just one “audience” for this information. Among the target audiences identified have been: Congress, the President, the Office of Management and Budget, colleagues within a Cabinet department, other Cabinet departments, senior political appointees, state legislators, local public officials, preservation advocates, and the general public. Certainly what each of these groups would do with the information and how it should be articulated and presented for that group would vary considerably.
3. **The methodology, clarity, and transparency.** A number of observations were received regarding methodology, some of them mutually contradictory:
 - a. The need for further, detailed explanation of a study’s methodology and approach, highlighting a need for transparency and clarity in assessments (this comment came primarily from economists or academics who felt that a study’s validity lay in understanding the methodology).
 - b. In contrast, several interviewees stated a strong preference for simply presented facts absent of detailed explanations of methodology and details, emphasizing approachability and easy comprehension.
 - c. Methodologies are not universal – while there is an acknowledged need to identify key measurables or values, local context and factors must be taken into account.
 - d. Measurements on a state, regional, town or Congressional district level would be useful.
 - e. However, there is an acknowledged need for standardized measurables across reports so that data can be more easily compared and analyzed, particularly over longer periods of time. Currently it is difficult to aggregate or even compare data from one report to another, as they are commissioned by different clients at different times using different researchers. Having a standardized model or set of measurables also contributes to the overall validity of such economic impact assessments.
 - f. Methodologies (software or other reporting/data collection and analysis mechanism) need to be accessible and usable (“simple”) for those collecting and analyzing data.
 - g. Data collection, in terms of type and objectivity of data, frequency of collection, and who collects it and where it is collected, needs to be improved. This also raises a funding issue.
 - h. The economic impact of historic preservation regulations and/or local zoning with preservation implications on property values is a necessary measurable.
 - i. Data in general needs to be more readily available and shared among states.
4. **Broader definition of economic.** There has been agreement that clearly economic data such as property values and job creation is important. However, there is widespread and growing consensus that also important are the “economics once removed”

data, particularly on the environmental side. Reliable and defensible data on factors such as landfill impact, embodied energy, reuse of infrastructure, life cycle costing, et al, are seen as critical. It was noted that in spite of a federal mandate to agencies to reduce their carbon footprint and the emphasis on sustainable buildings, the data that would include the attributes of a building already in existence are not currently included in the calculus.

DETAILED SUMMARY OF INTERVIEWS

The following are comments received from the interviewees. In writing this it was decided that a range of opinions would be represented in summarizing the key points, recognizing that there are occasionally contradictory comments. In several instances the authors of the report do not necessarily concur with the interviewee's response, but this section is intended to reflect the varied opinions of other experts in historic preservation and/or economic analysis.

KEY POINTS

- » Some respondents had heard from colleagues that, while the data collected and presented by historic preservation organizations was appreciated, it was biased because it came from the preservation field. Therefore, there is a need for data that is collected and analyzed by an independent institution, perhaps an academic one. However, others felt that this issue of impartiality is not as important because the developers and local officials with whom some officials work do not focus on the study's author.
- » Data, methodology and subsequent studies need to be accessible and understandable in cost, collection and analysis for local and state officials and preferably not require a third-party analyst. They also need to have longer relevance and applicability beyond just the initial data collection or study years. Methodologies in particular should be stand-alone and accessible for annual updates. Ideally, the historic preservation field would have an official model, endorsed by the National Trust for Historic Preservation, the National Park Service, the ACHP, and academic institutions, with funding behind it so that it can be updated annually. This model should be available and usable by anyone – metrics should be simple and applicable to states, regions, tribes, and communities of different sizes.
- » One respondent said that the majority of preservation-related studies the person had seen have been environmental impact assessments that fail to convey the net economic benefits that may accrue from preservation. This raises questions regarding the investment costs of tax credits, and the return on investment (ROI). Many studies discuss the impacts, but not the benefits.
- » States are increasingly looking at the impact of federal, state and local tax credits on their overall budgets.

- » Data is lacking – there is a need for primary research.
- » Most of the studies currently produced are tenuous. Models are too hypothetical and all different. However, there cannot be one model for the whole industry as historic places need to be considered within their context. Models need to reflect that.
- » Many felt that the federal government is not currently using existing tools to their fullest capabilities. For example, applications for receiving the federal tax credit require both the building’s square footage and the amount spent. But the National Park Service does not make the relatively simple calculation – rehabilitation cost per square foot. Since historic preservation is often accused of being excessively expensive, a report showing the range of projects costs could be a simple but exceedingly useful annual calculation.
- » In spite of labor intensity, historic preservation seems to have weak support among labor unions.
- » Data, methodologies, and studies need to show not only what is happening at the national and state level, but also, and perhaps most importantly, at the local level.

INTERVIEWEE COMMENTS ON DATA

- » Data should focus on jobs created, how private investment is leveraged, how incentives like the federal tax credit generate more benefits and revenue than they cost in lost tax revenues. (A good example comes from Michigan where a study was conducted that compared the economic impact of the Community Rehabilitation and Reinvestment Act with that of the Homeowner’s Tax Credit.) A community needs baseline data to use through the ups and downs of social and economic cycles. This data should be as geographically specific as possible, as legislators want to know what is happening in their district. However, the localized data also should be amenable to aggregation so that broader trends can be seen across states or nationally.
- » Data could perhaps connect census data and property values. In measuring property values, the quality of school districts could be used as a control to isolate the impact of historic district designation. Transactional data is more reliable than census data, so including market transactions would help but probably not be sufficient on its own.
- » Data needs to indicate who is getting the jobs that are created and filter them through demographic categories such as income and industry. It also needs to track, for example, what happens in a historic commercial building after a rehabilitation project is completed. For example, jobs data needs to help people articulate the direct, indirect, and induced impacts of these jobs, particularly to legislators, with geographic specificity. This data should also emphasize the fact that historic preservation jobs often require advanced skills and pay higher wages. Union involvement should be explored.

- » Data collection needs to be improved. This process could be built into the model. Collection needs to begin at census tract and congressional district levels.
- » Some thought that data collection should start with tax credits, and then look at buildings that are more than 50 years old. This could pull from data collected by the American Institute of Architects and Urban Land Institute in addition to the National Park Service and the State Historic Preservation Offices.
- » Data can also highlight the relationship between the National Register of Historic Places, tax credits, and poverty.
- » Data on the economic impact of heritage tourism is not readily available, in part because it is not separable from other tourism industry, public lands, or outdoor recreation data. Data that is available is collected with different baselines and methodologies.
- » Tourism professionals want data that identifies the big numbers (i.e. “heads in beds,” lodging and entertainment tax revenues) and for marketing purposes. Key questions are: How much do heritage travelers spend compared to other tourists? Do they stay longer? How many heritage travelers are there and what are their characteristics?
 - » The definition of a “heritage site” is changing to include “attractions” beyond museums or commercial properties that charge admission. Currently, these sites are not well-accounted for in heritage tourism data in a regular way.
 - » Perhaps data could be approached by looking at it in terms of the future – “what are our unmet needs? What kinds of economic activity would we have generated if we were fully funded over X years? How does this relate to broader trends such as Baby Boomer retirement and leisure travel, or climate change?”

INTERVIEWEE COMMENTS ON METHODOLOGY

- » A methodology needs to be stand-alone and accessible for annual updates. It should also have longevity so that what is tracked now can be used for comparative purposes in 25 years, just as weather records are tracked. However, state and local partners are not currently equipped to measure economic impacts in such a format. Nonetheless, the methodology needs to:
 - » account for degrees of historic preservation, from complete preservation and restoration to demolition and interpretation of vacant sites
 - » allow for dollar-for-dollar comparisons across industries
 - » be accessible and approachable so that advocates can find data easily
 - » be quick to produce so that data can be readily available and not require the contracting of a third-party to either collect or process data
 - » be simple to gather and not just an academic tool, standardized and official (which would require a steady funding source and perhaps the credibility of a university)

- » Collection and methodology needs to be standardized so that information is regular and comparable.
- » End audience is: local officials, legislators, politicians, private foundations and funders. Local governments are most important.
- » Case studies need to be developed and shared so that their lessons can be applied locally and successful strategies replicated.

INTERVIEWEE COMMENTS ON FURTHER STUDY

- » A compelling study of any particular measure needs to lay out the benefits, costs, who receives the benefits, who pays the costs and how. There needs to be a systematic technique or model that is transparent in its methodology.
- » Studies need to present data and analysis in the context of broader issues such as community vitality, quality of life and environmental sustainability. The economic data is important, but studies should be careful not to be too detailed and confusing – they need to be approachable by and understandable to the average reader.
- » For historic rehabilitation, a study needs to measure the impact of a project after it is serviced, not just at the beginning and end of the construction period. Individuals look at the benefits demonstrated in studies in the short-term, while a community takes a longer-term perspective. However, there is difficulty in generalizing from anecdotal evidence, or from general assertions about the tourism potential of a historic resource.
 - » There are currently too many caveats in existing analyses and methodologies.
- » Any study must demonstrate a positive cost-benefit: that the cost to protect and use the historic site or resource is equal to or less than the value of the protected object to society. If it is not, then protection may not be in the public interest.
- » Some respondents would like to see a study that analyzes the connection between the costs and benefits of preservation based on ultimate property values and return on investment from tax credits.

INTERVIEWEE COMMENTS ON THE FEDERAL REHABILITATION TAX INCENTIVE

- » Currently, two-thirds of approved projects for the federal tax credit are in low-income areas. This could be a new target area for a credit
 - » The current format for analyzing the impact of federal tax credits differentiates between money spent on new construction and rehabilitation of existing structures. More data is needed on the pluses and minuses of the credit – what costs are included in the listed costs? Where are the real savings from using extant buildings and how are they quantified?

- » In order to analyze the relationship between the Federal Rehabilitation Tax Incentive and low-income areas, applications should ask for census tract and congressional district. Additionally, every time a Part 3² is approved a letter could be sent to the congressional representative. This would increase the credit's visibility and benefits.
- » Some respondents would use the data to lobby for federal tax credit support, including expanding the use of tax credits to non-commercial properties.
- » Data should consider the tax base's impact on the provision of the credit, as the cost of administering the credit is scaled. It also needs to consider the size of the credit market – there is a threshold issue with the tax credits in looking at the size of the market below \$1.
- » Modeling of tax credit and investment trends at a local and regional level would be very useful.
- » Data regarding Federal Rehabilitation Tax Credits needs to dig deeper into the impacts of money spent on extant structures.

² "Part 3" refers to the form submitted to the National Park Service after completion of a historic rehabilitation project. It is on the approval of a Part 3 that a property owner is entitled to take the federal tax credit.

SYMPOSIUM

As part of the research project, a one-day symposium was convened at the University of Pennsylvania's School of Design on February 8, 2011. The goal of the symposium was to lend additional depth to the team's exploration of best practice in conceptualization and measurement of the economic values of historic preservation.

The symposium framed possibilities for applying economic methods to practical, policy, and political problems encountered in historic preservation—as opposed to regarding economic studies as ends in themselves. The goal was to bridge academic research and practical application; to match the needs of advocacy and policy workers with the capabilities of academic (particularly economic) researchers.

Keynote presentations were made by Drs. Guido Licciardi of the World Bank and Christian Ost of the ICHEC Brussels Management School, followed by commentary and responses from Erica Avrami of the World Monuments Fund, Dr. Jeff Adams of Beloit College, and Dr. David Listokin of Rutgers University. The symposium highlighted the following points, among many others:

- » Economic studies set up decisions but they do not make the decisions. The results of studies are used—or ignored—in the context of “political will,” perceptions of political gain or risk, and the political economy of government action and/or investor profit motive.
- » It is a danger to focus too narrowly on economic values. Studies of economic value should contextualize this among the other values of historic preservation (cultural, aesthetic, etc.)
- » There is a lack of serious evaluation work, using accepted econometric methodologies, in the historic preservation field.
- » Preservation consists of both private goods and public goods; this “mixed” nature yields both confusion and opportunity when it comes to choice of methods to evaluate and measure economic impacts.
- » We tend to understand “economic benefits” in a single-time snapshot, static way that is too narrow. Historic preservation yields “process” benefits as well, such as community cohesion, social capital, etc., that are not captured by looking just at property values. Our tools need to be matched to the whole spectrum of benefits we wish to measure.



Historic rehabilitation project
of the Philtower in downtown
Tulsa, Oklahoma

A more complete report on the symposium is found in Appendix A.

CURRENT DATA, METHODOLOGIES, AND PROGRAMS

Over the last 15 years a number of studies have been undertaken to measure the economic impact of historic preservation. Most of these have been done on a statewide basis. While there are variations among the studies, included in nearly all of them is an effort to measure that impact in four areas: the creation of jobs and household income from the rehabilitation process itself; the impact of heritage tourism; the impact on property values stemming from the protections of a local historic district; and economic development indicators from preservation-based downtown revitalization programs such as *Main Street*.

Less common, but included in some statewide studies are: 1) environmental impacts of historic preservation; 2) analysis of the effectiveness of state tax credit and grant programs; 3) the role of historic preservation in providing affordable housing; and 4) such environmental/social measurements such as walkability.

Despite these commonalities, there is no standard template of indicators or methodology to guide those conducting historic preservation economic impact assessments. However, the resultant diversity in approaches and methodology should not be considered detrimental to measurement efforts, as preservation economics is still an emerging discipline and this variety currently serves to further develop and enhance the field.

MISSING THE QUALITATIVE SIDE

While existing studies have provided valuable information on the quantitative side, many of the positive impacts still go unmeasured. Historic preservation yields both private and public goods. In economic terms this means that the benefits flowing from these goods include those traded in markets (by definition the private) and those provided outside of markets (by definition the public; provided by government agencies or philanthropic organizations). While some of the approaches discussed below capture private/market values well; qualitative methods are warranted as a complement to quantitative econometrics because the public goods are poorly understood in terms of price. It follows that some combination of qualitative and quantitative methods are appropriate to the two-fold task of, first, capturing the full range of economic and noneconomic values in measurements; and secondly, mitigating against the isolation of just a few values and privileging private values by overemphasizing quantitative, econometric measures.

Without casting doubt on the insights to be gained from econometric studies of historic preservation, qualitative methods have particular contributions to make to heritage economics as a complement to quantitative studies. While specific qualitative measurements are not among the five specific indicators recommended in this report,



Restoration at Monocacy National Battlefield, Maryland (photo courtesy National Park Service)

suggestions of this type of research that might be carried out independently or in the future are discussed at length in Appendix D.

Below is discussed each of the areas of research that has been included in existing studies, including a brief description of what is measured and the methodology used and the strengths and weaknesses of each approach.

JOBS AND HOUSEHOLD INCOME

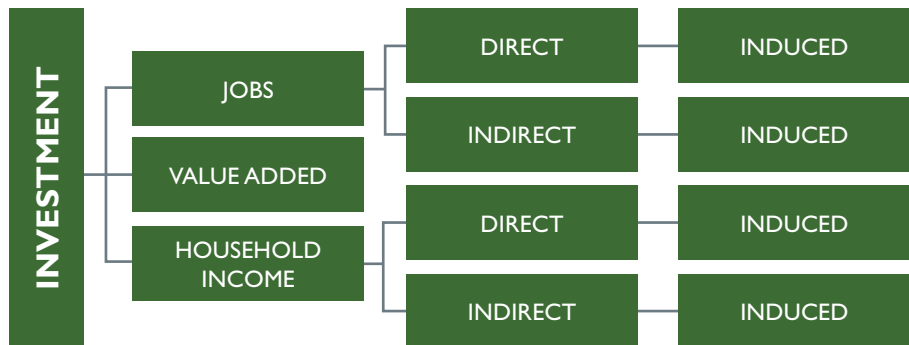
The most frequently cited indicator of the economic impact of historic preservation is the number of jobs and amount of household income created through the process of rehabilitating a historic building. This measurement is included in nearly every analysis for a number of reasons. First, data on private investment is generally readily available as owners and investors must report their expenditures to be eligible for federal and state tax credits. Second, widely recognized and accepted methodologies are available to translate investment into numbers of jobs and amount of household income. Finally, local elected officials, economic development proponents, and taxing jurisdictions are all eager to discover local economic activity that generates jobs.

Table 1: Recommended Economic Measures for Historic Preservation

MEASUREMENT	PURPOSE	METHODOLOGY	WHY NEW APPROACH IS NEEDED
Jobs/Household Income	Quantify job creation and income generated by historic rehabilitation activity or other preservation-related employment	Input-Output Multipliers (RIMS, ImPlan, etc.)	<ul style="list-style-type: none"> Only done sporadically on statewide levels Generally only includes projects that are receiving tax credits; Does not take fullest advantage of data that could be retrieved from NPS, Commerce, Labor; and GSA reports Need to distinguish permanent full-time vs. seasonal or part-time short duration employment
Property Values	Demonstrate impact on property values of being within local historic district	<p>Measurement of year- to-year value change relative to local market in general;</p> <p>Will require selection of representative communities and annual testing by national real estate data firm.</p>	<ul style="list-style-type: none"> Research is done irregularly and only on local or sample communities within a state. No national data. Measurement approaches vary widely; Recent regional and local market fluctuations skew picture and may create difficulties for baseline
Heritage Tourism	Quantify absolute economic impact of heritage tourism and incremental impact relative to other forms of tourism	<ol style="list-style-type: none"> Establish definition of "heritage tourism" Incorporate 2-3 questions that will more clearly identify heritage tourists into existing regular tourism surveys Based on surveys quantify absolute and relative contribution of heritage tourism over time. 	<ul style="list-style-type: none"> No clear definition of "heritage tourist" or focus of "heritage tourism" visits Specific research on heritage tourism impact irregular and rarely on national level. No way to track on an annual basis if heritage tourism is growing, shrinking, changing, etc., especially since visitation lumped with other travel and recreation
Environmental Measurements	Demonstrate the contribution of historic preservation to broader "sustainable development," "Smart Growth," "energy conservation," and environmentally-sensitive or "green" community planning	Develop 2-3 standard measurables that might include: 1) infrastructure costs savings from historic rehabilitation; 2) embodied energy of rehabilitated buildings; 3) greenfields not developed because of historic preservation activity	<ul style="list-style-type: none"> No standard definitions or approaches for measuring historic preservation/environment relationship No national data Weak understanding among environmentalists, preservationists, and general public of link
Downtown Revitalization	Understand the role of historic preservation and downtown, commercial district revitalization.	Expand and supplement existing aggregated data collected by the National Main Street Center. Commission regular academic analysis of comparative and non-Main Street approaches to revitalization and how historic resources are incorporated or used in the process.	<ul style="list-style-type: none"> Main Street data as currently gathered while useful, does not meet the standards of robust, defensible research. There is no ongoing measurement of preservation-based commercial revitalization not affiliated with Main Street, except in limited ways through CDBG There is no comparison of what is happening in Main Street communities and similar non-Main Street communities.

WHAT IS MEASURED?

Based on dollars of expenditure, calculations are made that reveal: number of jobs (direct, indirect, and induced), amount of household income (direct, indirect, and induced), and sometimes *value added* through the rehabilitation process. The expenditure amounts generally come from the amount reported for projects utilizing the Federal Rehabilitation Tax Credit. Where applicable the investment in projects utilizing state historic tax credits and, when they exist, state grant programs is also converted into jobs and household income. Graphically the analysis is as follows:



HOW IS IT MEASURED?

The calculation of the above, including jobs and household income, are calculated using sophisticated econometric modeling systems such as the RIMS II – the Regional Input-Output Modeling System created by the Bureau of Economic Analysis of the US Department of Commerce – or the IMPLAN system – (IMpact analysis for PLANning) economic impact modeling system. Some studies have also used Rutgers University Center for Urban Policy Research’s and the National Park Service’s *Preservation Economic Impact Model (PEIM)*.³ All of these databases are commonly used by planners, economists and other professionals in creating economic impact models and analysis within a variety of industries. The widespread acceptance and use of such econometric modeling systems standardizes their application within the historic preservation field.

STRENGTHS AND WEAKNESSES OF THE METHODOLOGY

The strengths of the methodology are:

- » It is well known and commonly accepted.
- » It is relatively easy to apply.
- » Historic rehabilitation (mostly construction) can be directly compared with other industries as to job creation and household income per million dollars of output.

Because of the labor intensity of the rehabilitation process and because construction jobs are generally well paid, particularly for those without advanced formal education, the local economic impact is not only significant but significantly greater per amount

³ See **Appendix B** for a full description of RIMS II, IMPLAN and PEIM.



Skating rink in historic downtown
Syracuse, New York

of output that most other sectors of economic activity, particularly manufacturing. Further, since the models themselves are created by those disinterested in any particular industry, there is less risk that the findings are seen as “tainted” by an advocacy position.

There are weaknesses, however. First it is only the expenditure data from tax credit projects and grants that is readily available. But those amounts are far from the total amount invested annually in historic rehabilitation. A homeowner who restores her historic house is not eligible for the federal tax credits, nor is the religious institution, fraternal organization, non-profit entity, or most colleges or hospitals. Further many property owners, who would otherwise be eligible for federal or state tax credits, simply choose not to use them or don't even know they exist. Government at all three levels invests in historic buildings but rarely are those systematically disaggregated from overall capital budgets and separately reported as historic rehabilitation investments. Conservatively the total amount of “historic rehabilitation” in any given year is likely to be three to five times the amount reported for tax credit and grant projects.

The second weakness is that “historic rehabilitation” is not a specific category of industry for which data is directly available. Therefore proxy indicators must be derived from existing categories. Most often used in ImPlan, for example, is the category *Maintenance and repair construction* for either residential or non-residential activity. Because historic rehabilitation is in most cases even more specialized and labor intensive than just typical “maintenance and repair construction” the impacts on jobs and household income is probably understated. RIMS II formerly had a maintenance and repair construction category but no longer provides separate multipliers in that area, so an indirect method must be used to calculate the greater numbers of jobs and household income than is generated by new construction.

Finally, the third weakness is a definitional one – what, exactly, constitutes “historic preservation”? Here the use of tax credit projects is useful since: a) those buildings are, by definition, “historic,” and b) there is a quality control imposed by the use of the Secretary of Interior's Standards for Rehabilitation which is a prerequisite for receiving the federal and most state tax credit awards. Additionally the work by federal government entities on historic buildings under their purview would in most cases qualify under most definitions of “historic preservation” since it is generally held that they are obligated to appropriately treat the buildings as part of their obligations under the National Historic Preservation Act. In most cases historic buildings subject to review by a local historic district commission (or its equivalent) *where there are good design standards* would count as “historic preservation.”

But there are thousands of other projects (and hundreds of millions of dollars of investment) each year for which determining “Is this historic preservation?” is much more problematic. Examples of these situations are:

- » Institutional (e.g. universities, hospitals, religious institutions) investment in historic structures where there are no specific guidelines to which the work must conform.

- » Investment in historic residential structures where there is no applicable tax credit and no preservation program oversight.
- » Rehabilitation of historic buildings by state and local governments where there is not a local equivalent of the standards the federal government sets..
- » Historic building rehabilitation of commercial structures, absent a tax credit application to the state, where there is no local preservation commission.
- » Most new construction in local historic districts that is not subject to preservation review.
- » Remodeling of historic buildings where the work is entirely on the interior and not subject to any preservation review.

In the United States there are more than 18,000 units of local government (cities, towns, villages, counties, etc.) but the National Park Service reports that only 2,700 of them have local preservation commissions that have been certified under the program. So what about the “historic preservation” in the other 15,000 or so?

The point is that if there were a consistent definition of what constitutes “historic preservation” and there were a means of estimating the amount of investment for those areas where data is not currently available, the jobs/household income calculations would more accurately reflect the totality of that sum of historic preservation’s economic impact. We believe that the number would be much larger than those reported in existing studies.

HERITAGE TOURISM

Often when “historic preservation” and “economics” are mentioned in one sentence, the default response is “Oh, you must mean heritage tourism.” What is known is that tourism is a growth industry worldwide, there seems to be consistent evidence that heritage tourism is one of the fastest growing segments of that industry, and many states report that tourism is one of their largest industries, particularly when measured by number of employees.

WHAT IS MEASURED?

Because of the size and sophistication of the tourism industry (at least on a state and national level) a number of variables are regularly measured. An extended list of these variables is found on the next page. Because *heritage tourism* is a sub-set of total tourism, most analyses of this sector do not include the full range of variables. Among those that are commonly included in heritage-specific tourism studies are the measures depicted in Table 2.



Stagecoach and historic hotel in downtown Medora, North Dakota, near Theodore Roosevelt National Park

TOURISM MEASUREMENTS

ON THE DEMAND SIDE

- » Number of visitors
- » Duration of stay
- » Origin of visitors
 - » In-state, out-of-state
 - » International/domestic
- » Purpose of visit
 - » Leisure
 - » Professional/Business
 - » Other
- » Means of transportation
- » Place of lodging
- » Destination(s)
- » Visitor characteristics
 - » Age
 - » Sex
 - » Number of travellers in party
 - » Income
 - » Race
 - » Education
 - » Employment status
 - » Household composition
 - » Propensity to travel
 - » Activities undertaken during trip
 - » Organization of trip (individually organized, group tour, travel agent assisted, etc.)

ON THE SUPPLY SIDE

- » Accommodations
 - » Hotels and motels
 - » B&Bs, Inns
 - » Hostels
 - » Campgrounds
 - » Private residence (paid)
 - » Private residence (non-paid; with family, friends)
 - » Owned dwelling (second home, time-share)
 - » Other
- » Activity venues (often merged with “Activities undertaken during trip”)
 - » Sports and recreation
 - » Observational
 - » Professional
 - » Semi-professional

- » Amateur
- » Participatory
 - » Golf
 - » Tennis
 - » Swimming
 - » Boating/sailing/surfing
 - » Skiing, skating
- » Parks
- » Beaches
- » Hiking trails
- » Climbing
- » Fishing/hunting
- » Other
- » Events
 - » Theater
 - » Concert
 - » Opera
 - » Ballet
 - » Festivals
 - » Amusement parks and theme parks
 - » Circus
 - » Sports car races
 - » Other
- » Gambling
 - » Casinos
 - » Horse, dog racing
 - » Other
- » Education and heritage
 - » Museums
 - » Educational short courses (not related to profession)
 - » Exhibitions
 - » Historic sites
 - » Zoos
 - » Nature reserves
 - » Botanical gardens
 - » Other
- » Sightseeing
- » Shopping
- » Meetings and conventions
 - » Conferences
 - » Trade shows
 - » Symposiums
 - » Exhibitions
- » Passive leisure
 - » Sunbathing

- » Relaxing
- » Eating and drinking

TOURISM SEGMENTS

This category varies greatly based on who is doing the analysis and where the tourism study is being done.

But common categories of tourism segments include:

- » Business tourism
- » Recreational tourism
- » Adventure tourism
- » Religious tourism
- » Cultural tourism
- » Heritage tourism (often included as part of cultural tourism)
- » Eco-tourism
- » Architectural tourism
- » Gaming tourism
- » Health and wellness tourism
- » Rural/agricultural tourism
- » Visiting friends and relations tourism
- » Holiday leisure tourism
- » Voluntarism tourism
- » Recreational vehicle tourism
- » Winter sports tourism

TOURISM ECONOMIC MEASUREMENTS

Depending on the purpose and the depth of the analysis, comprehensive tourism studies might measure:

- » Hotel room occupancy rates
- » Jobs and household income associated with tourism
- » Dollars spent per day
- » Dollars spent per trip
- » Allocation of expenditures
- » Taxes generated:
 - » Sales
 - » Gasoline
 - » Bed tax
 - » Income tax (indirect)
 - » Property tax (indirect)

Table 2. Measuring Heritage Tourism

DEMAND SIDE	SUPPLY SIDE	ECONOMIC MEASUREMENTS	SATISFACTION INDICATORS
Number of visitors	Activity venues*	Expenditure per day	Difference between expectation and experience
Duration of stay	Museums	Expenditure per trip	Value of visitation relative to cost
Origin of visitors	Civil War sites	Allocation of expenditures	Quality of exhibits
Means of transportation	Historic sites	Employment generation	Opportunity to learn
Place of lodging	Other	Tax generation (sales, income)	Facilities*
Destination(s)		Relative per-day and per-trip expenditures of heritage visitors as compared to all tourists	Staff**
Visitor characteristics			Inclination to return
Depth of visitor emphasis*			
Heritage visitors as percentage of all visitors			
Other sites visited			
* How strongly were heritage-related activity a driver for the choice of where to go and what to do	* Often merged with "Activities undertaken during trip"		* Cleanliness, condition, sense of safety, gift shop or purchase opportunities ** Helpfulness, friendliness, knowledge of site/history

HOW IS IT MEASURED?

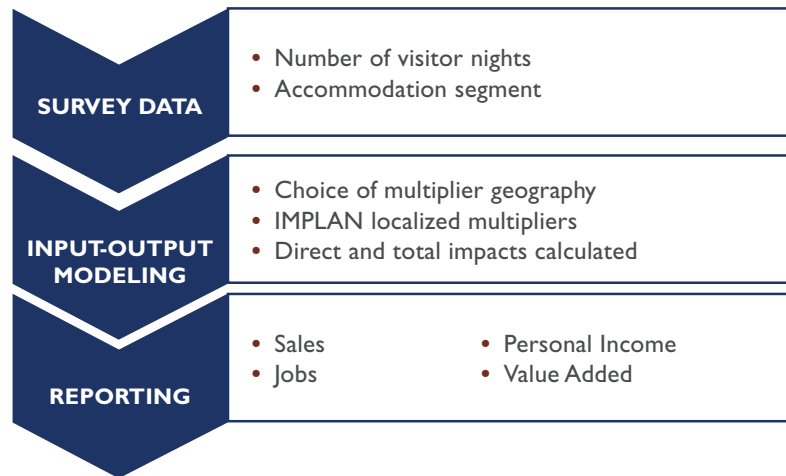
Tourism impact studies are survey based. The Tourism Industry Association (TIA) commissions massive surveys, the results of which are available for a fee to members. This data is also sortable and is frequently purchased by state tourism offices and used as the base for their own analyses and subsequent strategies. The Department of Commerce conducts in-flight surveys among international visitors arriving in the US by plane. Several states regularly conduct visitor surveys at welcome centers and at state-owned visitation sites.

For the past several years the National Park Service has evaluated the economic impact of park visitors using MGM2 – Money Generation Model. This relatively user-friendly approach requires the park to enter three basic pieces of information: number of visitor nights; visitor segments (based on nature of accommodations); and a choice of multipliers (rural, small metro area, large metro area, or region). Based on this input the MGM2 system will calculate: sales, jobs, personal income and value added, broken down in the twelve industries most affected by tourism expenditures.

Graphically the process could be represented as follows:



Crow Fair Parade on the Crow Tribe Reservation, Montana



While every study will have some customization, this process most often used is first, estimating the number of visitors and daily expenditures through surveys; and then aggregating those expenditures and applying I-O (input-output) multipliers.

Finally surveys are often included as an original research component of commissioned tourism studies. Depending on the scale of the analysis, these surveys may be conducted as one-on-one surveys at a historic site, or as telephone or mail surveys among a target group likely to be travelers. More recently online surveying has been utilized in the tourism industry but some analysis suggests that the accuracy of internet-based surveys is significantly less than telephone or mail surveys.

Again, since heritage tourists are a sub-set of all tourists, typically heritage tourism analysts will simply start with larger scale tourism data and disaggregate that portion of the whole defined as heritage tourists. In cases where attempting to define “total impact” seems problematic given the base data, some analyses have simply calculated the incrementally greater impact of heritage tourists versus tourists in general. In nearly all the comparative analyses, heritage tourists (however defined) tend to stay longer, visit more places, and spend more per day than tourists in general, thereby having a significantly greater per trip economic impact.

Lock Fest water festival at Willamette Falls, 1873 West Linn canal and locks, West Linn, Oregon





Demonstration of dugout canoe making, Etowah Mounds site, Cartersville, Georgia

STRENGTHS AND WEAKNESSES OF THE METHODOLOGY

Surveys are a perfectly adequate means of gathering base data upon which overall impacts can be calculated using I-O models or other methods, if: 1) the survey base is large enough (one national survey interviews between 22,000 and 25,000 households quarterly); and 2) if the questions are properly drawn. The problem is quantity – regular surveys of large numbers of households are an expensive undertaking.

Furthermore, some recent heritage tourism surveys have had, arguably, sufficient numbers of respondents to be reasonably accurate on first-level questions (male/female; origin of trip, etc.) but the numbers become so small as to provide questionable reliability on “drill down” percentages (i.e., responses of women who arrived by airplane).

And certainly with tourism survey data there is a definitional problem on two levels: 1) what counts as a “heritage tourist”; and 2) how much of the visitor’s expenditures should be included in the impact analysis? Further, especially when trying to calculate impacts locally, what about transportation costs? This is particularly true of visitors arriving by plane or other form of public transportation. Since a major budget item for any tourist is transportation, where are those impacts measured? At the corporate headquarters of the airline? At the point of origin of the trip? At the arrival point? Allocated between both?

In candor, there are probably few industries where greater amounts of data are presented with as much confidence as with the tourism industry. But much of that data should be viewed with significant skepticism, not because the data is consciously skewed by the analysts, but because the “what should count” question is rarely adequately addressed.

PROPERTY VALUES

Because of concerns of “property rights” and a widespread suspicion of regulation among property owners, the creation of local historic districts is not infrequently an issue of heated debate. Among the arguments used by opponents is “a local historic district will constitute another layer of regulation and more regulation, *prima facie*, will have an adverse effect on property values.” Historic property owners may also resent being regulated more than their neighbors, when they may have already agreed through their stewardship to devote extra care for a historic resource. Because of this, the relationship between local historic districts and property values has been the most studied area of preservation economics in the United States.

WHAT IS MEASURED?

Most studies of the relationship between historic designation and property value look at the value of the affected properties, the rate of value change of the properties, or the contributory value of being within a local historic district.

In the first category two approaches are common:



Historic Victorian homes in Bellingham, Washington

- » Simple value comparison. What is the difference in value between a property in a historic district with a similar property not in the district?
- » Before and after designation. What was the average value of houses in the neighborhood before historic designation and after historic designation?

In the second category common types of analysis are:

- » Appreciation compared to the local market. At what rate did properties in the historic district appreciate (or decline) in value over time and how does that value change compare with properties in the local market that are not in a historic district?
- » Appreciation compared to similar neighborhood. At what rate did properties in the historic district appreciate (or decline) in value over time and how does that value change compare with properties in a similar neighborhood that is not a historic district?

The third category of analyses is the most sophisticated and attempts mathematically to identify the monetary contribution of each of the significant variables that affect the price of a property (size, number of bedrooms, garage, pool, etc.). Once all the other variables are accounted for the difference, if any, of being within a local historic district can be isolated.

HOW IS IT MEASURED?

Property values (and value changes) are measured in two alternative ways: actual transactions in the marketplace, or a proxy for those transactions. Since in most places in the United States, property taxes are levied on an ad valorem basis, the assessed value for taxation purposes can usually be effectively used as a proxy for sales prices. The advantages of using assessed valuation are:

- » The numbers of properties are large, obviating the small sample problem that is encountered when using actual transactions.
- » The assessed data is generally in the public record so can be easily accessed (which is not always the case with Multiple Listing Services of local Boards of Realtors®).
- » Many jurisdictions have all of their property records computerized so sorting and evaluating becomes easier.
- » Most of the variables between properties (size of lot, zoning, size of house, number of bathrooms, etc.) are usually included in the property records.
- » Assessed value databases facilitate the use of GIS representation of findings.

Since there is a great variety among residential properties, however, it is always necessary to convert the data and make the representations using a *unit of comparison*, typically dollars per square foot of livable area.

When there are enough transactions over an extended time period, some studies have used resales of the same property. If a property sold more than once during the study



period, what was the value change and how does that value change compare to the appreciation rates for non-designated property?

The most sophisticated analysis that has been used in heritage property value studies is known as *hedonic pricing*. This method tries to identify the individual components of a property and each component's contribution to the overall property value. One study of historic neighborhoods in the US used a limited number of rather straightforward variables:

- » Number of bedrooms
- » Number of bathrooms
- » Square feet of living area
- » Square feet of lot
- » Number of garage spaces
- » Availability of swimming pool
- » Age of property

Then having calculated the relative contribution of each of those elements a final distinction was made – historic designation. The assumption was that when the contributory value of all of the other variables was accounted for, any remaining difference in price was attributable to that designation.

Other studies have had a more comprehensive list of variables which have included such things as distance to the center city, proximity to water, architectural style, condition of the building, character of the neighborhood, population density, existence of a garden, and others. The selection of which variables to use is dependent on a knowledge of which variables are significant to buyers and sellers in the marketplace.

STRENGTHS AND WEAKNESSES OF THE METHODOLOGY

The strength of this methodology is that the base source of data is indifferent to historic preservation so it is relatively free from charges of advocacy bias. When assessment data is complete, computerized, and sortable, the issue of the relationship between property values and location within a historic district can be evaluated in depth and in a variety of ways. Because virtually every property in a local jurisdiction will have parallel value and other information, the quantity of data far outweighs any minor error that a individual property value estimate might include. Further, it is not necessary that each value estimate is “right” as to the probable sales price tomorrow, as long as there is a consistent ratio between the market value and the assessed value for tax purposes.

This approach is not without challenges, however, including:

- » There is a wide variation in experience and competence among local assessors around the country. While most are highly professional and reliable with their value estimates, some simply are not.

- » Assessed values tend to trail movements in the marketplace (in both directions) so “current estimates” may, in fact, be a number of years behind.
- » Some jurisdictions have a rolling reassessment, so that even properties within the jurisdiction are not adjusted at the same time. Comparisons between properties may, therefore, lead to erroneous conclusions.
- » There are reasons why a property’s assessed valuation increases may not be attributable to a general upward movement in the market. Adding a garage, for example, would likely add to the assessed value. If the only thing that is considered is the assessed value between two points in time, this capital improvement could be misinterpreted as appreciation. (Even so, because the numbers of properties involved will generally be large, it is a reasonable assumption that properties both within and outside of a local historic district will have had capital improvements, so on a comparative basis the errors probably offset each other).

When actual transactions are used, rather than assessed values, a greater understanding of the peculiarities of any given property is possible. However, because the number of sales will be limited, even in an active market, the chance that an “outlier” transaction statistically affects the conclusions is greater.

MAIN STREET/DOWNTOWN REVITALIZATION

National Main Street is a program of the National Trust for Historic Preservation. In simplest terms it is downtown revitalization within the context of local business activity in historic buildings. In the past thirty years more than 2,500 communities (and a hundred or so urban neighborhoods) have had Main Street programs. It has been called the most cost-effective economic development program in America. Local Main Street programs generally receive technical assistance, but rarely money, from the state agency that coordinates the program (most but not all states have a state coordinator) and from the National Main Street Center of the National Trust. From a measurements perspective, almost from the beginning the National Main Street Center has required that local programs keep track of a handful of indicators to measure their success.

WHAT IS MEASURED?

All state coordinating programs are asked to provide five pieces of information annually for aggregation at the national level. The states gather and transmit information from each of their active local Main Street communities. The basic data collected or calculated by all state programs include net new jobs (new jobs less loss of jobs); net new businesses (businesses opening less businesses closing); amount of public and private investment in physical improvements; and number of building rehabilitations. Some state programs collect volunteer hours; attendance at downtown festivals; buildings sold; business expansions; façade improvements; and number of housing units created.



Northern Hotel rehabilitation in downtown Fort Collins, Colorado, historic district

Finally, the total investment is divided by the average local community financial support for the Main Street program to calculate a “leverage” figure of investment to program costs.

HOW IS IT MEASURED?

All of the data is gathered by the local Main Street manager and forwarded to the state coordinating program. The data from each participating town is then aggregated and sent to the National Main Street Center. The local manager is responsible for identifying how to acquire and verify each piece of information.

STRENGTHS AND WEAKNESSES OF THE METHODOLOGY

The consistent gathering, aggregating, and reporting of this finite number of indicators for nearly thirty years is certainly a strength. And for the most part the information that is being gathered is appropriate to the program.

Unfortunately the weaknesses of this approach are numerous:

- » There is no comparative analysis. There is no data to demonstrate that these communities are doing better, worse, or the same as other similar towns without Main Street programs.
- » The process of gathering the basic data is done by a local manager who has every motivation to report numbers as positively as possible. While there is no evidence of conscious inflation of the “good news” by local managers, the “advocate as data source” would not qualify as a robust research methodology.

This is not to say the numbers are not useful, or that they should not continue to be gathered. However, a comparative approach and a more neutral source of the data would strengthen the credibility of the Main Street numbers.





Renovated county courthouse in downtown Georgetown, Texas

HISTORIC PRESERVATION, THE ENVIRONMENT, AND SUSTAINABILITY

The most recent area of significant research is the relationship between preservation and the environment, particularly the contribution of historic preservation to sustainable development and *Smart Growth*. Although these measures emerge from environmental metrics, they often have a considerable economic consequence, particularly in the area of public infrastructure expenditures. While other measurements of the economic impact of historic preservation are usually expressed as dollars gained (property values, household income, etc.) the environmental measurements are often dollars saved.

Historic buildings are often regarded as energy inefficient in measurement systems that focus solely on annual energy usage. This approach ignores two important factors: 1) the annual energy use in an appropriately rehabilitated historic building is not measurable greater than for a new building; and 2) Fifteen to thirty times as much energy is used in the construction of a building than its annual operation. For an existing building the energy expended in construction has already been “embodied” in the structure.⁴ When the energy consumption analysis is approached from a life cycle perspective wherein both the energy needed to construct the building as well as annual energy usage is included, the energy inefficiency claim against historic buildings largely disappears. This is an area, however, where more research and more widely dispersed research is necessary.

WHAT IS MEASURED?

In studies conducted to date that included some environmental component, the measurements have been:

- » Reduced land fill from buildings being reused rather than razed.
- » Savings in infrastructure from buildings being reused rather than razed.
- » The embodied⁴ energy in an existing building that would be lost if the structure were demolished.
- » Reduced vehicle miles traveled (VMT) and CO² emissions because existing buildings are reused rather than replaced with new ones.
- » Amount of “greenfield” acreage left undeveloped if existing building are reused as the alternative.

HOW IS IT MEASURED?

Most of the measurements are of the “what if” variety in a cost-benefit sense. That is to say, what would be the environmental consequences of building a new structure of the same utility and razing an existing historic structure? First either an actual rehabilitated building or a hypothesized building (assuming a given size, materials, type of construction, and use) is chosen as an example. Then calculations are made on a variety of environmental metrics.

⁴ *Embodied energy* is the sum of the energy consumed by extracting raw materials, processing those materials into a finished product, transporting them to the building site, and installing the building components into a structure.

In some cases (specifically the Maryland/Abell Foundation report; See Appendix D) calculations were made on a composite basis using all of the projects that received state tax credits as the alternative to demolition and new construction.

The data sources for making these calculations include factors generated by the Environmental Protection Agency, the Urban Land Institute, the Construction Materials Recycling Association, and others.

STRENGTHS AND WEAKNESSES OF THE METHODOLOGY

The methodology is valuable for several reasons:

1. It makes the historic preservation case in terms environmental advocates understand.
2. It shows a demonstrable connection between where development is encouraged (or accepted) and the public costs of accommodating that development, and is therefore a measure of community support.
3. As in other approaches, the bases upon which the calculations are made come from non-preservation sources so the “research by advocacy” criticism is lessened.
4. The field of environmental economics is growing in sophistication so there will likely be more cross-over measurements in the future.

To the extent that there is a weakness, it is in the hypothesized nature of the approach. “If this building had been torn down rather than reused, then...” On measurements such as vehicle miles travelled and cost of infrastructure, the same score would be achieved by tearing down the existing historic structure and building on the same site.

Rehabilitated passenger train station and Greenway trail in Muncie, Indiana



EFFECTIVENESS OF STATE HISTORIC PRESERVATION PROGRAMS

Under fiscal and political pressures many state governments are requiring all departments to defend their various programs on some type of cost/benefit or effectiveness measurements. Historic preservation programs are subject to these same requirements. Some states, therefore, have commissioned analyses of how well their programs are working and this is often measured in economic terms.

WHAT IS MEASURED?

The particular analysis is dictated by the programs available through the State Historic Preservation Office. Because every state reviews projects applying for the Federal Rehabilitation Tax Credit, that program is always included. Where there is a state tax credit, the activities utilizing that program are usually also included. Beyond those two types of programs, however, there is a great variety from state to state on what else is studied. Grant programs, when they exist, are sometimes reviewed. Other programs, such as the share of Transportation Enhancement funds that are directed toward preservation related projects, are also the focus of some studies.

HOW IS IT MEASURED?

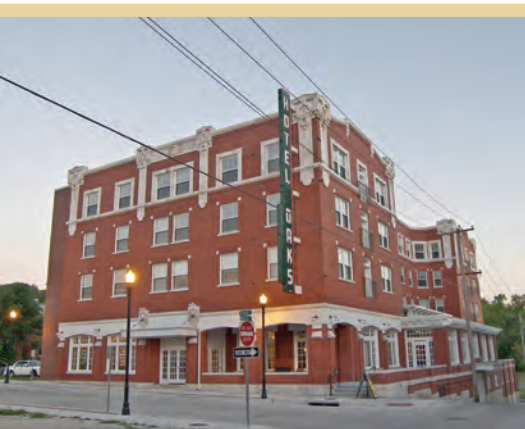
Regarding tax credit projects – either federal or state – the approach is as described in the *Jobs and Household Income* section above. Additionally, however, in the context of *Effectiveness of State Programs* commonly there is a discussion of the amount of leveraged funds that the existence of the tax credit program generates. For the federal tax credit the minimum leverage ratio is four to one (since the federal tax credit is 20%) but the actual leverage is generally higher as a result of two factors: 1) acquisition costs are not eligible for federal tax credits, so the dollars represented in the purchase price constitute additional investment (and therefore leverage) by the private sector; and 2) not all of the expenditures are eligible for tax credits (site improvements, landscaping, etc.). As a result, when comprehensive numbers are available, the actual leverage is often found to be five to one or greater.

For grant programs as well, leverage is often discussed, but because many grants require only a 50% match, and sometimes less, the public-to-private investment ratios will be less dramatic than for tax credit programs.

Additionally, grants and other state programs are frequently described through their geographic distribution throughout a state. This is assumed to convey the message to the public that there are historic resources everywhere and to legislators that their district, too, is benefiting from state historic preservation resources.

STRENGTHS AND WEAKNESSES OF THE METHODOLOGY

To the extent that adequate data is available for the state tax credit projects, the job/household income calculations are generally reliable. What is not considered in most analyses is what percentage of those projects would have been completed were the tax



Excelsior Springs, Missouri, hotel transformed into senior housing

credit(s) not available. While some surveys of tax credit users (See particularly *Prosperity through Preservation: Virginia's Historic Rehabilitation Tax Credit Program*) (See Appendix G) indicate that there is a very high percentage of projects that would not have gone forward without the credits, there is not typically an adjustment for projects in this regard.

Public budget analysts make a distinction between direct expenditures (i.e. funds spent by a unit of government) and “tax expenditures,” the latter being a reduction of taxes payable generally through an incentive in the tax code. From a budgeting perspective it is argued that a reduction of tax receipts has the same net effect as the expenditure of collected funds. State tax credits are a “tax expenditure” and grants a direct expenditure of taxpayers’ dollars. But in either case something else, theoretically, could have been spent on something else, e.g. instead of paying for ten more teachers the state could have hired ten more highway patrolmen. In the studies to date there has not been any comparative analysis of the impacts on a state’s economy had those resources been spent in a manner other than for historic preservation.

As to grant programs, while there is typically a reporting requirement from an audit standpoint (i.e., evidence that the monies were actually spent on the project for which they were rewarded) there often is not a requirement to report on the results of the project. In evaluation terms, what is being measured is “outputs” rather than “outcomes.”

SOCIAL IMPACTS OF HISTORIC PRESERVATION

WHAT IS MEASURED?

As was noted earlier, very little research has been done in the United States on the social impacts of historic preservation. The exception is that many reports identify the number of low- and moderate-income housing units that were created using (usually in conjunction with other incentives) the Federal Rehabilitation Tax Credit.

Elsewhere in the world, however, particularly in Great Britain and a few countries in Western Europe, there has been some primary research on the relationship between heritage conservation (and/or heritage conservation-based programs) and social impacts. Probably the most comprehensive has been the analysis of both the economic and social impacts of the use of lottery funds for heritage conservation in England.⁵

HOW IS IT MEASURED?

In the study of the impacts of English lottery funds, citizen surveys and focus groups were conducted to supplement the “hard data” on money invested, leverage of public funds, numbers of buildings rehabilitated, and new businesses started.

The European Union funded a network of five European cities that used heritage conservation as the bases of center-city revitalization programs. Their measurements

⁵ See especially Kate Clark and Gareth Maer, “The Cultural Value of Heritage: Evidence from the Heritage Lottery Fund,” *Cultural Trends* 17.1 (2008).

were on both the “hard” and “soft” side and included the categories of Immediate Economic, Strategic Economics, Social and Environmental. These indicators and what was measured and how are listed on page 34.

Individual preferences as expressed by market prices and transactions are important but there are also public-good aspects of historic preservation that are, by definition, beyond individual preferences. These are not well captured in markets and have to be measured via other methodologies. These other methodologies range from the purely qualitative (narrative accounts of decisions or conflicts over preservation issues) to the very quantitative (statistical analysis of demographic data from the Census).

STRENGTHS AND WEAKNESSES OF THE METHODOLOGY

Since there is nearly no US-based research on the social impacts of historic preservation, the biggest weakness of the methodology is that it does not exist (or at least does not exist in application form. There is obviously social impact analysis with focuses other than historic preservation that could readily be adapted.)

The strength of the European Livable Cities evaluative approach is that it is comprehensive and captures change over time. The weakness is not in the methodologies but in the fact that they are both extraordinarily time consuming and expensive. It might be possible, however, for preservation to partner with other entities with an urban focus to jointly conduct this type of research.

Biking on recreation trail over historic Whipple Truss bridge in Licking County, Ohio



Qualitative Measurements of Historic Preservation

LONGITUDINAL PUBLIC OPINION RE: HISTORIC PRESERVATION

Two particular applications of qualitative methods would be useful complements to market-based quantitative analyses: 1) understanding of social and psychological contexts of decision-making within political structures and organizations; and 2) understanding public preferences and opinions directly related to cultural, spiritual, aesthetic, and political meanings of heritage, which are only indirectly and imperfectly represented by market measures

It would be useful to undertake studies of the political and decision-making processes in which economic considerations of preservation are embedded. Such investigations would be related not just to how preservation decisions are made about significance, integrity, and the like but also to resource allocation questions, both within the preservation field and putting the field in context of other alternative kinds of investments or policies.

What should be measured

Public opinion surveys and other narrative forms would be effective for understanding the aggregation of individual preferences, to build a “public” snapshot as well as the reasoning behind preferences. Additionally, following quantitative findings with ethnographic methods would provide insights on how the trade-offs are perceived both by individual consumers/owners and also by the decision-makers who possess greater power to create and decide public policies, make regulatory decisions, etc.

How it should be measured

To understand the nuances of public perception of historic preservation, three discrete approaches are recommended:

1. Decision-maker surveys: Since the principal audience for economic research on historic preservation is decision-makers (politicians, public agency heads, bankers, etc.), small-sample surveys or interviews of typical decision-makers would yield direct insight into the types of information, arguments, and expectations these important stakeholders regard as most relevant. Delphi studies⁶ or focus groups could be conducted regularly at relevant professional meetings or other regular gatherings (legislative meetings, annual conventions of city managers, U.S. Conference of Mayors,

6 Delphi studies are a type of survey methodology with two important distinctions from general surveys: 1) the persons questioned are experts in the area being studied (as opposed to a random sample of the general population), and 2) the process is usually iterative with surveys being refined and retaken after initial results are received.

American Planning Association, CEOs for Cities, Mayors Institute for City Design, etc.)

2. Community indicators: A number of American cities have, in the past ten years, established community indicator projects to measure the provision or perception of a variety of outcomes usually unmeasured because there is no easily available data, the data is inaccessible, or the community scale is not the level of aggregation. Many of the indicator projects are motivated by better understanding sustainability and how to achieve it at the community scale. Historic preservation indicators could be added to these creative, longitudinal efforts. One particularly effective and prominent indicator system is used in Baltimore, where there is also a robust historic preservation community. Baltimore’s effort could be used as a test case, later to be promoted nationally.
3. Annual survey of bellwether preservation sites: A range of places should be studied, including publicly and privately operated sites; historic districts; interpreted historic sites and museums. A small number of sites could be measured to broadly encompass market and nonmarket (educational, aesthetic) values. One basis for the educational methods is Parks Canada’s process for gauging the commemorative integrity of its historic sites, which includes interviewing some visitors about the effectiveness of site interpretation, and interpreting the interviews within a clear framework relating outputs to outcomes.

Where the information could be found

A great deal of valuable insight would be gained by creating qualitative, longitudinal data sets tracking public preferences and perceptions of historic preservation. Survey questions specific to historic preservation values could be included in existing, long-standing public surveys such as the Chicago social survey, Michigan consumer preference survey, one of the regular surveys conducted by the Pew Charitable Trust, or others. Building on the example of the *Presence of the Past*⁷ survey, these could be designed to focus on educational questions as well—not just consumer preferences but what people are actually seeking and learning in their experiences with historic places.

SOCIAL IMPACTS OF PRESERVATION

Metrics concerning the social impacts of historic preservation are meant to test and support the assumption that greater levels of historic preservation activity in a place are associated with improved quality of life (vis-à-vis similar places, or the population at large) or higher levels of social well-being. In other words, are well-preserved

7 *Presence of the Past: Popular Uses of History in American Life*, Roy Rosenzweig and David Thelen, Columbia University Press, 1998

places also places that are reflective of higher education levels, more stable, and safer, with populations that are more diverse?

A second area of research into the social impacts of preservation concerns urbanistic impacts – correlating places where higher levels of preservation is implemented with other measures of environmental quality or design.

What should be measured

The specific kinds of social benefits that could be explored include:

- » Levels of education (% of residents with college education, or standardized school test scores, for instance)
- » Ethnic, class, racial, and age diversity;
- » Length of housing tenure (a gauge of community stability)

- » Incidence of crime
- » Other categories of data about social phenomena that are hypothesized to have some connection to historic preservation

On the urban quality side, the use of the *Walk Score*⁸ metric, for example, enables the precise mapping of an index about the pedestrian-friendly quality of a property’s surrounding context. And there is a growing body of research on measuring the “grain” of urban fabric (related to building scale, street design, intensity of street activity, etc.). To the extent these methodologies prove successfully it would present another way to associate preservation activities with particular empirical qualities of the built environment more generally.

How it should be measured

Because most of this social data is collected as part of the decennial Federal Census, longitudinal analysis, tracking change in these relationships through time is enabled. It is much more useful to be able to understand processes of change through longitudinal studies than to glimpse only an isolated snapshot in time.

Straightforward statistical regression can be carried out to determine correlations between historic preservation activity (designation, tax credit investments, etc.) and one (or multiple) other factors.

It should be cautioned that these analyses would yield insight about the *correlation* of preservation and social factors, without necessarily determining *causal* relationships. In other words, the studies would not *prove* that better preserving a neighborhood will lead to great diversity, etc., only that it is *associated* with greater diversity.

Notwithstanding the limitations of regression analysis, it would be illuminating to document objectively the association between places that pursue historic preservation also being places where citizens enjoy greater levels of social well-being. And, if one is able to study change over time, a clear understanding of the direction of change (positive or negative), if not its precise magnitude, would be a significant finding in itself. This would be useful, among other reasons, as a contribution to debates about preservation and gentrification.



Shops in downtown Bardstown, Kentucky, historic district

⁸ See Appendix C

Table 3. European Livable Cities Project

INDICATOR	MEASURE	TECHNIQUE
IMMEDIATE ECONOMIC		
Pedestrian activity	People flows	Manual counts, cameras, surveys of special events
More Expenditure	Expenditures (retail, leisure, hotel, on street event)	Interviews, surveys (on street, self-completion, operators)
More uses on street	Number of: cafes, street traders, stalls, events	Before & after survey
More repair/regeneration of sites	Level of activity	Exterior condition surveys, planning applications, repair frequencies, occupier surveys
Increased local distinctiveness	Number of independent shops Number of distinctive events User attitude Image change	Audit of shops Audit of events User surveys Survey of distinctive elements
STRATEGIC ECONOMIC		
Improvement in town's performance	Performance of shops Tourism performance Quality of life	National retail rankings National tourism rankings Various surveys
New strategic roles for public space	Role changes	Before & after surveys
Integration of latent economic assets	More effective use	Audit of new economic activity Before & after surveys of vacant sites
Creation of new economic quarters	Diversity	Audit of changes in cultural/social/econ offerings
Improvement in quality of life	Overall quality	User surveys Indicator surveys
Creation of new image Image changes	Image changes	Surveys (user, business, opinion maker, media)
SOCIAL		
Reduction in road deaths, injuries	Accidents	Before & after surveys
Wider health and well-being benefits	Health	User surveys General health records
Reduction in actual threat	Crime, anti-social behavior	Before & after surveys
Reduction in perceived threat	Fear	User surveys
Reduction in social exclusion Engagements	Before & after surveys	Observation (cameras) User surveys
More efficient walking trips	Routing	User surveys, camera surveys, GPS monitoring
Greater community ownership	Sense of civic pride	User perception surveys, plotting of new community initiatives
ENVIRONMENTAL		
Reduction in noise pollution	Audible quality	Noise surveys Ambient sound surveys
Reduction in air pollution	Air quality	Air quality surveys
Reduction in vehicle use	Vehicle presence	Flow surveys Parking surveys
Reduction in visual intrusion	Visual quality	Environmental audit User surveys
Reduction in vehicle infrastructure	Infrastructure presence	Infrastructure audit
More sustainable use of urban space	Space use	Before & after surveys Camera surveys

RECOMMENDATIONS ON METRICS FOR FUTURE DATA AND METHODOLOGIES

BROAD CATEGORIES FOR WHICH WE SHOULD HAVE ANNUAL DATA



Mud plastering workshop at Ohkay Owingeh Pueblo, New Mexico (photo by Tania Hammidi)

The intent of this project was to identify a finite number of metrics demonstrating the link between historic preservation and economics. The data for these measurements would be gathered annually and, it is assumed, publicized and promoted. It was not within the scope of the project to provide detailed descriptions of particular methodologies to be used. Rather it was to provide recommendations on what data should be collected, and to provide a general idea of how that data would be gathered and what would be measured.

Based on the activities described earlier in this report, it is recommended that there be the collection, evaluation, and dissemination of five categories of data: jobs, property values, heritage tourism, environmental measurements, and downtown revitalization/*Main Street*. Most of the categories have been part of one or more statewide preservation impact studies and are discussed in detail in the *Current Data, Methodologies and Programs* section of this report. The descriptions of the categories below, therefore, are brief.

METRIC I – JOBS

This is the measurement of number of jobs that are created annually through the rehabilitation of historic buildings and the household income that those jobs generate. This data should be compiled reflecting direct, indirect, and induced jobs and household income accompanied by adequate and understandable definitions of what those categories mean.

WHAT SHOULD BE MEASURED

Historic rehabilitation should include the following:

- » Projects receiving the Federal Rehabilitation Tax Credit
- » Projects receiving state tax credits for historic preservation
- » Federal, state, and local government projects that are considered historic preservation
- » An estimate of activity that would be defined as “historic preservation” but is not reflected in any of the categories above

HOW IT SHOULD BE MEASURED

The dollar amounts aggregated from the four categories above would be converted into jobs and household income using ImPlan, RIMSII, or other reliable Input-Output methodology.

WHERE THE INFORMATION COULD BE FOUND

For projects receiving the Federal Rehabilitation Tax Credit

- » From National Park Service data (perhaps supplemented with SHPO data)

For projects receiving state tax credits for historic preservation

- » Aggregated annual reports from State Historic Preservation Offices of state tax credit investment (making sure projects are not included that also received the federal credit, so as not to double count)

For federal, state, and local government projects that are considered historic preservation

- » General Services Administration
- » State Historic Preservation Offices (from data gathered from their respective state's equivalent of the GSA)
- » Modeling of estimates of local government expenditures on capital improvements to buildings and percentage of those expenditures going to the rehabilitation of historic buildings

An estimate of activity that would be defined as "historic preservation" but is not reflected in any of the categories above

- » Estimates based on a model that would include the following:
 - » Total rehabilitation expenditure
 - » Percentage of that expenditure within local historic districts overseen by Certified Local Governments (CLGs)
 - » Percentage of total spending in local historic districts not overseen by CLGs
 - » Percentage of total spending on the appropriate rehabilitation of historic buildings not covered by any local historic district
 - » Percentage of institutional expenditures (hospitals, colleges, etc., not included in any of the above) that is considered the appropriate rehabilitation of historic buildings

METRIC 2 – PROPERTY VALUES

This is a measurement of the impact on property values attributable to being located within a local historic district and/or a National Register Historic District.

WHAT SHOULD BE MEASURED

While a number of variables might be measured, for simplicity of explanation and data collection, two measurements are recommended:

- » What is the year-to-year change in property value for residential structures within historic districts as compared to property value change for houses in the rest of the local market not within historic districts.
- » What, if any, is the “heritage premium⁹” paid for properties within historic districts.

HOW IT SHOULD BE MEASURED

- » Based on a representative sample of cities, and using either assessed valuation or actual transactions, calculate on a dollar-per-square-foot basis the change in property values year to year within historic districts as compared to properties in the local market not within historic districts. The data should be represented as follows:
 - » Percentage change in per-square-foot value of properties within local historic districts

9 A *heritage premium* is the amount, if any, that the marketplace pays for a property in a historic district after all other variables are accounted for. This would typically be done using a hedonic pricing methodology.

Historic Eastern Market food hall, Washington, DC



- » Percentage change in per-square-foot value of properties within National Register Historic Districts but not within local historic districts
- » Percentage change in per-square-foot value of properties within both National Register and local historic districts
- » Percentage change in per-square-foot value of properties in neither local nor National Register historic districts
- » Based on a localized hedonic pricing model, determine what is the difference in value (if any, and if positive or negative) for properties within historic districts as compared to similar properties not within historic districts after all other variables in value contribution have been accounted for.

WHERE THE INFORMATION COULD BE FOUND

Because there needs to be consistent analysis and data over time, it is recommended that research be conducted in conjunction with (or by) one of the national data and research firms that regularly report on change in real estate values. Two firms/systems to be considered are the S&P/Case-Shiller Home Price Indices¹⁰ and Zillow Real Estate Research. With relatively minor additional data input factors (i.e., in or out of historic districts), one of these ought to be able to provide useful data vis-a-vis value and historic designation. The S&P/Cash-Shiller Composite 20 Metro Areas might be a useful base.

METRIC 3 – HERITAGE TOURISM

WHAT SHOULD BE MEASURED

Again, for consistency and simplicity a finite number of measurements should be sought to determine:

- » What is the total number of tourists that would be considered “heritage tourists” and what percentage do they represent of all tourists
- » What are the trip characteristics of the heritage tourist including:
 - » Number of annual trips
 - » Number of places visited
 - » Daily expenditures
 - » Total expenditures
- » How do the numbers from 2 above contrast with tourists not considered heritage tourists
- » What are the demographic characteristics of heritage tourists and how do they contrast with all other tourists

¹⁰ Methodology explained at http://www.standardandpoors.com/servlet/BlobServer?blobheadername3=MDT-Type&blobcol=urldata&blobtable=MungoBlobs&blobheadervalue2=inline%3B+filename%3DMethodology_SP_CS_Home_Price_Indices_Web.pdf&blobheadervalue1=application%2Fpdf&blobkey=id&blobheadername1=content-type&blobwhere=1243624745188&blobheadervalue3=UTF-8.

HOW IT SHOULD BE MEASURED

This information should be measured through regular, comprehensive, and consistent surveys.

WHERE THE INFORMATION COULD BE FOUND

There already exist major, comprehensive, regular, and consistent surveys regarding tourism using large national samples. For *heritage tourism* data three things must be done:

- » Establish a reasonable definition of what attributes/activities a tourist needs to have (and in what magnitude) to fall in the category of “heritage visitor” (including distinguishing these visitors from other tourists who engage in cultural activities such as attending concerts).
- » Write two to four questions that would reveal those attributes/activities as part of a survey.
- » Incorporate those questions into an existing national survey.

Once that is done, the “drilling down” to reveal the information desired is a relatively straight forward process. There does not need to be a heritage-specific tourism survey – only questions within an existing survey that identifies “heritage tourists.”

Historic excursion steam railroad in Durango, Colorado



METRIC 4 – ENVIRONMENTAL MEASUREMENTS

Quantifying the contribution of historic preservation to the environment is, as was noted earlier, the most recent area of research. That research continues to evolve. The “Green Lab” of the National Trust for Historic Preservation is both compiling existing research and conducting original research of the preservation/environment nexus. Additionally the Department of the Army has commissioned an in-depth look at issues such as life cycle costs and environmental impacts. The statewide analysis of the tax credit program in Maryland¹¹ in 2009 tested a variety of approaches to measure the environmental savings spawned by opting for rehabilitation rather than new construction on undeveloped land.

WHAT SHOULD BE MEASURED

A variety of measurements could be undertaken annually. Examples of calculations might be:

- » Embodied energy in buildings rehabilitated
- » Infrastructure cost savings of rehabilitation rather than new construction at an outlying location
- » Reduction of emissions and vehicle miles travelled
- » Reduced impact on land fill and corresponding dollar savings
- » Comparative analysis of annual operating costs of rehabilitated historic buildings with new buildings
- » Life cycle energy use calculations that include both operating expenditures and energy used in construction

Because the research in this area is new and evolving, and because alternative approaches are being tested, it is the recommendation of this report that there certainly should be an environment/preservation annual measurement but the specifics of what is measured and how be deferred for a few years until more is learned through existing research programs.

METRIC 5 – DOWNTOWN REVITALIZATION/MAIN STREET

The role of historic preservation in downtown revitalization efforts is apparent in nearly every town and city in the country where the center has begun to return from a four-decade period of decline. The Main Street program of the National Trust for Historic Preservation has been the one national program that has been specifically defined as *economic development within the context of historic preservation*. By almost any measure Main Street has been an extraordinary success and the Main Street Approach has

¹¹ <http://www.abell.org/pubsitems/arn309.pdf>



Historic district in Liberty, Missouri

been adopted as the set of organizing principles for downtown revitalization even by communities that are not formally participants in the Main Street process.

WHAT SHOULD BE MEASURED

The data currently gathered by state Main Street programs and then forwarded to and aggregated by the National Main Street Center is certainly valuable measurements: net new jobs, net new businesses, amount of investment, number of buildings rehabilitated. The research deficiencies of the current approach notwithstanding, this data should continue to be collected. The consistency of the information gathered, the size of the database, and the length of time the information has been assembled to a significant degree offset research weaknesses from an academic perspective.

What is missing from these numbers are: 1) comparable numbers from cities that have had successful downtown revitalization programs, but have not used historic preservation as part of their strategy; and 2) a detailed analysis of the catalytic impact of an individual historic preservation project on the economy of the immediately surrounding area.

HOW IT SHOULD BE MEASURED

The credibility of data on the historic preservation/downtown revitalization connection would be enhanced if:

- » The information were gathered by a third party and/or all of the data came from public record sources
- » There were a comparison of the activity in the program area with commercial districts elsewhere in the community or with comparable downtowns which did not have a preservation-based revitalization strategy

The catalytic measurement should be done on a before-and-after basis (five to ten years before and after the project completion) and consider such variables as: property values, retail sales, investment, net new jobs, net new businesses, and commercial occupancy rates.

WHERE THE INFORMATION COULD BE FOUND

To obtain data that is parallel to what the National Main Street Center accumulates, city building permit records, city directories, Chamber of Commerce listings, business improvement district data, and business owner surveys would provide most of the requisite information.

For the catalytic impact of preservation projects, the above data sources on a before-and-after basis, as well as ad valorem property tax records and building owner surveys, would be useful.

CONCLUSIONS

There was a consistent message from the existing research, from the interviews, and from the symposium: research on the relationship between historic preservation and economics is critical and needs to be provided on a regular basis. To be useful, however, while the research must be conducted on an academically robust level, research findings and resultant recommendations need to be written so that they are comprehensible to preservation advocates, public servants, elected officials, and the general public.

Five areas of research demonstrating (directly or indirectly) the link between historic preservation and economics are recommended in this report:

- » Jobs
- » Property values
- » Heritage tourism
- » Environmental measurements
- » Downtown revitalization

It is unlikely that a single institution would have the resources to cost-effectively conduct annual research into each of these areas. **Rather it is recommended that the research be “farmed out” and then assembled, distributed, and publicized by a single agency.**

Of the five areas of suggested research, one of them, heritage tourism, is primarily survey based. It is recommended that a limited number of questions (2-3) be incorporated into larger, existing surveys currently conducted.

For property values it is recommended that a historic property subcomponent analysis be commissioned within one of the existing national real estate value analyses.

Because of the evolving nature of the research on the connection between historic preservation and the environment, it is recommended that any decisions on exactly what is measured and the investigation of the connection between historic preservation and environment be deferred until more has been learned from ongoing studies and their methodologies.

There is an acceptable methodology for measuring the job creation impact of historic rehabilitation activity. There has been an analysis on a national level of the economic impact of the Federal Historic Tax Credit that is reportedly going to be updated annually. An expanded methodology needs to be developed, however, that includes historic preservation activity nationwide that is not reflected in federal tax credit projects.

Finally the National Trust and its National Main Street Center are encouraged to continue aggregating and publicizing the data that have been collected over the last 25

years. If, however, the contribution of historic preservation to downtown revitalization is to be credibly demonstrated, additional research needs to be undertaken using more rigorous methodologies and needs to consider the preservation/revitalization link in downtowns that have not been part of the Main Street program. Because these stories may well be better understood on a case study rather than a comprehensive quantitative basis, graduate students might be encouraged to make this the focus of their masters theses and PhD dissertations. An annual report could be produced summarizing that year's research findings.

This report was not commissioned to develop specific methodologies, to identify specific research institutions, or to suggest funding sources and amounts that this research would require. Rather this report was intended to identify whether such research is necessary, to document what has been learned in existing research, and to recommend areas of research in the future.

To that end:

- » Research on the connection between historic preservation and the economy is critical
- » A growing body of research has been conducted and while much of that research is useful, it is not being done on a regular, consistent, national level
- » An ongoing program of preservation/economics research should be initiated that would include: jobs, property values, heritage tourism, environmental impacts, social impacts, longitudinal public opinion, and downtown revitalization

The next steps in this process are recommended as follows:

1. Identify and reach agreement with responsible parties to undertake the ongoing research and data collection for each of the recommended indicators.

Because of the diverse nature of the proposed research as well as costs and other issues it is recommended that there be a collaboration of several entities each committed to conducting a portion of this research. Among these research partners might be: ACHP, National Park Service, Department of Commerce, General Services Administration, Department of Defense, National Trust, the nascent Ellis Island Preservation Resource Center and universities including Rutgers, University of Pennsylvania, University of Maryland, and others.

2. In conjunction with the responsible parties, create a long-term research, evaluation, and reporting plan.

At the outset the research partners will need to reach agreement as to: 1) who will conduct which research; 2) how and when will that research be provided; 3) who will aggregate the individual research projects into a single report; 4) how and when will the results of the research be published and distributed.

3. Establish baseline(s) for each of the recommended indicators.

As it is the hope that the recommended research will be conducted and released annually there will need to be a base established against which change is

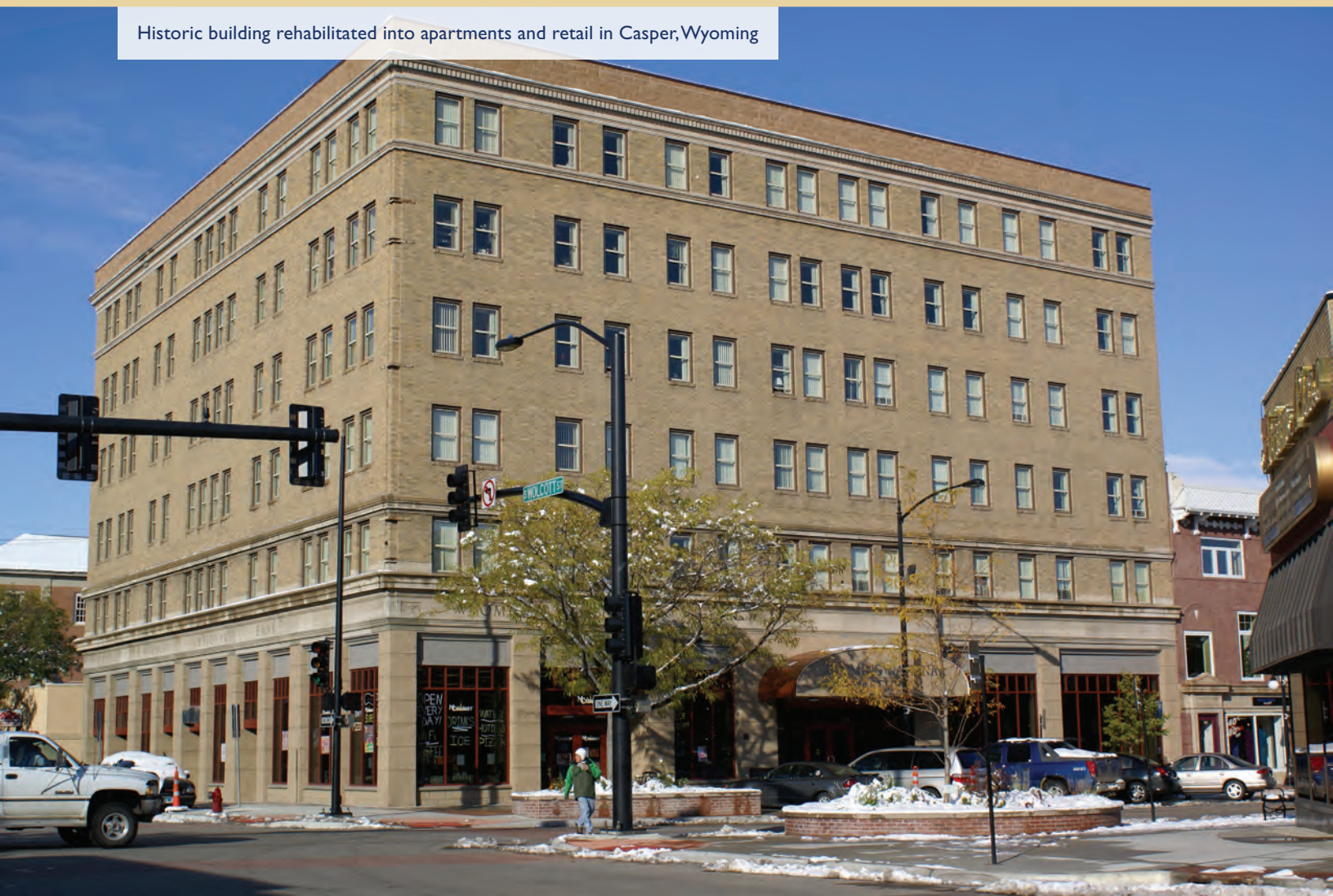
measured. As the first step in each research component the responsible research partner should identify what that base will be, and how the data that constitutes that base will be acquired.

4. Work with the identified parties to systematize data collection.

While it will be important that the reports of the research are written in such a fashion as to be understandable by a non-technical audience, the methodologies and research approaches utilized will need to be both transparent and defensible under scholarly scrutiny. Each participating research entity should, therefore, identify a data collection and analysis procedure that is academically robust and replicable from year to year.

Historic preservation will not reach its optimum potential to contribute to the American economy or American society without such research being done.

Historic building rehabilitated into apartments and retail in Casper, Wyoming



APPENDIX A: SYMPOSIUM SUMMARY

As part of the research project, a one-day symposium was convened at the University of Pennsylvania's School of Design on February 8, 2011. The goal of the symposium was to lend additional depth to the team's exploration of best practice in conceptualization and measurement of the economic values of historic preservation.

The symposium framed possibilities for applying economic methods to practical, policy, and political problems encountered in historic preservation—as opposed to regarding economic studies as ends in themselves. The goal was to bridge academic research and practical application; to match the needs of advocacy and policy workers with the capabilities of academic (particularly economic) researchers.

Two international scholar/practitioners (themselves bridging in some manner the worlds of research and practice) were invited to present keynote speeches; three distinguished researchers with yet different combinations of academic focus with practical application were invited to comment on the speeches. This summary captures the main points raised and discussed during the day of formal presentations and informal discussions.

The day's workshop was introduced by Prof. Randall Mason; Donovan Rypkema presented the overall context and challenges presented by the research project commissioned by the ACHP.

The two invited keynote presenters were:

- » Guido Licciardi, PhD: Urban Specialist, Urban Development and Local Government, The World Bank.
- » Prof. Christian Ost: Professor and former Dean, ICHEC Brussels Management School; 2008-09 Guest Scholar, Getty Conservation Institute.

HIGHLIGHTS FROM THE TWO MORNING KEYNOTE SPEECHES

Licciardi: Presenting heritage economics through the lens of the World Bank (Bank) and its processes for internal project monitoring and evaluation, Licciardi argued that a greater appreciation of econometrics applied to heritage is possible, productive, even urgent, given the threats presented

by urbanization (particularly in developing countries). The Bank's growing work on urban regeneration as a poverty reduction measure attests to the centrality of heritage (especially in its form as historic urban centers). The pursuit of this work by the Bank's Urban department will require an increasing effort to measure the economic values of heritage outcomes. A detailed presentation of Bank evaluation procedure and the role of econometrics was enhanced by a case study from Shandong province, China, and a short video highlighting a recent Bank project in Tunisia. In 2010 the World Bank published *The Urban Rehabilitation of Medinas* which highlights many of these issues, including fiscal and social policies.

Ost: Professor Ost presented some of his ongoing work in spatial analysis of heritage towns, using the case study of Djenne, Mali, (a World Heritage site) as an example. Ost takes as a starting point the multivalent nature of urban heritage and proceeds to create, through fieldwork and surveying, mappable data representing the different values for a historic urban center. Economic values, importantly, are presented as one among several significant value types including use and non-use values, vacancy rates, building conditions, and others. His work is an exciting and promising extension of the kinds of quantifying research so central to the economics field regarding the multiple social processes and variables characterizing urban heritage. The fundamental role of GIS in his work represents an important future direction of research and practice, as the management and synthesis of data related to economic and cultural values of heritage places remains a challenge for practitioners. It is also a potential boon to the understanding of decision-makers.

AFTERNOON DISCUSSION

Following formal presentations in the morning, much of the afternoon was devoted to wide-ranging discussion among a larger group of participants, which included colleagues from the world of policy and public service, academic colleagues, and graduate students. Three leading thinkers in areas related to economic values of heritage and other public goods were

invited to comment on the keynote speeches and kick off the afternoon discussion. They were:

- » Erica Avrami, Director of Research and Education, World Monuments Fund
- » Dr. Jeff Adams, Professor of Economics, Beloit College
- » Dr. David Listokin, Professor, Center for Urban and Policy Research, Rutgers University

As with the key points of the interviews enumerated in the body of this report, the main points of the discussion were included to reflect the range of opinions of the participants, even though some of them are contradictory and other subject to dissent by the authors of this report.

Main points from the open discussion:

- » Corresponding to the mix of participants from the academic, professional, and policy sectors, the discussion yielded a range of ideas and topics, including essential conceptual issues regarding the application of economic thinking to heritage phenomena as well as practical topics related to what kinds of arguments hold sway with decision-makers.
- » Economic studies (or other academic studies for that matter) set up decisions but they do not make the decisions. The results of studies are used – or ignored – in the context of “political will,” perceptions of political gain or risk, and the political economy of government action and/or investor profit motive.
- » It is a danger to focus too narrowly on economic values. Studies of economic value should contextualize this among the other values of historic preservation (cultural, aesthetic, etc.).
- » There is a lack of serious evaluation work, using accepted econometric methodologies, in the historic preservation field. Many opportunities for *ex post facto* economic analysis of preservation projects/policies exist. For example there is no known report that systematically compares the effectiveness and efficiency of state historic rehabilitation tax credit programs with other state-provided incentives meant to encourage local economic development.
- » Evaluations are always subjective, no matter how successful our efforts to quantify them.
- » Studies quantifying the economic value of preservation, no matter how professional and sound, always exist (or will be used) within a political context. So the “political will” to act on the studies will remain a major variable in determining whether such studies are successful. Since the decisions based on economics are so highly determined by politics, we might think in terms of “political economy” instead of “economics.”
- » Preservation consists of both private goods and public goods; this “mixed” nature yields both confusion and opportunity when it comes to choice of methods to evaluate and measure economic impacts. For the private goods in preservation (individually owned homes, for instance), economic value is relatively straightforward; for the public-good aspects remain difficult. Embracing the public-good aspects can serve as a kind of conceptual bridge to social and political questions shared more widely in society (outside of preservation), as with the idea of the loss of the public commons and the nature of social cooperation.
- » The alleged culture and habits of the preservation field (single-mindedness, resistance to change) present barriers to accepting economic concepts and methodologies. Many in preservation want data “to make the case” (i.e., advocate what they would have advocated anyway) without really opening up to understanding how economic research could shape, change, and improve the field’s understanding of how historic preservation should work as well as preservation’s potential and actual benefits. As a field, preservation needs to recognize the inevitability of change and determine the best strategies to respond, not just fear change and the associated risks. Perhaps thinking of historic preservation in terms of portfolio management (as agencies like GSA or NPS must do) would be a way to adapt economic thinking to a “managing change” approach for evaluating preservation policies and making sensible decisions that are not isolated from the overall goal of improving the portfolio’s performance.

- » We tend to understand “economic benefits” in a single-time snapshot, static way that is too narrow. Historic preservation yields “process” benefits as well, such as community cohesion, social capital, etc., that are not captured by looking just at property values (though may be indicated in metrics such as depth of local government support for preservation, or existence of special incentives, permanent professional and technical jobs created). Our tools need to be matched to the whole spectrum of benefits we wish to measure. Perhaps the notion of “environmental services” as compared to “architectural” or “historic preservation” services is a useful analog (from the environmental conservation sector) in this regard.
- » How effective are quantitative expressions of preservation benefits to decision-makers? We assume that numbers are the most effective means for swaying people to support preservation, but this is an unexamined, or at least anecdotal, belief. Rational arguments may not matter as much as well-articulated but irrational arguments crafted to identify with an audience/decision-maker more emotionally (such as community pride or identity associated with history and culture).
- » In choosing metrics to collect, it is critical to ensure they can be collected regularly and into the future so longitudinal studies can be undertaken over some length of time.
- » It is important that the metrics not only relate to market values but also captures core “outputs” of historic preservation such as educational outcomes, community cohesion, etc. Threat, risk, and price are not the only (or most relevant) measures.

- » Issues such as the relationship between urban density and preservation policy, or competing market interests, raise the stakes for including some kinds of econometric analyses in preservation discourse and debate. It is obvious that the market plays a key role in shaping discussions over both commercial and residential density, so we better know how it works, how to measure outcomes, and how to talk about markets.
- » The solutions to our problems cannot be found just within our sector; we have to collaborate.

In addition to the invited participants already mentioned, those active in the afternoon discussion included:

- » Ron Anzalone, Advisory Council on Historic Preservation
- » David Brown, National Trust for Historic Preservation
- » Caroline Cheong, PlaceEconomics
- » Brian Daniels, Penn Center for Cultural Heritage
- » Scott Doyle, Pennsylvania Historical and Museum Commission
- » Cory Kegerise, Maryland Historical Trust
- » Brent Lane, University of North Carolina
- » Constance Ramirez, National Park Service
- » Donovan Rypkema, PlaceEconomics
- » Benjamin Simon, Department of Policy Analysis, Department of Interior
- » Erika Stewart, National Trust for Historic Preservation and National Trusts Community Investment Corporation
- » Cherilynn Widell, Preservation consultant

APPENDIX B: ECONOMIC ANALYSIS METHODS— RIMS II, IMPLAN, AND PEIM

RIMS II

US Department of Commerce
Bureau of Economic Analysis
Regional Economic Accounts
<https://www.bea.gov/regional/rims/brfdesc.cfm>

OVERVIEW

Effective planning for public- and private-sector projects and programs at the state and local levels requires a systematic analysis of the economic impacts of these projects and programs on affected regions. In turn, systematic analysis of economic impacts must account for the interindustry relationships within regions because these relationships largely determine how regional economies are likely to respond to project and program changes. Thus, regional input-output (I-O) multipliers, which account for interindustry relationships within regions, are useful tools for conducting regional economic impact analysis.

In the 1970s, the Bureau of Economic Analysis (BEA) developed a method for estimating regional I-O multipliers known as RIMS (Regional Industrial Multiplier System), which was based on the work of Garnick and Drake.¹ In the 1980s, BEA completed an enhancement of RIMS, known as RIMS II (Regional Input-Output Modeling System), and published a handbook for RIMS II users.² In 1992, BEA published a second edition of the handbook in which the multipliers were based on more recent data and improved methodology. In 1997, BEA published a *third edition of the handbook* that provides more detail on the use of the multipliers and the data sources and methods for estimating them.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial

distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: BEA's national *I-O table*, which shows the input and output structure of nearly 500 U.S. industries, and BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.³

Using RIMS II for impact analysis has several advantages. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. The accessibility of the main data sources for RIMS II keeps the cost of estimating regional multipliers relatively low. Empirical tests show that estimates based on relatively expensive surveys and RIMS II-based estimates are similar in magnitude.⁴

BEA's RIMS multipliers can be a cost-effective way for analysts to estimate the economic impacts of changes in a regional economy. However, it is important to keep in mind that, like all economic impact models, RIMS provides approximate order-of-magnitude estimates of impacts. RIMS multipliers are best suited for estimating the impacts of small changes on a regional economy. For some applications, users may want to supplement RIMS estimates with information they gather from the region undergoing the potential change. Examples of case studies where it is appropriate to use RIMS multipliers appear in the *RIMS II User Handbook*.

To effectively use the multipliers for impact analysis, users must provide geographically and industrially detailed information on the initial changes in output, earnings, or employment that are associated with the project or program under study. The multipliers can then be used to estimate the

1 See Daniel H. Garnick, "Differential Regional Multiplier Models," *Journal of Regional Science* 10 (February 1970): 35-47; and Ronald L. Drake, "A Short-Cut to Estimates of Regional Input-Output Multipliers," *International Regional Science Review* 1 (Fall 1976): 1-17.

2 See U.S. Department of Commerce, Bureau of Economic Analysis, *Regional Input-Output Modeling System (RIMS II): Estimation, Evaluation, and Application of a Disaggregated Regional Impact Model* (Washington, DC: U.S. Government Printing Office, 1981). Available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; order no. PB-82-168-865; price \$26.

3 See U.S. Department of Commerce, Bureau of Economic Analysis, *The Detailed Input-Output Structure of the U.S. Economy, Volume II* (Washington, DC: U.S. Government Printing Office, November 1994); and U.S. Department of Commerce, Bureau of Economic Analysis, *State Personal Income, 1929-93* (Washington, DC: U.S. Government Printing Office, June 1995).

4 See U.S. Department of Commerce, *Regional Input-Output Modeling System (RIMS II)*, chapter 5. Also see Sharon M. Brucker, Steven E. Hastings, and William R. Latham III, "The Variation of Estimated Impacts from Five Regional Input-Output Models," *International Regional Science Review* 13 (1990): 119-39.

total impact of the project or program on regional output, earnings, and employment.

RIMS II is widely used in both the public and private sectors. In the public sector, for example, the Department of Defense uses RIMS II to estimate the regional impacts of military base closings. State transportation departments use RIMS II to estimate the regional impacts of airport construction and expansion. In the private sector, analysts and consultants use RIMS II to estimate the regional impacts of a variety of projects, such as the development of shopping malls and sports stadiums.

RIMS II METHODOLOGY

RIMS II uses BEA's benchmark and annual I-O tables for the nation. Since a particular region may not contain all the industries found at the national level, some direct input requirements cannot be supplied by that region's industries. Input requirements that are not produced in a study region are identified using BEA's regional economic accounts.

The RIMS II method for estimating regional I-O multipliers can be viewed as a three-step process. In the first step, the producer portion of the national I-O table is made region-specific by using six-digit NAICS location quotients (LQs). The LQs estimate the extent to which input requirements are supplied by firms within the region. RIMS II uses LQs based on two types of data: BEA's personal income data (by place of residence) are used to calculate LQs in the service industries; and BEA's wage-and-salary data (by place of work) are used to calculate LQs in the non-service industries.

In the second step, the household row and the household column from the national I-O table are made region-specific. The household row coefficients, which are derived from the value-added row of the national I-O table, are adjusted to reflect regional earnings leakages resulting from individuals working in the region but residing outside the region. The household column coefficients, which are based on the personal consumption expenditure column of the national I-O table, are adjusted to account for regional consumption leakages stemming from personal taxes and savings.

In the last step, the Leontief inversion approach is used to estimate multipliers. This inversion approach produces output, earnings, and employment multipliers, which can

be used to trace the impacts of changes in final demand on directly and indirectly affected industries.

ACCURACY OF RIMS II

Empirical evidence suggests that RIMS II commonly yields multipliers that are not substantially different in magnitude from those generated by regional I-O models based on relatively expensive surveys. For example, a comparison of 224 industry-specific multipliers from survey-based tables for Texas, Washington, and West Virginia indicates that the RIMS II average multipliers overestimate the average multipliers from the survey-based tables by approximately 5 percent. For the majority of individual industry-specific multipliers within these states, the difference between RIMS II and survey-based multipliers is less than 10 percent. In addition, RIMS II and survey multipliers show statistically similar distributions of affected industries.

ADVANTAGES OF RIMS II

There are numerous advantages to using RIMS II. First, the accessibility of the main data sources makes it possible to estimate regional multipliers without conducting relatively expensive surveys. Second, the level of industrial detail used in RIMS II helps avoid aggregation errors, which often occur when industries are combined. Third, RIMS II multipliers can be compared across areas because they are based on a consistent set of estimating procedures nationwide. Fourth, RIMS II multipliers are updated to reflect the most recent local-area wage-and-salary and personal income data.

APPLICATIONS OF RIMS II

RIMS II multipliers can be used in a wide variety of regional impact studies. For example, the U.S. Nuclear Regulatory Commission has used RIMS II multipliers in environmental impact statements required for licensing nuclear electricity-generating facilities. The U.S. Department of Housing and Urban Development has used RIMS II multipliers to estimate the impacts of various types of urban redevelopment expenditures. RIMS II multipliers have also been used to estimate the regional economic and industrial impacts of: opening or closing military bases, tourist expenditures, new energy facilities, energy conservation, offshore drilling, opening or closing manufacturing plants, shopping malls, new sports stadiums, and new airport or port facilities.

IMPLAN

David Mulkey and Alan W. Hodges
University of Florida, IFAS Extension
<http://edis.ifas.ufl.edu/fe168>

THE IMPLAN DATABASE

The economic data for IMPLAN comes from the system of national accounts for the United States based on data collected by the U.S. Department of Commerce, the U.S. Bureau of Labor Statistics, and other federal and state government agencies. Data are collected for 528 distinct producing industry sectors of the national economy corresponding to the Standard Industrial Categories (SICs). Industry sectors are classified on the basis of the primary commodity or service produced. Corresponding data sets are also produced for each county in the United States, allowing analyses at the county level and for geographic aggregations such as clusters of contiguous counties, individual states, or groups of states.

Data provided for each industry sector include outputs and inputs from other sectors, value added, employment, wages and business taxes paid, imports and exports, final demand by households and government, capital investment, business inventories, marketing margins, and inflation factors (deflators). These data are provided both for the 528 producing sectors at the national level and for the corresponding sectors at the county level. Data on the technological mix of inputs and levels of transactions between producing sectors are taken from detailed input-output tables of the national economy. National and county level data are the basis for IMPLAN calculations of input-output tables and multipliers for local areas.

IMPLAN MULTIPLIERS

The IMPLAN software package allows the estimation of the multiplier effects of changes in final demand for one industry on all other industries within a local economic area. Multipliers may be estimated for a single county, for groups of contiguous counties, or for an entire state; they measure total changes in output, income, employment, or value added. Definitions are provided below. More detail on the derivations of multipliers is available in the earlier cited IMPLAN Users Guide.

For a particular producing industry, multipliers estimate three components of total change within the local area:

- » Direct effects represent the initial change in the industry in question.
- » Indirect effects are changes in inter-industry transactions as supplying industries respond to increased demands from the directly affected industries.
- » Induced effects reflect changes in local spending that result from income changes in the directly and indirectly affected industry sectors.

IMPLAN allows the analyst to choose from multipliers that capture only direct and indirect effects (Type I), multipliers that capture all three effects noted above (Type II), and multipliers that capture the three effects noted above and further account for commuting, social security and income taxes, and savings by households (Type SAM). Total effects multipliers usually range in size from 1.5 to 2.5 and are interpreted as indicated below:

- » Output multipliers relate the changes in sales to final demand by one industry to total changes in output (gross sales) by all industries within the local area. An industry output multiplier of 1.65 would indicate that a change in sales to final demand of \$1.00 by the industry in question would result in a total change in local output of \$1.65.
- » Income and employment multipliers relate the change in direct income to changes in total income within the local economy. For example, an income multiplier for a direct industry change of 1.75 indicates that a \$1.00 change in income in the direct industry will produce a total income change of \$1.75 in the local economy. Similarly, an employment multiplier of 1.75 indicates that the creation of one new direct job will result in a total of 1.75 jobs in the local economy.
- » Value added multipliers are interpreted the same as income and employment multipliers. They relate changes in value added in the industry experiencing the direct effect to total changes in value added for the local economy.

PEIM

Preservation Economic Impact Model, created by Rutgers University Center for Urban Policy Research for the National Park Service

Excerpted from *Economic Impacts of Historic Preservation in Oklahoma* (2008)

Prepared by the Center for Urban Policy Research at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey for Preservation Oklahoma.

www.okhistory.org/shpo/econimpact.pdf

The Preservation Economic Impact Model (PEIM) was produced by Rutgers University Center for Urban Policy Research for the National Park Service. The PEI Model produces very accurate estimates of the total regional impacts of an economic activity and employs detail for more than 500 industries in calculating the effects.

This model and its predecessors have proven to be the best of the non-survey-based regional input-output models at measuring a region's economic self-sufficiency. The models also have a wide array of measures that can be used to analyze impacts. In particular, PEIM produces one of the only regional economic models that enable an analysis of governmental revenue (i.e., tax) impacts and an analysis of gains in total regional wealth.

The results of PEIM include many fields of data. The fields most relevant to this study are the total impacts with respect to the following:

- » **Jobs:** *Employment, both part- and full-time, by place of work, estimated using the typical job characteristics of each detailed industry.* (Manufacturing jobs, for example, tend to be fulltime; in retail trade and real estate, part-time jobs predominate.) All jobs generated at businesses in the region are included, even though the associated labor income of commuters may be spent outside of the region. In this study, all results are for activities occurring within the time frame of one year. Thus, the job figures should be read as job-years; i.e., several individuals might fill one job-year on any given project.

- » **Income:** *“Earned” or “labor” income—specifically wages, salaries, and proprietors’ income.* Income in this case does not include non-wage compensation (i.e., benefits, pensions, or insurance), transfer payments, or dividends, interest, or rents.
- » **Wealth:** *Value added—the equivalent at the subnational level of gross domestic product (GDP).* At the state level, this is called gross state product (GSP). Value added is widely accepted by economists as the best measure of economic well-being. It is estimated from state-level data by industry. For a firm, value added is the difference between the value of goods and services produced and the value of goods and nonlabor services purchased. For an industry, therefore, it is composed of labor income (net of taxes); taxes; non-wage labor compensation; profit (other than proprietors’ income); capital consumption allowances; and net interest, dividends, and rents received.
- » **Output:** Of the measures in any input-output report, perhaps the least well defined one is that labeled “output.” *Output is defined as the value of shipments, which is reported in the Economic Census.* The value of shipments is very closely related to the notion of business revenues. Thus it is NOT the “output” to which most other economists refer and which is better known as “gross domestic product” (GDP). Input-output analysis “output” is not the same as business revenues for several reasons, however. First, establishments often sell some of their output to themselves and therefore do not ship it. Hence, such sales cannot be included in the Census’s tally of the value of shipments. Second, to avoid some double counting in national accounts (those used to produce input-output tables), “output” in the wholesale and retail trade industries is measured simply as their margins, which is value added plus the costs of inputs used in the course of doing business. That is for these trade industries, “output” does NOT include the value of the items stocked on shelves.
- » **Taxes:** *Tax revenues generated by the activity.* The tax revenues are detailed for the federal, state, and local levels of government. Totals are calculated by industry.

- » *Federal tax* revenues include corporate and personal income, social security, and excise taxes, estimated from the calculations of value added and income generated.
- » *State tax* revenues include personal and corporate income, state property, excise, sales, and other state taxes, estimated from the calculations of value added and income generated (e.g., purchases by visitors).

- » *Local tax* revenues include payments to sub-state governments mainly through property taxes on new worker households and businesses. Local tax revenues can also include revenues from local income, sales, and other taxes.

APPENDIX C: WALK SCORE

<http://www.walkscore.com/methodology.shtml>

Street Smart Walk Score calculates a score by mapping out the walking distance to the closest amenity locations of 9 different amenity categories. Different numbers of amenities are counted in each category (for instance the first 10 restaurants and bars are counted, while only 1 park is counted), which are referred to as counts.

Each category receives different weights as well, which shows that category's importance relative to other categories. The distance to a location, the counts and the weights determine a base score of an address, which is then linearly expanded to range from 0 to 100. After this, an address may receive a penalty for having poor pedestrian friendliness metrics, such as having long blocks or low intersection density.

The following categories, counts and weights are used:

```
amenity_weights = {  
  "grocery": [3],  
  "restaurants": [.75, .45, .25, .25, .225, .225, .225, .225, .2, .2],  
  "shopping": [.5, .45, .4, .35, .3],  
  "coffee": [1.25, .75],  
  "banks": [1],  
  "parks": [1],  
  "schools": [1],  
  "books": [1],  
  "entertainment": [1],  
}
```

The numbers after a category indicate the assigned weight and number of counts of that amenity. More than one number means that more than one count of that amenity is included, with the second nearest amenity of that type receiving the weight of the second number, etc. At this point, the weights indicate the relative importance of categories to one another. So having a grocery store nearby is 3 times as important as having a bank nearby.

These weights were determined from the research literature and testing the algorithm. Lee and Moudon (2006) find evidence that nearby grocery stores, restaurants/bars, banks and schools increase walking, as do areas with grocery/

retail/restaurant clusters. Moudon et al. (2006) and Cerrin et al. (2007) both cite collected survey data showing that grocery stores, restaurants/bars, retail locations, coffee shops, and banks are common walking destinations. The Cerrin et al. (2007) survey responses find that people frequently walk to parks as well. The categories we use here are also similar to ones used in studies and work on walkability by Iacono et al. (2010), El-Geneidy and Levinson (2010), and Piekarski (2009).

The amenity categories have been determined from the available research to be of either of high importance to walkability, medium importance or low importance. This is reflected in the category weights. Grocery store and restaurants/bars have total category weights summing to 3, while shopping and coffee shops have weights summing to 2, while the other categories sum to 1.

Grocery stores receive the heaviest weight because they have been found to be drivers of walking (Lee and Moudon 2006), as well as the most common walking destination in surveys (Moudon et al. 2006, Cerrin et al. 2007).

Restaurants and bars are combined into a single category due to their overlapping nature: many restaurants have bars and many bars serve food. Restaurants/bars are found to be some of the most frequent walking destinations (Moudon et al. 2006, Cerin et al. 2007), so this category has a combined total weights of 3.

Variety and options are important, so 10 counts of restaurants/bars are included, with the first counts receiving greater weight than the later counts to account for diminishing returns. Including 10 counts of restaurants also allows for more differentiation among high scoring locations, as 10 restaurants or bars must be very nearby to receive a perfect score.

The shopping category includes clothing stores and stores categorized as "gift shops," which defines a broad range of retail locations (e.g. specialty food store, flower store, children's store, etc.). The "gift shop" category is used as a proxy for the breadth of retail stores near an address.

Shopping and retail are commonly used categories in the research literature, are one of the more common walking destinations (Cerin et al. 2007) and are found to increase walking (Lee and Moudon 2006). The category has a combined total weight of 2, and there are 5 counts included. Giving this category 5 counts demands a certain density of shopping locations for an address to score well. The stores looked at in this category are important in themselves, but are also meant to proxy to a degree for other shopping stores. Not every retail location falls under clothing store or gift shop, but an address that scores well in this category is likely to have these other retail locations close by as well.

For coffee shops, variety is also important, but not to the same degree that it is for restaurants and shopping. Two counts are included, so that in the ideal walkable area some

choice is available. Additionally, coffee shops are found by both Cerin et al. (2007) and Moudon et al. (2006) to be important destinations, and the presence of nearby coffee shops gives an indication of the overall walkability of an area. Because of this, we have made the total weight of this category 2.

The other categories are deemed to be more or less equal and all receive a weight of 1 and have 1- count. The literature does not give a clear indication of which of these other categories should have a greater weight, while still indicating that they are important. However, they are not generally found to be as important as grocery stores, restaurants/bars, and retail, and it does not seem appropriate to include more than one count for any of them.

APPENDIX D: LITERATURE REVIEW – UPDATE

Since Randall Mason's 2005 Brookings Institute Report, numerous studies, reports, and papers focusing on the economic impact of historic preservation have been produced. Both academics and practitioners have written about the various aspects of this diverse topic, some deepening the extant body of knowledge and others opening new avenues to explore. This report collects literature published since 2005 that is intended to be a continuation of Mason's report. Within each category, sources that focus directly on the subject or are particularly relevant are summarized; other interesting but less-relevant works are also listed, but not summarized. Overall, the intention of this document is to call attention to the most useful and illuminating literature for practitioners and decision-makers, not to list exhaustively everything published on a topic.

Some of the published work relevant to the economics of heritage and preservation are difficult to categorize. For example, many of the national and statewide economic impact reports contain tourism information and analysis. Regarding cultural and heritage tourism in particular, much of the current research and resultant publications on its economic impact is subsumed under tourism in general or focuses on reporting visitor spending habits and travel services, rather than econometric analysis. This is an area within cultural and heritage tourism that warrants further analysis.

Since 2005, the literature on environmental sustainability has grown dramatically and issues of sustainability have taken center stage in the thinking and practice of those involved in evaluating the economic impact of historic preservation. The additional category "Sustainability and Historic Preservation" is thus necessary to sample some key works that put this recent shift in focus. Similarly, new technologies have opened doors to new and innovative ways of visualizing and presenting economic data by placing it within its geographic context. The additional category of "Geographic/Information Technology and Historic Preservation" is thus necessary. It should also be noted that public lands and outdoor recreation is a growing focus due to the creation and promotion of National Heritage Areas, National Heritage Corridors, and other public lands.

However, literature currently focuses on the reporting of data rather than scholarly or economic assessment.

Mason's 2005 Brookings Institute report, *Economics and Historic Preservation: A Guide and Review of the Literature*, can be found here: http://www.brookings.edu/~media/Files/rc/reports/2005/09metropolitanpolicy_mason/20050926_preservation.pdf.

ECONOMICS AND PRESERVATION: REVIEW AND RESULTS FROM THE LITERATURE

NEW CATEGORIES:

I. SUSTAINABILITY AND HISTORIC PRESERVATION

Literature focusing on the connections between sustainability and historic preservation is varied and growing. Articles focus on such topics as the impact of historic preservation regulations on property values, the reuse of historic buildings, LEED standards, and the integration of culture in sustainability measurements. The linkages between sustainability and heritage conservation are becoming increasingly prominent and receiving more attention from practitioners and academics alike.

Stubbs, Michael. "Heritage-Sustainability: Developing a Methodology for the Sustainable Appraisal of the Historic Environment." *Planning, Practice & Research* 19, 3 (August 2004): 285–305.

This article sets out to establish a framework for appraising sustainability in the heritage sector. Focusing ostensibly on case study material, a methodology is advanced for the promotion and appraisal of other projects that seek to promote sustainability. The hypothesis tested by this work is that policy makers in the heritage sector need to pay regard to a 'bespoke' application of sustainability when devising indicators to measure the consequences of their actions. It follows that the null hypothesis, therefore, is that such projects

can be measured by generic indicators, applicable to both heritage and non-heritage projects.

Young, Robert. "Striking Gold: Historic Preservation and LEED." *Journal of Green Building* 3.1 (2007).

This article explores the growth and emergence of the preservation movement as an increasingly recognized and important form of sustainable design. The article provides an overview of the relationship between the preservation and environmental movements, exemplifying how to multiply the benefits of historic preservation and environmental stewardship. The article uses the case study of the W. P. Fuller Paint Company Building in Salt Lake City. This project is among the first to simultaneously incorporate LEED and Historic Preservation Tax Incentives to achieve a "Gold" rating by LEED while meeting conformance requirements to the Secretary of the Interior's Standard for Rehabilitation and earning a 20% historic preservation tax credit.

APT Bulletin: The Journal of Preservation Technology "Special Green Issue" 36.4 (2005).

Caramitru, Ion, et al. "Session III: Policies for Culture in Sustainable Development." Proceedings of Culture Counts: Financing, Resources, and the Economics of Culture in Sustainable Development, October 4-7, 1999, Florence, Italy. Washington, DC: The World Bank, 2000. 49-60.

Chusid, Jeffrey M. "Natural Allies: Historic Preservation and Sustainable Design." In Steven A. Moore, ed. *Pragmatic Sustainability: Theoretical and Practical Tools*. New York: Routledge, 2010.

Deakin, Mark, et al, eds. *Sustainable Urban Development Volume 2: The Environmental Assessment Methods*. Oxford: Taylor & Francis, 2007.

De Groot, R. "Function-Analysis and Valuation as a Tool to Assess Land Use Conflicts in Planning for Sustainable, Multi-Functional Landscapes." *Landscape and Urban Planning* 75.3-4 (2006): 175-186.

Farr, Douglas. *Sustainable Urbanism: Urban Design with Nature*. Hoboken, NJ: John Wiley & Sons, Inc., 2007.

Gražulevičiute, I. "Cultural Heritage in the Context of Sustainable Development." *Environmental Research, Engineering and Management* 3.37 (2006): 74-79.

Lombardi, P. and P.S. Brandon. "A Framework for Understanding Sustainability in the Cultural Built Environment." *Cities & Sustainability: Sustaining Our Cultural Heritage*, Conference Proceedings, Vishva Lekha Sarvodaya, Sri Lanka, cap.IV, 2000. Eds. Lombardi, P., et al. 1-25.

McMahon, Edward T. "Sustainability and Property Rights." *Urban Land*, June 2005: 30-33.

Moreno, Y.J., W. Santagata, and A. Tabassum. "Material Cultural Heritage, Cultural Diversity and Sustainable Development." ACEI, 13th International Conference on Cultural Economics, June 3-5, 2004, University of Illinois at Chicago, Department of Economics, Chicago, Illinois.

National Trust for Historic Preservation website: <http://www.preservationnation.org/issues/sustainability/>

Rypkema, Donovan. "Economics, Sustainability, and Historic Preservation." National Preservation Conference, October 1, 2005, Portland, Oregon.

- » "New Life in Warehouse Districts: The Inherent Sustainability in the Adaptive Reuse of Industrial Sites." *Sustainable Urban Redevelopment* (Spring 2008): 6-12.
- » "Economics, Sustainability, and Historic Preservation." *Forum Journal* 20.1 (2005).
- » "Historic Preservation as Sustainable Development." *North Carolina Preservation Magazine*, Spring 2005.

Stubbs, Michael. "Heritage-Sustainability: Developing a Methodology for the Sustainable Appraisal of the Historic Environment." *Planning Practice and Research* 19.3 (August 2004): 285-305.

Tweed, Christopher and Margaret Sutherland. "Built Cultural Heritage and Sustainable Urban Development." *Landscape and Urban Planning* 83.1 (2007): 62-69.

Wheeler, Stephen M. and Timothy Beatley, eds. *The Sustainable Urban Development Reader*. New York: Routledge, 2004.

2. GEOGRAPHIC / INFORMATION TECHNOLOGY AND HISTORIC PRESERVATION

Recent innovations in technology have opened new avenues and possibilities for measuring the economic impact of historic preservation. Mapping techniques have allowed for the visualization of valuable information that informs policy makers, practitioners, academics, community members, and other stakeholders by presenting data in an easily understood format. Other forms of media technology have altered the way in which information is conveyed, changing the landscape of cultural economics and heritage. The relationship between technology and historic preservation is expanding and will likely continue to create new ways in which the values of heritage resources can be communicated.

Ost, Christian. "A Guide for Heritage Economics in Historic Cities: Values, Indicators, Maps, and Policies." Getty Conservation Institute. (2009).

Ost uses familiar language but approaches measurement of heritage economics in a values-based framework, beginning with use value then distinguishing between direct and indirect values and the *indicators* that can be used to measure heritage's economic impact. Some of his suggested indicators are specific, such as the visitor/resident ratio to measure tourism pressures, full- versus part-time residency, population decline/increase, and rental rates. He also suggests *mapping* as a powerful tool, then describes various methods for *policy* approaches, including cost-benefit analysis and multi-criteria analysis.

Indicators – explains how to measure the economic value by the use of indicators. Based on definitions of the economic values of a historic city's cultural heritage, it suggests categories of indicators for each component of the total economic values. It also describes economic and strategic analysis of historic cities using heritage indicators.

Indicators are used to communicate performance and guide decision-making. They are well regarded as a way to test a city's performance. Heritage's contributions to a city's economic performance can also be measured by indicators. Page 41 has a good chart of examples of

such indicators. He suggests their use because they're low-cost, and can be gathered without a huge amount of difficulty or time.

Mapping – explains how to present economic landscapes, from data or indicators to maps. The mapping process is defined, along with its specific software and on database requirements. The purpose of this section is also to prepare the decision-making process by using mapping techniques compatible to urban-planning methods.

Policies – proposes methodologies to city authorities – as macroeconomic policy makers – to enhance planning and managing of heritage conservation, such as cost-benefit analysis and multi-criteria analysis applied to historic cities, with the goal of achieving a balance between conservation and city development.

Bodurow, Constance C., Calvin Creech, Alan Hoback, and Jordan Martin. "Multivariable Value Densification Modeling Using GIS." *Transactions in GIS* 13 (2009): 147-75.

The article focuses on the development and use of a GIS mapping tool – called the Value Densification Community Mapping Project (VDCmp) – used primarily to evaluate density of resources and physical features. The authors focused on Southwest Detroit, Michigan, as a case study. This project was developed to explore how aspects of the post-industrial city can be understood, communicated, and leveraged in service of equity and sustainability and to use technology to reveal data about the city in order to convince community, political, and economic leadership to embrace a broader interpretation of value. The VDCmp digital interface is unique in that it models "social exchanges" in three dimensions and allows the user to overlay social and infrastructure layers with physical density. These techniques have allowed the community groups to visually identify over- or under-served resources, conflicting planning objectives, environmental health impacts, or areas of social inequality, with an end-goal of developing a dynamic, unified development and preservation strategy for the community.

OTHER

Heuer, Tad. "Living History: How Homeowners in a New Local Historic District Negotiate Their Legal Obligations." *The Yale Law Journal* 116.4 (2007): 768-822. American historic preservationists are increasingly emphasizing the need to preserve not only prominent landmarks but also the vernacular architectural culture of "ordinary neighborhoods." Preserving such neighborhoods often requires convincing homeowners to agree to legal restrictions on how they maintain their homes, yet to date there has been no empirical research on how homeowners have responded to the policy tradeoffs inherent in making such a decision. This Note fills that gap, using extensive original empirical research to examine how homeowners in New Haven's recently approved City Point Local Historic District viewed and managed their legal obligations. This Note then draws upon these data to develop policy recommendations for improving local preservation efforts nationwide. (Abstract taken from publication)

Kaminski, Jaime, Jim McLoughlin, and Babak Sodagar. "Assessing the Socio-economic Impact of Heritage: From Theory to Practice." *Technology Strategy, Management and Socio-economic Impact*. Budapest: Archaeolingua, 2007. This chapter describes the key dimensions and interconnections that drive impact and combines this with a typology of impacts and accompanying measurement considerations. This theoretical construction is converted into a practical tool for assessing and measuring impact through the new 6Cs HIT (Heritage Impact Training) model, which is designed to help heritage managers, strategists, and policy makers implement coherent and effective approaches to capturing the socio-economic impacts of heritage.

Rypkema, Donovan. *Feasibility Analysis of Historic Buildings*. Washington, DC: National Trust for Historic Preservation, 2007. Rypkema provides a thorough methodology for assessing the feasibility for reuse of a historic building. Through step-by-step guidelines, he takes users through the stages of determining the potential outcomes for a heritage building, emphasizing the importance of capitalizing

upon each team member's strengths and the economic impact of potential uses.

ANNOTATED BIBLIOGRAPHY

Below is a listing of pertinent additions to Mason's 2005 Brookings Institute annotated bibliography.

A. "FIRST TEN READINGS"

Peacock, Alan, and Ilde Rizzo. *The Heritage Game: Economics, Policy, and Practice*. Oxford: Oxford University Press, 2008.

A notable feature in cultural life is the growing demand to preserve and promote public access to historical buildings and sites, and artistic treasures of the past. Governments are increasingly involved in financing and regulating private attempts to meet this growing demand as well as extending their own provision of these treasures in state and locally owned museums and galleries. These developments raise important issues about the scope, content, and relevance of heritage policies in today's world. Written by two leading figures in the field of cultural economics, this authoritative book focuses on the impact of economic analysis on the formulation and implementation of heritage policy. (Abstract taken from publication)

Journal of Cultural Economics

Journal of Cultural Heritage Management and Sustainable Development

B. OVERARCHING WORKS ON ECONOMICS AND HISTORIC PRESERVATION

Bowitz, Einar and Karin Ibenholt. "Economic Impacts of Cultural Heritage – Research and Perspectives." *Journal of Cultural Heritage* 10.1 (January-March 2009): 1-8.

Doyle, Gillian. "Why Culture Attracts and Resists Economic Analysis." *Journal of Cultural Economics* 34 (2010): 245-259.

Glaeser, Edward. *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Healthier and Happier*. New York: Penguin Press, 2011.

Mason, Randall. "Be Interested and Beware: Joining Economic Valuation and Heritage Conservation." *International Journal of Heritage Studies* 14.4 (2008): 303-318.

Snowball, J.D., *Measuring the Value of Culture: Methods and Examples in Cultural Economics*. Berlin: Springer, 2008.

C. ECONOMICS OF THE ARTS AND CULTURE

Anheier, Helmut K., and Yudhishtir Raj. Isar. *The Cultural Economy: Cultures and Globalizations*. London: Sage, 2008.

This second volume *The Cultural Economy* analyses the dynamic relationship in which culture is part of the process of economic change that in turn changes the conditions of culture. It brings together perspectives from different disciplines to examine such critical issues as:

- » the production of cultural goods and services and the patterns of economic globalization
- » the relationship between the commodification of the cultural economy and the aesthetic realm
- » current and emerging organizational forms for the investment, production, distribution, and consumption of cultural goods and services
- » the complex relations between creators, producers, distributors, and consumers of culture
- » the policy implications of a globalizing cultural economy

Currid, Elizabeth, "How Art and Culture Happen in New York: Implications for Urban Economic Development." *Journal of the American Planning Association* 73.4 (2007). This article looks closely at the mechanisms that structure and drive the cultural economy and suggests possible avenues for cultural economic development and policymaking based on these mechanisms. The author focuses on how cultural producers obtain jobs, advance their careers, gain value for their goods and services, and interact with each other.

Butcher, Jim. "Cultural Politics, Cultural Policy and Cultural Tourism." *Cultural Tourism in a Changing World: Politics, Participation and (Re)presentation*. By Melanie K. Smith and Mike Robinson. Clevedon, UK: Channel View Publications, 2006: 21-35.

Cowen, Tyler. "Why Everything Has Changed: The Recent Revolution in Cultural Economics." *Journal of Cultural Economics* 32.4 (December 2008): 261-273. DeNatale, Douglas and Gregory H. Wassall.

"Creative Economy Research in New England: A Reexamination." White paper prepared for discussion at the Research Convening of the New England Research Community, New England Foundation for the Arts (March 27, 2006).

DeNatale, Douglas and Gregory H. Wassall. "New England's Creative Economy: The State of the Public Cultural Sector – 2005 Update. A new research methodology." New England Foundation for the Arts (August, 2006).

Evans, Graeme. "From cultural quarters to creative clusters: creative spaces in the new city economy." *The Sustainability and Development of Cultural Quarters: International Perspectives*. Edited by M. Legner. Stockholm: Institute of Urban History, 2009: 32-59.

Evans, Graeme. "Creative Cities, Creative Spaces and Urban Policy" *Urban Studies* 46.5&6 (2009): 1003-1040.

Frey, Oliver. "Creativity of Places as a Resource for Cultural Tourism," in *Enhancing the City: New Perspectives for Tourism and Leisure: Urban and Landscape Perspectives*, vol. 6. Edited by Giovanni Maciocco and Silvia Serreli. New York: Springer, 2009: 135-154.

Ginsburgh, Victor A. and David Throsby, eds. *Handbook of the Economics of Art and Culture*. Amsterdam: Elsevier, 2006.

Grodach, C. "Cultural Development Strategies and Urban Revitalization." *International Journal of Cultural Policy* 13.4 (2007): 349-370.

Madden, Christopher. "Indicators of Arts and Cultural Policy: A Global Perspective." *Cultural Trends* 14.3 (September 2005): 217-247.

Markusen A. "Urban development and the politics of a creative class: evidence from a study of artists." *Environment and Planning* 38.10 (2006): 1921 – 1940.

Potts, Jason, Stuart Cunningham, John Hartley, and Paul Ormerod. "Social network markets: a new definition of the creative industries." *Journal of Cultural Economics* 32.3 (2008): 167-18.

"Culture and Economic Performance: What strategies for sustainable employment and urban development planning?" *Forum d'Avignon*. Prepared by Ineum Consulting and Kurt Salmon Associates. 2010. http://www.forum-avignon.org/sites/default/files/editeur/2010_Etude_Ineum_UK.pdf

D. ENVIRONMENTAL ECONOMICS

Cato, Molly Scott. *Green Economics: An Introduction to Theory, Policy and Practice*. London: Earthscan, 2009.

Davis, Steven M. "Preservation, Resource Extraction, and Recreation on Public Lands: A View from the States." *Natural Resources Journal* 48.303 (2008).

E. WORKS ON THE NOTION OF VALUE

Maskey, Vishakha, Cheryl Brown, and Ge Lin. "Assessing Factors Associated With Listing a Historic Resource in the National Register of Historic Places." *Economic Development Quarterly* (2009).

The authors focus on the socioeconomic, institutional, and location factors behind a community's reasons for approving or disapproving of historic district listings. Findings are summarized here: Two separate models of total historic listings and rate of historic house listings in the National Register identify the following: number of higher education institutions and older houses, rural area, more than one historic preservation organization, proportion of females, and the share of income in the service economy. Age, poverty rate, and the Gini coefficient of income inequality have an inverse relationship with listing.

Levi, Daniel J. "Does History Matter? Perceptions and Attitudes toward Fake Historic Architecture and Historic Preservation." *Journal of Architectural and Planning Research* 22:2 (Summer 2005).

Mason, Randall. "Theoretical and Practical Arguments for Values-Centered Preservation." *CRM: The Journal of Heritage Stewardship* 25 (Summer 2006): 21-48.

Provins, Allan, David Pearce, Ece Ozdemiroglu, Susana Mourato, and Sian Morse-Jones. "Valuation of the historic environment: the scope for using economic valuation evidence in the appraisal of heritage-related projects." *Progress in Planning* 69 (2008): 131-175.

F. BASIC COST STUDIES / DESCRIPTIVE WORK

Ozdil, Taner R. "Assessing the Economic Revitalization Impact of Urban Design Improvements: The Texas Main Street Program." Diss. Texas A&M University, 2006.

G. ECONOMIC IMPACT STUDIES

Many of these studies have focused on the holistic economic impact of a state's tax credit and grant programs, non-profit activities, and private investment, while others have more narrowly analyzed the impact of specific programs. Standard indicators such as jobs, household income, and private investment continue to be used as primary quantitative units of measurement. However, the expansion of thinking within urban planning and public policy towards sustainability and the creation of livable neighborhoods has led many academics and practitioners to focus on new indicators that are representative of these shifting priorities. These include walkability, embodied energy, infrastructure savings, and waste saved from landfills.

The subcategories below – National, State, Tax Credits, Tourism, and Public Lands and Outdoor Recreation – attempts to distinguish the focus of the studies by theme, however it should be noted that in some cases there is significant overlap. For example, a statewide study may include tourism impacts in its scope. Similarly, a tourism study may focus entirely on an outdoor recreation area.

For more details on the focus of each study, please see Appendix B.

a. National

Measuring the Economic Impact of Federal Historic Properties (2005)

Prepared by the Federal Preservation Institute.

https://www.historicpreservation.gov/c/document_library/get_file?uuid=6d67e144-49b2-4088-8506-46694fab5757&groupId=14502

This 45-page report discusses the difficulties in measuring the economic impact of preservation and advocates for federal agencies to engage in measuring the economic impacts of their historic preservation programs. It describes in detail the metrics and methodologies commonly used and their implications for the agencies. Measuring such impacts would help agencies understand the economic contributions of their historic preservation activities.

Blue, Gray, and Green: A Battlefield Benefits Guide for Community Leaders (2006)

Prepared by Davidson – Peterson Associates for The Civil War Preservation Trust.

<http://www.civilwar.org/land-preservation/blue-gray-and-green-report.pdf>

The full report analyzes the economic impact on local communities of the preservation of 20 historic battlefields.

b. State

The Economic Benefits of Historic Preservation in Colorado (2005)

Prepared by Clarion Associates of Colorado, LLC in association with BBC Research and Consulting for The Colorado Historical Foundation.

http://www.blm.gov/heritage/adventures/HT_Resources/Colorado%20Historical%20Foundation/ECONOMIC%20BENEFITS%20OF%20HISTORIC%20PRESERVATION%20IN%20COLORADO%20.pdf

This report looks at the state and federal historic preservation tax credit, the state historical fund, heritage tourism, property values, and Colorado's Main Street program.

Banking on Tennessee's History: The Economic Value of Historic Preservation to the People of Tennessee (2005)

Prepared by the Tennessee Preservation Trust.

<http://www.sitemason.com/files/evPV1C/Banking%20on%20Tennessee%20History.pdf>

This report addresses public/private partnerships, downtown revitalization, job creation, heritage tourism, and property values.

Economic Impacts of Historic Preservation in Arkansas (2006)

Prepared by the Center for Urban Policy Research at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey for the Arkansas Historic Preservation Program.

<http://www.arkansaspreservation.org/economic-benefits/>

The report was prepared during the advocacy for a state historic preservation tax credit. It examines economic impacts of the federal historic preservation tax credit, rehabilitation, grant programs, heritage tourism, Main Street, and property values.

Contributions of Historic Preservation to the Quality of Life of Floridians (2006, 2010 update)

<http://www.flheritage.com/preservation/economic-impact.cfm>

Two reports are available. Sections include: "Quality of Life Indicators"; "Preservation Law and Policies"; "Heritage Tourism"; "History Museums"; "Historic and Affordable Housing."

Report Card: The Economic Impacts of Historic Preservation in Michigan (2006)

Original 2002 report prepared by Clarion Associates for the Michigan Historic Preservation Network.

<http://www.preservationnation.org/issues/rehabilitation-tax-credits/addtional-resources/Michigan-Report-on-Tax-Credit.pdf>

Two reports are available. Key chapter/section titles of the original report: "Rehabilitation of Historic Buildings"; "Historic Districts and Property Values"; "Preservation and Michigan Tourism."

Preservation at Work for the Nebraska Economy (2007)

Prepared by the Center for Urban Policy Research at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey for the Nebraska State Historical Society and the Nebraska State Historic Preservation Office.

<http://www.nebraskahistory.org/histpres/publications/EconImpactReport.pdf>

This 16-page illustrated report summarizes the findings of the study referenced below, *Economic Impacts of Historic Preservation in Nebraska*.

Economic Impacts of Historic Preservation in Nebraska (2007)
http://www.nebraskahistory.org/histpres/publications/Nebraska_Hist_Pres_Econ.pdf

This full report addresses rehabilitation, heritage tourism, the Main Street Program, historic sites and museums, historic tax credits, and historic property valuation.

The Economic Benefits of Historic Preservation in Washington State: Technical Report (2007)

Prepared by Matt Dadswell, Tetrattech, Inc and William Beyers, University of Washington for the Washington Department of Archaeology and Historic Preservation.
http://www.dahp.wa.gov/pages/HistoricSites/documents/FinalTechnicalReport_January30.pdf

This report focuses on the economic impact of federal and state historic preservation tax credits, Main Street programs, heritage tourism, and the impact of historic designation on property values.

Historic Preservation in Kentucky (2008)

Prepared by John I. Gilderbloom, Erin E. House and Matthew J. Hanka for Preservation Kentucky.
<http://sun.louisville.edu/preservation/PreservationinKentucky201-29-08.pdf>

The report focuses on affordable housing, property values, tax incentive programs, Main Street programs, heritage tourism, rural heritage, jobs, and environmental benefits. It also provides a demographic background of the state's population and recommendations for local and state government.

Economic Impacts of Historic Preservation in Oklahoma (2008)

Prepared by the Center for Urban Policy Research at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey for Preservation Oklahoma.

www.okhistory.org/shpo/econimpact.pdf
www.okhistory.org/shpo/econimpactes.pdf

Two reports are available: a 393-page technical report and a 34-page executive summary. The study includes a detailed analysis of the economic impacts of general rehabilitation work in Oklahoma; of redevelopment completed under the federal and state rehabilitation tax credits programs; of the Oklahoma Main Street Program; of heritage tourism initiatives; and of local historic district designation.

The Abell Report: March 2009 -- Heritage Tax Credits: Maryland's Own Stimulus to Renovate Buildings for Productive Use and Create Jobs, an \$8.53 Return on Every State Dollar Invested (2009)

Prepared by Lipman Frizzell & Mitchell and Northeast-Midwest Institute for the Abell Foundation.
<http://www.abell.org/pubsitems/arn309.pdf>

This report addresses economic impacts such as job creation, leverage of historic preservation investment, generation of state and local taxes. Significantly, it also includes a substantial section on environmental impacts. These are measured using infrastructure savings, calculations of landfill savings, embodied energy, walkability, climate change, and greenfields. Some of the key findings include:

- » The reuse of extant historic structures over the past 12 years resulted in an infrastructure investment "savings" of \$102-\$163 million.
- » Assuming each tax credit preservation project to be an alternative to demolition, the state's investment in historic commercial properties has "saved" 387,000 tons of material from landfills over the past 12 years. This amount of landfill material is the equivalent of filling a football stadium to a depth of 50-60 feet.

The Economic Impact of Historic Preservation in Philadelphia (2010)

Prepared by Econsult Corporation for the Preservation Alliance of Greater Philadelphia.
http://www.preservephiladelphia.org/wp-content/uploads/Econ_Report_Final.pdf

The report examines federal historic preservation tax credit projects, investment on other real estate projects, investment by government and other non-profit entities, residential conversions, heritage tourism, the impact of the film industry in Philadelphia, historic resources and the urban form, and the real estate impact of historic designation.

The Economic Impact of Historic Preservation in Southwestern Pennsylvania (2010)

Prepared by the Young Preservationists Association of Pittsburgh.
<http://www.youngpreservationists.org/YPADocs/Economic%20Impact%20in%20SW%20PA.pdf>

The study examines construction and trade-related jobs produced during rehabilitation, new permanent employment positions established as a result, new business development, housing unit creation, and annual tax benefit generated.



Economic Impact of Historic Rehabilitation Tax Credits in Kansas (2010)

Prepared by the Center for Urban Policy Research at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey for Kansas Preservation Alliance.

http://www.kshs.org/preserve/documents/Kansas_40_Page_Report_for_Web.pdf

The report focuses on trends regarding geographic dispersion of tax credits projects, jobs, income, tax base, and a comparison of activity before and after the implementation of the Kansas state historic rehabilitation tax credit.

An Evaluation of the Missouri Historic Preservation Tax Credit Program's Impact on Job Creation and Economic Activity Across the State (2010)

Prepared by Sarah L. Coffin, Rob Ryan and Ben McCall, Saint Louis University for The Missouri Growth Association.

http://www.novoco.com/historic/resource_files/research/slu_mo_hptc_0310.pdf

The 35-page report examines the impact of the state's tax credit via jobs, income, affordable housing and environmental impact.

First Annual Report on the Economic Impact of the Federal Historic Tax Credit (2010)

Prepared by the Center for Urban Policy Research at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey for the National Trust Community Investment Corporation.

<http://www.preservationnation.org/issues/community-revitalization/jobs/Rutgers-Report.pdf>

The report provides a cumulative look at the economic impact of the federal historic tax credit using data provided by the National Park Service. It includes such indicators as jobs, income, affordable housing and taxes.

The Economic and Fiscal Impact on Maine of Historic Preservation and the State Historic Preservation Tax Credit (2011)

Prepared by Planning Decisions, Inc for Maine Preservation.
http://www.novoco.com/historic/resource_files/research/me_htc_impact_042111.pdf

This 27-page report provides a summary of impact of preservation in Maine from 2007-2011, highlighting jobs, income, affordable housing and property values.

Second Annual Report on the Economic Impact of the Federal Historic Tax Credit (2011)

Prepared by the Center for Urban Policy Research at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey for the National Trust Community Investment Corporation.

http://www.preservationnation.org/issues/community-revitalization/jobs/2nd_Annual_Rutgers_Report.pdf

The report provides an update of the first report, using updated data from the National Park Service.

d. Tourism

2005 Heritage Tourism Spending in Delaware and Lehigh National Heritage Area (2005)

http://www.nationalheritageareas.com/documents/DL_MGM2_Final_2005_Fact_Sheet.pdf

Produced by Public Works.

This short fact sheet highlights the impact of tourism spending on jobs, income, and total direct and indirect economic impact to the region.

Economic Impact of Heritage Tourism Spending (2005)

http://www.nationalheritageareas.com/documents/ANHA_Eco_Imp_Report_2005_MGM2.pdf

Produced by the Alliance of National Heritage Areas.

The study focuses on job creation, visitor spending, visitor behavior, profits and rents, indirect business taxes, and income.

Cultural Tourism in Indiana: The Impact and Clustering of the Arts and Creative Activities in this Recession (2009)

Prepared by Ball State University's Center for Business and Economic Research (CBER).

<http://cms.bsue.edu/Academics/CentersandInstitutes/BBR/CurrentStudiesandPublications.aspx>

The study found that the arts and creative activities account for \$4.9 billion in direct economic activity and employ 43,000 workers in Indiana.

e. Public Lands and Outdoor Recreation

Economic Impact of Pennsylvania's Heritage Areas: A Study in Success (2008)

http://www.heritagepa.net/publication_files/summary-of-economic-impact-study.pdf

Sponsored by Heritage PA.

The study used visitor surveys and the MGM2 model to identify job creation, visitor spending, direct and indirect economic effects.

The Economic Impact of Arizona's State Parks (2009) http://www.pr.state.az.us/publications/downloads/2009_ASP_Economic_Impact_c.pdf

Prepared by The Arizona Hospitality Research & Resource Center, Center for Business Outreach, Northern Arizona University.

The study found that the total economic impact of Arizona State Parks on the state during FY 2007 was \$266,436,582. Of that, historic parks accounted for \$35.4 million.

A Development and Economic Impact Study of the South Carolina National Heritage Corridor (2010)

Prepared by University of South Carolina – Clemson University Tourism Research Partnership, Alfred P. Sloan Foundation – Travel & Tourism Industry Center.

<http://www.hrsm.sc.edu/travelandtourism/documents/2010ADevelopmentEconomicImpactStudySCNationalHeritageCorridor.pdf>

The study focuses on stakeholder interviews, economic impact scenarios, travelers' needs and preferences, and product development.

H. REGRESSION ANALYSES

Noonan, D. S. "Finding an Impact of Preservation Policies: Price Effects of Historic Landmarks on Attached Homes in Chicago, 1990-1999." *Economic Development Quarterly* 21 (2007): 17-33.

The article attempts to provide an example of an assessment of impact of landmark designation on property values without methodological limitations and biases.

Examples of such bias include an omitted variable such as important unobserved characteristics that likely correlate with landmark designation and can bias results. Second, if designations depend on property values or neighborhood

housing market conditions, the endogenous selection process further undermines inferences about preservation policies' effects. The article outlines more robust empirical strategies and presents new evidence on landmark designation effects on property values. For a sample of Chicago home sales during the 1990s, a hedonic price analysis suggests that landmark buildings and districts sell at a small premium. To address the omitted-variable bias, a repeat-sales approach demonstrates significant spillover effects of landmark designation on prices. These estimates are also robust to sample selection bias and some forms of spatial autocorrelation.

Ruijgrok, E. C. M. "The Three Economic Values of Cultural Heritage: A Case Study in the Netherlands." *Journal of Cultural Heritage* 7 (2006): 206-213.

The paper demonstrates that conservation of historic properties is a sound investment and that the costs of conservation are outweighed by the benefits. The authors use three measurements: a housing comfort value, a recreation value, and a bequest value. The housing comfort value is measured using the hedonic pricing method, while the recreation and bequest value are measured using the contingent valuation method.

Narwold, A., J. Sandy, and C. Tu. "Historic Designation and Residential Property Values," *International Real Estate Review* 11 (2008): 83-95.

I. STATED-PREFERENCE STUDIES: CONTINGENT VALUATION AND CHOICE MODELING

Choi, Andy S., Franco Papandrea, and Jeff Bennett.

"Assessing Cultural Values: Developing an Attitudinal Scale." *Journal of Cultural Economics* 31.4 (2007): 311-35.

The authors outline the limitations of existing attitudinal valuation methods, including contingent valuation methods. They explore the potential for the identification of latent variables that are likely to help explain the multidimensional nature of cultural value. In particular, they outline the development of a cultural worldview scale. The scale is a measure of people's underlying general attitudes such as primitive beliefs and perceptions in the major dimensions of perceived cultural value, which are represented as a limited number of latent variables.

Tuan, T. and S. Navrud. "Capturing the Benefits of Preserving Cultural Heritage." *Journal of Cultural Heritage* 9.3 (2008): 326-37.

This paper details the results from a contingent valuation (CV) study in My Son, Vietnam. The authors provide advice on the policy use of the results and the ways these benefits could be captured and used to improve the condition of the sites by using the estimated benefits for visitors to assess optimal entrance fees that maximize revenues for the site. They also perform a cost-benefit analysis of the preservation project, and show how the outcome can be used to justify investments in cultural heritage preservation.

Boter, Jaap, Jan Rouwendal, and Michel Wedel. "Employing Travel Time to Compare the Value of Competing Cultural Organizations." *Journal of Cultural Economics* 29.1 (2005): 19-33.

J. APPRAISAL STUDIES

Reynolds, Judith. *Historic Properties: Preservation and the Valuation Process*, Chicago, IL: The Appraisal Institute, 2006.

Roddewig, Richard. *Appraising Conservation and Historic Preservation Easements*. Chicago, IL: The Appraisal Institute, 2010.

Winson-Geideman, Kimberly and Dawn Jourdan. "Historic façade easements and single-family home value: a case study of Savannah, Georgia (USA)." *International Journal of Housing Markets and Analysis* 4.1, (2011): 6-17.

Winson-Geideman, Kimberly and Dawn Jourdan and Shawn Gao. "The Impact of Age on the Value of Historic Homes in a Nationally Recognized Historic District." *Journal of Real Estate Research* 33.1 (2011): 25-48. http://aux.zicklin.baruch.cuny.edu/jrer/papers/pdf/new_current/vol33n01/02.25_48.pdf

K. POLICY AND DECISION-MAKING SUPPORT

Frey, Patrice. "Building Reuse: Finding a Place on American Climate Policy Agendas." National Trust for Historic Preservation. 2009. http://www.preservationnation.org/issues/sustainability/additional-resources/building_reuse.pdf

Kurtz, Rick S. "Public Lands Policy and Economic Trends in Gateway Communities." *Review of Policy Research* 27.1 (2010): 77-88.

Noonan, D.S. and D. Krupka. "Determinants of Historic and Cultural Landmark Designation: Why We Preserve What We Preserve." *Journal of Cultural Economics* 34 (2010): 1-26 .

Schwartz, Harry K. "State Tax Credits for Historic Preservation." The National Trust for Historic Preservation's Center for State and Local Policy. (Updated October 2010).

Throsby, David. *The Economics of Cultural Policy*. New York: Cambridge University Press, 2010.

"Historic Preservation's Critical Role in the Economic and Sustainable Development Policy of New York State." The Preservation League of New York State. 2007. <http://www.uticalandmarks.org/Research/histprespolicyNY.pdf>

L. CASE STUDIES

"HeritageWorks: The Use of Historic Buildings in Regeneration – A toolkit of good practice." English Heritage (2007).

This toolkit provides valuable case studies of large-scale regeneration projects in the UK, detailing the role of historic resources in this process. The economic impact of these projects is discussed.

Gilderbloom, John I., Matthew J. Hanka, and Joshua D Ambrosius. "Historic preservation's impact on job creation, property values, and environmental sustainability." *Journal of Urbanism* 2.2 (July 2009): 83-101.

This study examines the impacts of historic preservation on jobs, property values, and environmentalism in Kentucky and its largest city, Louisville.

Coulson, N. Edward and Michael L. Lahr. "Gracing the Land of Elvis and Beale Street: Historic Designation and Property Values in Memphis." *Real Estate Economics* 33.3 (2005): 487-507.

Productivity Commission (Australian Government).

Conservation of Australia's Historic Heritage Places Inquiry report, 2006. <http://www.pc.gov.au/projects/inquiry/heritage/docs/finalreport>.

Vishakha Maskey, Cheryl Brown, Alan R. Collins, and Hala F. Nassar. "What Is Historic Integrity Worth to the General Public? Evidence from a Proposed Relocation of a West Virginia Agricultural Mill." *Agricultural and Resource Economics Review* 36.1 (April 2007) 39–52.

M. ECONOMIC DEVELOPMENT AND HISTORIC PRESERVATION

Tweed, C. and M. Sutherland. "Built Cultural Heritage and Sustainable Urban Development." *Landscape and Urban Planning* 83.1 (2007): 62-69.

The paper considers changing definitions of built heritage before outlining the broad contribution it can make to sustainable urban development. The paper then considers how the built environment contributes to the satisfaction of human needs by providing symbolic meanings that bind cultural groups and communities across generations. Results from the development and application of a novel survey method, designed to assess different people's perceptions of and attitudes to urban historical areas, are presented before describing a case study of recent urban development in Belfast that highlights the problems of intangible heritage. The paper concludes with a brief discussion of shortcomings of existing approaches to urban regeneration and suggests how these might be overcome through a greater understanding of how people interact with the urban environment and its heritage.

Department for Communities and Local Government, Regeneration. "Valuing the Benefits of Regeneration." United Kingdom, December 2010.

The report is designed to provide an analytical framework that will underpin a research methodology on the value of the benefits from regeneration and how they compare with the relevant costs. The intention for such a framework is to establish a robust evidence base, identify potential challenges, and provide constructive suggestions on how these could be overcome. Section 2 of the final report identifies three main themes of regeneration

activity: Worklessness, Skills and Business Development (18.8% of public sector expenditure on regeneration in period 2009-2011); Industrial and Commercial Property and Infrastructure (11.3% of expenditure); and Homes, Communities and the Environment (69.9% of expenditure). Within each of these three over-arching themes eight Activity Categories are identified and then a series of Activity Types. The study developed logic chains for each of the Activity Types that show how regeneration investment in each type generates different outputs that in turn contribute to outcome change.

Greenblatt, A. "Downtown Renaissance: Are Center Cities Finally Returning to Health?" *Congressional Quarterly Researcher* 16.24 (2006): 553-576.

Leinberger, Christopher B. *Turning Around Downtown: Twelve Steps to Revitalization*. Washington, DC: Brookings Institution Center on Urban and Metropolitan Policy, 2005.

Lindberg, James. "Rural Development Trends and Opportunities for Historic Preservation." *Historic Preservation Forum* 20.4 (Summer 2006): 6-14.

Mallach, Allan. *Bringing Buildings Back: From Abandoned Properties to Community Assets: A Guidebook for Policymakers and Practitioners*. New Jersey: Rutgers University Press, 2006.

Rypkema, Donovan. *Strengthening Communities through Historic Preservation*. Washington, DC: Department of Housing and Urban Development, to be released 2011.

Rypkema, Donovan. *Feasibility Analysis of Historic Buildings*. Washington, DC: National Trust for Historic Preservation, 2007.

Thurley, Simon, Louis Armstrong, and Liz Peace. *Heritage Works: The Use of Historic Buildings in Regeneration. A Toolkit of Good Practice*. England: RICS, British Property Federation, English Heritage, and Drivers Jonas, 2006. http://www.rics.org/site/download_feed.aspx?fileID=8385&fileExtension=PDF

Wagner, Fritz W., et al, eds. *Revitalizing the City: Strategies to Contain Sprawl and Revive the Core*. Armonk, NY: M.E. Sharpe, 2005.

N. GENTRIFICATION

Freeman, Lance. *There Goes the 'hood: Views of Gentrification from the Ground Up*. Philadelphia, PA: Temple University Press, 2006.

Rather than hewing to theory by asking professionals about gentrification in minority-dominated urban areas, Columbia assistant professor Freeman takes a practical approach, bringing his questions to the residents themselves. Focusing on New York City neighborhoods Harlem, in Manhattan, and Brooklyn's Clinton Hill, he asks residents about everything from widespread retail development to expensive apartments and residential developments. What he uncovers is a "nuanced reaction toward gentrification. ... welcomed by some and feared and loathed by others, and even dreaded and welcomed at the same time by the same people." It's Freeman's pursuit of this duality that makes the book strong – he's willing to admit that gentrification is both a pleasure and a problem, rather than setting up camp on one side. He explores the reasons that residents welcome gentrification, and the very real, though by no means universal benefits imparted by it. Simple experiences like grocery shopping in a clean, well-lit store, or eating at a decent restaurant, are new and much-appreciated by indigenous residents – except that those residents must struggle to afford such places, despite the measure of economic opportunity created by them. That sense of balance, combined with the powerful voices of the folks involved makes this study important and informative. (From *Publisher's Weekly*)

Lees, Loretta, Tom Slater, and Elvin K. Wyly. *Gentrification*. New York: Routledge/Taylor & Francis Group, 2008. This [was] the first ever textbook on the topic of gentrification, written for upper-level undergraduates in geography, sociology, and planning. The gentrification of urban areas has accelerated across the globe to become a central engine of urban development, and it is a topic that has attracted a great deal of interest in both the academy and the popular press. *Gentrification* is the first comprehensive introduction to the subject. It explains the

theories surrounding gentrification and includes numerous case studies explaining how it works. The book has international coverage, but also features a sharp analysis of gentrification in the United States. (Publisher abstract)

Hutton, Thomas A. *The New Economy of the Inner City: Restructuring, Regeneration and Dislocation in the 21st Century Metropolis*. New York: Routledge, 2008

D. AFFORDABLE HOUSING AND HISTORIC PRESERVATION

Arigoni, Danielle, Robin Surratt, and Janice Clark. *Making the Connection*. The Smart Growth Network Subgroup on Affordable Housing. 2009. (http://www.smartgrowth.org/pdf/epa_ah-sg.pdf)

Ceraso, Karen. "Eyesore to Community Asset: Historic Preservation Creates Affordable Housing and Livable Neighborhoods." National Housing Institute: Shelter Force Online.

Johnson, Helen. *The Economics of Rehabilitation for Affordable Housing Projects: Are the Secretary of Interior's Standards for Rehabilitation a Significant Barrier to Project Completion*. MA thesis. University of Pennsylvania, Philadelphia, Pennsylvania. 2010. [http://repository.upenn.edu/cgi/viewcontent.cgi?article=1143&context=hp_theses&sei-redir=1#search=h=""affordable+housing"+historic](http://repository.upenn.edu/cgi/viewcontent.cgi?article=1143&context=hp_theses&sei-redir=1#search=h=)

Listokin, David et al. *Best Practices for Effecting the Rehabilitation of Affordable Housing: Framework and Findings (Vol. I)*. Washington, DC: US HUD, Office of Policy Development and Research. 2006.

Rosenthal, Larry A. and David Listokin. *New or Rehab: Striking A New Balance Under California's Affordable Housing Standards*. UC Berkeley: Berkeley Program on Housing and Urban Policy. 2009. <http://escholarship.org/uc/item/6099j2wr>

Woodward, P. Historic preservation and revitalization in working-class communities. M.S. dissertation. Clemson University, Clemson, South Carolina. 2007. <http://proquest.umi.com/pqdlink?Ver=1&Exp=04-11->

2016&FMT=7&DID=1296119531&RQT=309&attempt=1&cfc=1

"Affordable Housing and Historic Preservation." The Advisory Council on Historic Preservation. Washington, DC. 2007. http://www.huduser.org/portal/publications/pdf/historic_preserv.pdf

"Comments from NCSHPO on the Advisory Council on Historic Preservation 2005 Policy Statement on Affordable Housing and Historic Preservation." National Conference of State Historic Preservation Officers. 2005.

"Making Affordable Housing in Historic Buildings." Heritage Consulting, Inc. Sponsored by Preservation New Jersey. 2011. <http://www.heritageconsultinginc.com/blog/wp-content/uploads/2011/04/Making-affordable-housing-in-historic-buildings-report-.pdf>

"The ACHP Task Force on Affordable Housing and Historic Preservation: Final Report." The Advisory Council on Historic Preservation. Washington, DC. 2005.

P. URBANIZATION AND HISTORIC PRESERVATION

Chan, E.H.W. and G.K.L. Lee. "Critical Factors for Improving Social Sustainability of Urban Renewal Projects." *Social Indicators Research* 85.2 (2008): 243-256.

Grodach, C. "Cultural Development Strategies and Urban Revitalization." *International Journal of Cultural Policy* 13.4 (2007): 349-370.

Szold, Terry S. "True Urbanism: Living in and Near the Center." *Journal of the American Planning Association* 74.2 (2008): 261-262.

Q. TAX ISSUES AND HISTORIC PRESERVATION

Pickard, Rob. "A Review of Fiscal Measures to Benefit Heritage Conservation." RICS Research Paper Series 7.6, July 10, 2007. (http://www.rics.org/site/download_feed.aspx?fileID=3508&fileExtension=PDF)

R. TOURISM AND HISTORIC PRESERVATION

Campbell, George Adrian, Thomas James Straka, Robert M. Franklin, and Ernie P. Wiggers. "Ecotourism as a revenue-generating activity in South Carolina Low

country plantations." *Journal of Ecotourism*, 1747-7638, First published on 30 March 2011.

Cela, Ariana, Sam Lankford, and Jill Knowles-Lankford. "Visitor Spending and Economic Impacts of Heritage Tourism: a Case Study of the Silos and Smokestacks National Heritage Area." *Journal of Heritage Tourism* 4.3 (2009): 245-56.

Burr, Steven W. and Jascha M. Zeitlin. "A Heritage Tourism Overview." *Utah Recreation and Tourism Matters*. Utah State University Institute for Outdoor Recreation and Tourism, January 2010.

Cerina, Fabio, Anil Markandya, and Michael McAleer. *Economics of Sustainable Tourism (Routledge Critical Studies in Tourism, Business and Management)*. New York: Routledge, 2010.

Cuccia, T. and R. Cellini. "Is Cultural Heritage Really Important for Tourists? A Contingent Rating Study." *Applied Economics* 39.2 (February 2007): 261-271.

Hampton, M.P. "Heritage, Local Communities and Economic Development." *Annals of Tourism Research* 32.3 (2005): 735-759.

Kirshenblatt-Gimblett, B. "World Heritage and Cultural Economics." *Museum Frictions: Public Cultures/Global Transformations*. Eds. Ivan Karp, et al. North Carolina: Duke University Press, 2006. 161-203.

Gelbman, Alon and Amos S. Ron. "Heritage and Cultural Tourism: The Present and Future of the Past." *Tourism Geographies* 11.1 (2009): 127-129.

Mandala, Laura. "The Cultural and Heritage Traveler," Mandala Research. 2009. http://mandalaresearch.com/index.php/purchase-reports/view_document/1-the-cultural-a-heritage-traveler-study?tmpl=component

Morris, Christine Ballengee and James H. Sanders III. "Culture, identity, representation: the economic policies of heritage tourism." *International Journal of Education through Art* 5, no. 2/3(December 2009): 129-42. Education Full Text, WilsonWeb.

Plaza, B. "Valuing museums as economic engines: Willingness to pay or discounting of cash-flows?" *Journal of Cultural Heritage* 11. 2 (2010):155-162.

Xie, Philip Fiefan. "Developing industrial heritage tourism: A case study of the proposed Jeep museum in Toledo, Ohio." *Tourism Management* 27. 6 (2006): 1321-1333.

"Heritage Tourism Handbook: A How-to Guide for Georgia." Georgia Department of Natural Resources, Historic Preservation Division. March 2010. <http://www.georgia.org/SiteCollectionDocuments/Industries/Tourism/Product%20Development/GA%20Heritage%20Tourism%20Handbook.pdf>

"The Impact of Travel on State Economies." U.S. Travel Association. June 2009. <http://commerce.idaho.gov/assets/content/docs/Research/Impact%20of%20Travel%20on%20State%20Economies%2009.pdf>

"Exploring Authentic Oregon: The Importance of Cultural Tourism." Oregon Arts Commission. September 2006. http://www.oregonartscommission.org/pdf/oac_connections_tourism_1.pdf

S. PRESERVATION ADVOCACY

Kirk, Patricia L. "Changing Places." *Urban Land*, November/December 2007.

The author details the role historic buildings can play in responding to the growing demand for housing. Residential construction has seen a trend in conversions of historic buildings to residential spaces due to scarcity

in vacant land and difficult entitlement processes. The value and use of federal and state tax credits is explored. Conversion of historic high-rises is generally more cost effective than building new ones.

Kirk, Patricia L. "Capturing the Spirit." *Urban Land*, November/December 2007.

Developers are responding to pressure to develop inner-city neighborhoods and are finding that reusing existing historic buildings is both aesthetically and financially appealing.

Ford, L.R. "Historic Preservation and the Sense of Place." *Growth and Change* 5.2 (2006): 33-37.

Loulanski, Tolina. "Revising the Concept for Cultural Heritage: The Argument for a Functional Approach." *International Journal of Cultural Property* 13.02 (2006): 207-233.

Nyron, Ron. "Historic Main Street Revivals." *Urban Land*, November/December 2007.

Rypkema, Donovan. "Globalization, Urban Heritage, and the 21st Century Economy." *Global Urban Development* 1.1 (May 2005).

"The American Contrast." *Journal of Architectural Conservation* 12.3 (November 2006).

Throsby, David. "The Value of Cultural Heritage: What Can Economics Tell Us?" Capturing the Value of Heritage, The Proceedings of the London Conference, January 25-26, 2006, Swindon, London. Ed. Kate Clark. Swindon: English Heritage, 2006. 40-43.

APPENDIX E: DATA AND PROGRAMS INCLUDED IN ECONOMIC IMPACT STUDIES

STATE GENERAL REPORTS

STATE	STUDY NAME	RESULT					PROGRAM					LINK
		JOB	HOUSE-HOLD INCOME	LEVERAGING PRIVATE FUNDS	PROPERTY VALUES	AFFORDABLE HOUSING	HISTORIC REHAB	TAX CREDITS	MAIN STREET	HERITAGE TOURISM	OTHER	
Arkansas	Economic Impacts of Historic Preservation in Arkansas (2006)	●	●	●	●		●	●	●	●	Grants Historic designation	http://www.arkansaspreservation.org/economic-benefits/
Colorado	The Economic Benefits of Historic Preservation in Colorado (2002)	●	●	●	●	●	●	●	●	Rural preservation Preservation indicators	www.coloradohistory-oahp.org/publications/1620.htm	
	The Economic Benefits of Historic Preservation in Colorado (2005)	●	●	●	●	●	●	●	●		http://www.blm.gov/heritage/adventures/HT_Resources/Colorado%20Historical%20Foundation/ECONOMIC%20BENEFITS%20OF%20HISTORIC%20PRESERVATION%20IN%20COLORADO%20.pdf	
Florida	Economic Impacts of Historic Preservation in Florida (2002)	●	●	●	●		●		●	Museums	http://www.law.ufl.edu/cgr/pdf/executive_summary_2010.pdf www.law.ufl.edu/cgr/technical-report.shtml	
	Contributions of Historic Preservation to the Quality of Life of Floridians (2006)			●		●	●	●	●	Museums	http://www.flheritage.com/qualityoflife.pdf	
Georgia	Profiting From the Past: The Economic Impact of Historic Preservation in Georgia (1999)	●			●	●	●	●	●		http://www.gashpo.org/assets/documents/profitting_from_the_past.pdf	
	Good News in Tough Times: Historic Preservation and the Georgia Economy (2011)	●	●	●	●	●	●	●	●		http://www.gashpo.org/content/displaycontent.asp?txtDocument=148	
Kentucky	Historic Preservation and the Economy of the Commonwealth: Kentucky's Past at Work for Kentucky's Future (1996)										www.preservationbooks.org/	
	Historic Preservation in Kentucky (2008)	●	●	●	●	●	●	●	●	Demographics	http://sun.louisville.edu/preservation/PreservationinKentucky2011-29-08.pdf	
Maryland	The Value of Historic Preservation in Maryland (2000)	●	●	●	●		●	●	●	Museums and the arts Film production Sustainable communities Transportation enhancements Smart Growth	http://www.preservationmaryland.org/pdf/PM_Value_scn.pdf	
	Investing in Our Communities: Maryland's Heritage Areas Program (2003)	●	●	●				●	●	Grants	http://mht.maryland.gov/documents/pdf/mhaa_economicimpact_2003.pdf	
Massachusetts	Economic Impacts of Historic Preservation in Massachusetts (2002)	●	●	●			●	●	●		http://www.sec.state.ma.us/mhc/mhcpdf/Economic_Impacts_2002.pdf	
Maine	The Economic and Fiscal Impact on Maine of Historic Preservation and the State Historic Preservation Tax Credit (2011)	●	●	●	●	●	●	●	●		http://www.novoco.com/historic/resource_files/research/me_htc_impact_042111.pdf	
Michigan	Investing in Michigan's Future: The Economic Benefits of Historic Preservation (2002)	●	●	●	●		●	●	●		www.michigan.gov/documents/ha_l_mhc_shpo_econ_benies_115616_7.pdf	

continued

State General Reports continued

STATE	STUDY NAME	RESULT					PROGRAM					LINK
		JOBS	HOUSE-HOLD INCOME	LEVERAGING PRIVATE FUNDS	PROPERTY VALUES	AFFORDABLE HOUSING	HISTORIC REHAB	TAX CREDITS	MAIN STREET	HERITAGE TOURISM	OTHER	
	Report Card: The Economic Impacts of Historic Preservation in Michigan (2006)	●	●	●	●		●	●		●		http://www.preservationnation.org/issues/rehabilitation-tax-credits/additional-resources/Michigan-Report-on-Tax-Credit.pdf
Missouri	Economic Impacts of Historic Preservation in Missouri (2001-2002)	●	●	●			●	●	●			www.dnr.mo.gov/shpo/RutgersStudy.pdf
Nebraska	Economic Impacts of Historic Preservation in Nebraska (2007)	●	●	●	●	●	●	●	●	Historic sites and museums		http://www.nebraskahistory.org/histpres/publications/Nebraska_Hist_Pres_Econ.pdf
New Jersey	Partners in Prosperity: The Economic Benefits of Historic Preservation in New Jersey (1998)	●	●	●	●		●	●		Historic sites and organizations		http://www.njht.org/dca/njht/publ/downloading_partners_prosperity.html
New York	New York: Profiting Through Preservation (2000)	●	●	●		●			●	Arts and culture		http://www.placeeconomics.com/pub/PlaceEconomicsPUB2001.pdf
North Carolina	Profiting from the Past: The Impact of Historic Preservation on the North Carolina Economy (1998)											www.preservationbooks.org/
Oklahoma	Economic Impacts of Historic Preservation in Oklahoma (2008)	●	●	●	●	●	●	●	●			www.okhistory.org/shpo/econimpact.pdf
Pennsylvania	The Economic Impact of Historic Preservation in Philadelphia (2010)	●	●	●	●			●				http://www.preservephiladelphia.org/wp-content/uploads/Econ_Report_Final.pdf
	The Statewide Economic Impact of Federal Historic Preservation Investment Tax Credit Projects in Southeastern Pennsylvania	●	●	●				●				http://www.preservationnation.org/issues/rehabilitation-tax-credits/additional-resources/Study_20100428_HistPresSoutheastern.pdf
Rhode Island	Economic Effects of Historic Preservation in Rhode Island (1996)						●	●				www.preservationbooks.org/
South Carolina	Smiling Faces Historic Places: The Economic Benefits of Historic Preservation in South Carolina (2003)	●	●	●	●	●			●	●		http://shpo.sc.gov/NR/rdonlyres/AAB5C630-95E3-408E-8694-08C8A382DA70/0/hpEconomicsbooklet.pdf
Tennessee	Banking on Tennessee's History: The Economic Value of Historic Preservation to the People of Tennessee (2005)	●		●	●		●	●	●	●	Public private partnerships	http://www.sitemason.com/files/evPV1C/Banking%20on%20Tennessee%20History.pdf
Texas	Historic Preservation at Work for the Texas Economy (1999)	●			●		●		●	●		www.thc.state.tx.us/publications/reports/EconImpact.pdf
Virginia	Virginia's Economy and Historic Preservation: The Impact of Preservation on Jobs, Business, and Community (1995)											www.preservationbooks.org/
Washington	The Economic Benefits of Historic Preservation in Washington State (2007)	●	●		●		●	●	●	●		http://www.dahp.wa.gov/pages/HistoricSites/documents/FinalTechnicalReport_January30.pdf
West Virginia	Economic Impact of Historic Preservation in West Virginia (1997)	●	●		●		●	●	●	●	Grants	www.paww.org/econimpact.htm

STATE TAX CREDIT REPORTS

STATE	NAME	JOBS	TAX BASE	AFFORDABLE HOUSING	HOUSEHOLD INCOME	SMART GROWTH/ ENVIRONMENTAL IMPACT	LEVERAGING OF PRIVATE FUNDS	CONSTRUCTION	OTHER	LINK
Delaware	The Delaware Historic Preservation Tax Credit Program: Good for the Economy, Good for the Environment, Good for Delaware's Future (2009)	●		●	●	●	●	●		http://history.delaware.gov/pdfs/rypkemaReport.pdf
Iowa	Iowa's Historic Preservation and Cultural and Entertainment District Tax Credit Program Evaluation Study (2009)								Primarily reporting tax credit activity – number of tax credits/year and geography	http://www.iowa.gov/tax/taxlaw/HistoricPreservationCreditStudyMar09.pdf
Kansas	Economic Impact of Historic Rehabilitation Tax Credits in Kansas (2010)	●	●		●		●	●	Comparison of activity before and after state tax credit	http://www.kshs.org/preserve/documents/Kansas_40_Page_Report_for_Web.pdf
Maryland	State of Maryland Heritage Structure Rehabilitation Tax Credits: Economic and Fiscal Impacts (2002)	●	●		●		●	●		http://www.preservemd.org/html/resources.html
	Maryland Heritage Structure Tax Credit Program Economic and Fiscal Impacts (2003)	●				●			Forecast of eligible properties, high cost rehab projects, rehab expenditures and environmental impact	
	Final Report of the Governor's Task Force on Maryland's Heritage Structure Rehabilitation Tax Credit Program (2004)	●	●		●		●	●		
	Economic and Fiscal Analysis of Changes to the Historic Preservation Tax Credit Program in Maryland (2006)	●	●		●					
	The Abell Report: March 2009 – Heritage Tax Credits: Maryland's Own Stimulus to Renovate Buildings for Productive Use and Create Jobs, an \$8.53 Return on Every State Dollar Invested (2009)	●	●		●		●	●	Revitalization	http://www.abell.org/pubsitems/arn309.pdf
	The Environmental and Energy Conservation Benefits of the Maryland Historic Tax Credit Program (2009)	●				●		●		http://www.preservationnation.org/issues/rehabilitation-tax-credits/additional-resources/EnvEnergyImpactsMDHistTaxCredit.pdf
Missouri	An Evaluation of the Missouri Historic Preservation Tax Credit Program's Impact on Job Creation and Economic Activity Across the State (2010)	●		●		●	●	●		http://www.novoco.com/historic/resource_files/research/slu_mo_hptc_0310.pdf
North Carolina	A Profitable Past, A Priceless Future: The Economic Impact of North Carolina's Historic Tax Credit (2008)	●	●		●		●		New economic activity	http://www.presnc.org/index.php?option=com_docman&task=doc_download&gid=94&Itemid=103
Rhode Island	Rhode Island Historic Preservation Investment Tax Credit Economic and Fiscal Impact Analysis (2005)	●	●	●	●		●	●		http://www.ncshpo.org/current/pdf/initiatives/RhodeIsland.pdf
Virginia	Prosperity Through Preservation: Virginia's Historic Rehabilitation Tax Credit Program (2008)	●	●		●	●	●		Revitalization	http://www.dhc.virginia.gov/pdf_files/Prosperity%20through%20Preservation.pdf
National	First Annual Report on the Economic Impact of the Federal Historic Tax Credit (2010)	●	●	●	●		●	●		http://www.preservationnation.org/issues/community-revitalization/jobs/Rutgers-Report.pdf
National	Second Annual Report on the Economic Impact of the Federal Historic Tax Credit (2011)	●	●	●	●		●	●		http://www.preservationnation.org/issues/community-revitalization/jobs/2nd_Annual_Rutgers_Report.pdf
OTHER										
Hawaii	The Economic Benefits of State Historic Preservation Investment Tax Credits	This report does not focus on tax credits in Hawaii, but rather provides a summary of study results from other states to encourage the creation of a Hawaii state credit.								http://www.historichawaii.org/WhyPreserve/State_Tax_Credit_Rept_Jan20_2008.pdf



Preserving America's Heritage

Advisory Council on Historic Preservation

1100 Pennsylvania Avenue NW, Suite 803, Washington, DC 20004

Phone: 202-606-8503 • Fax: 202-606-8647

www.achp.gov