CHAPTER NINE

Putting the Economic Impacts of Historic Preservation in Perspective

INTRODUCTION AND SUMMARY OF THE ECONOMIC IMPACTS OF HISTORIC PRESERVATION

This chapter synthesizes and lends perspective to the study's findings and illustrates how the data and analytic approaches assembled in the current analysis can be put to good use by preservationists.

To recap, the study considers in detail the economic impacts of historic rehabilitation, heritage tourism, and the operations of historic sites and organizations in New Jersey. Direct spending in these three areas annually amount to $123 million, $432 million, and $25 million respectively, for a total of $580 million. In all three cases, base data were assembled and input-output analyses applied to project total effects (direct and indirect/induced) of these activities. The issue of historic property values and property tax payments was considered as well, but in a much more exploratory fashion.

The results are summarized in Exhibit 9.1. On an annual basis, historic preservation activities in New Jersey result in 21,575 jobs (i.e., person years of employment), $572 million in income, $929 million in total wealth as realized in gross domestic product (GDP), and $415 million in total tax payments ($160 million federal, $94 million state, and $161 million local). These are the effects realized by the entire nation. The renovation of the New Jersey State House, for instance, would likely include steel purchased from Michigan, lumber from Oregon, and paint from New Jersey.

New Jersey garners nearly half of the jobs, income, and wealth benefits, and 70 percent of the taxes. On an annual basis, the in-state effects include 10,140 jobs, $263 million in income, $543 million in gross state product (GSP), and $298 million in taxes ($83 million federal, $71 million state, and $144 million local). The net in-state wealth is $460 million annually ($543 million GSP minus $83 million in federal taxes).

As noted in numerous instances in this study, the above estimates of historic preservation benefits are, if anything, *conservative*. Historic rehabilitation is understated because construction work on properties eligible for, but not yet on, federal, state, or local landmark registers is not included. Another consideration is that with financial incentives for rehabilitation on register-listed properties, which today are largely *unavailable*, the amount of rehabilitation effected on the register-listed properties would likely be significantly greater than the $123 million estimated in this study. Further, our estimate of heritage travel is also understated both in terms of the number of heritage travelers counted and the share of their spending (for heritage overnighters) that is attributed to heritage purposes. Thus, the total economic benefits attributed to New Jersey historic preservation—the 22,000 jobs (10,200 jobs in-state), $572 million income ($263 million in-state), and other substantial wealth and tax effects—are "lower" rather than "higher" estimates of magnitude.

COMPARING THE BENEFITS

How "large" are the above benefit figures? The standard economic response to almost any query is "it depends." Here, the yardstick of comparison is particularly important. Compared to the total economic scale at the national or state levels, historic preservation does not loom large. As of the mid-1990s, New Jersey has 3.7 million people employed, and its nearly 8 million residents annually earn about $150 billion. The in-state economic benefits of historic preservation—10,200 jobs and $263 million in income—is clearly a minute fraction of the statewide employment and earnings totals.

Exhibit 9.1
Summary of the Annual Economic Impacts of Historic Preservation in New Jersey

	I. ***Historic Rehabilitation*** $123 million historic rehabilitation annually results in:	*II.* ***Heritage Tourism*** 9.1 million annual adult heritage travelers, spending $432 million annually, results in:	*III.* ***Spending by NJ Historic Sites and Organizations*** $25 million in annual spending results in:	*IV.* ***Historic Stock Valuation*** Landmark properties, valued at $6 billion, annually pay property taxes of:	*V.* ***Total Examined Economic Impacts*** ***(Sum I-IV)***
NEW JERSEY DIRECT EFFECTS					
↓					
NATIONAL TOTAL IMPACTS (DIRECT and MULTIPLIER)	***National Total (Direct and Multiplier) Impacts***				
Jobs	4,607	15,530	1,438		21,575
Income	$156 million	$383 million	$33 million		$572 million
GDP*	$207 million	$559 million	$43 million	$120 million	$929 million
Taxes: *Federal*	*$41 million*	*$110 million*	*$9 million*		*$160 million*
State	*$13 million*	*$78 million*	*$3 million*		*$94 million*
Local	*$11 million*	*$28 million*	*$2 million*	*$120 million*	*$161 million*
Tax Subtotal	$65 million	$216 million	$14 million	$120 million	$415 million
↓					
NJ PORTION of NATIONAL TOTAL IMPACTS	***In-State NJ Total (Direct and Multiplier) Impacts***				
Jobs	2,316	7,085	739		10,140
Income	$81 million	$168 million	$14 million		$263 million
GSP*	$116 million	$287 million	$20 million	$120 million	$543 million
Taxes: *Federal*	*$23 million*	*$56 million*	*$4 million*		*$83 million*
State	*$8 million*	*$62 million*	*$1 million*		*$71 million*
Local	*$7 million*	*$16 million*	*$1 million*	*$120 million*	*$144 million*
Tax Subtotal	$38 million	$134 million	$6 million	$120 million	$298 million
In-State Wealth**	$93 million	$231 million	$16 million	$120 million	$460 million

*GDP=Gross Domestic Product; GSP = Gross State Product

** GSP less Federal tax payments

Source: Rutgers University, Center for Urban Policy Research, 1997

In part, the fraction is so small because economic activity in a given state is far from fully contained within that state. Recall the New Jersey State House restoration using materials from around the country. But even at the national level, historic preservation may appear of minor import when it is compared to the total economic scale of the country.

To give some order of magnitude, in the United States there is annually almost $50 billion of rehabilitation (Chapter Two) and $290 billion of travel expenditures (Chapter Four). If the New Jersey incidences of historic activity were applied (a big "if"), then nationally, on an annual basis, about $3 billion in historic rehabilitation is taking place and about $12 billion in heritage travel outlays is made. That would translate at the national level to about 600,000 jobs and $15 billion in income generated from the combination of historic rehabilitation and heritage travel. Although these national figures are consequential, when compared to national totals of about 130 million people employed and total $4.1 trillion in income (as of the mid-1990s), historic preservation does not comprise a large segment of economic activity.

Although comparing historic preservation to total economic activity at both the state and national levels is somewhat instructive, it is also misleading: nearly any individual economic activity will not appear large against the sum of all activities. For instance, of the total 125 million individuals employed in the United States as of the mid-1990s, "only" 650,000 are lawyers—or one-half of one percent of the nation's total employment; yet lawyers, and for that matter any other singled-out professional group, are not viewed as small in number.

Rather than measuring historic preservation's economic benefits by the yardstick of *all* economic activity, it is more meaningful to examine it against a more appropriate scale—of which there are many. One, for instance, is a "linked" economic activity. Thus, while preservation is not a major New Jersey employer in the totality of all employment, preservation is a contributor to the travel industry, and travel ranks third as a New Jersey economic activity.

The geographical scale of comparison is a further consideration. Thus far, we have been considering the more global scales of nation and state, but to paraphrase the adage about politics, to a practical extent "all economics are local." At the local level—and certainly for financially distressed communities, the economic contribution of historic preservation is much more noticeable. Take, for instance, the example of Trenton. Heritage tourism to this community from visitation to the State House, the Trenton Barracks, and other historic sites in the state's capital is more important to Trenton's economy than the average heritage travel effect in New Jersey.

The same is true with respect to the penetration of "bricks and mortar" historic preservation. As of 1994, about $7 million in historic rehabilitation was effected in Trenton (Chapter Two). Historic rehabilitation generates in-state income benefits of $661,376 per $1 million of initial expenditures (Exhibit 9.2). Therefore, the $7 million in Trenton historic rehabilitation translates into $5 million worth of income at the state level. While only a small share of that $5 million, in turn, is captured in Trenton, the net to Trenton is meaningful in a city with a 12 percent unemployment rate and $11,000 per capita income. By comparison, New Jersey as a whole has a 6 percent unemployment rate and $19,000 per capita income.

Exhibit 9.2

Economic Effects by Component of Historic Preservation Activity

Economic Sector	Historic Preservation Activity: Historic Rehabilitation	Heritage Tourism	Operation of Historic Sites / Organizations
	Effects Per Million Dollars of Initial Expenditure		
National			
Employment (jobs)	37.6	35.9	57.5
Income	$1,274,853	$886,747	$1,330,152
GDP	$1,688,706	$1,294,604	$1,721,179
Taxes			
State	$107,634	$179,667	$111,341
Local	$90,630	$65,788	$93,779
State			
Employment (jobs)	18.9	16.4	29.5
Income	$661,376	$389,562	$550,896
GSP	$949,464	$663,086	$801,341
Taxes			
State	$67,876	$143,926	$54,767
Local	$56,935	$36,405	$45,194
	Multipliers of Total Effects Compared to Direct Effects		
National			
Employment	2.849	2.071	2.079
Income	2.424	2.849	3.080
GDP	2.707	2.300	4.049
State			
Employment	1.543	1.398	1.347
Income	1.387	1.496	1.609
GSP	1.522	1.244	1.885

Notes: GDP = Gross Domestic Product
GSP = Gross State Product

Source: Rutgers University, Center for Urban Policy Research, 1997

Further, there is the positive support that historic rehabilitation lends to other construction activity in a community. When buildings in an historic neighborhood are rehabilitated in Trenton, doesn't this encourage further rehabilitation in the city? What often makes urban areas distinct is their place in history, so the preservation of these places fosters further rounds of renovation (as well as added tourism and other benefits). There was a total of $41 million of non-historic rehabilitation effected in Trenton—generating an in-state total benefit (including multiplier effects) of $27 million of income. Some of that income, fostered by the seed of historic preservation activity, works its way back to Trenton.

In a complementary way, much as historic rehabilitation encourages all rehabilitation in a community and, for that matter, new construction there as well, these other activities improve the climate for historic preservation. We cannot currently disentangle and measure all these effects. But the fact that they are unquantified does not mean they don't exist. The point is that at a micro scale, such as at the city of Trenton

level, historic preservation has effects that loom relatively much more significant in import than when preservation is related to the overall magnitude of national or state economic activity.

A final note on the scale of the historic preservation benefit also relates to the inadequacy of our measuring capabilities. The quality of life, educational, and other benefits of preservation are not being tallied here. For instance, in the renovation of the State House (or Waterloo Village, Monmouth Battlefield State Park, and other historic resources), we count as an economic benefit to the state's economy the job, income, and GDP-GSP effects from both the rehabilitation and the ongoing visitation. Not counted, however, is the benefit from the thousands of visitors who now, knowing more about New Jersey's important history and feeling more pride in the state, ultimately decide to live and work in the state, develop or expand businesses, refer others to visit, and so on. These benefits are elusive to measure but are there and add to the job, income, and GDP-GSP effects that are being tallied.

COMPONENTS OF THE BENEFITS

Of the benefits from historic rehabilitation noted earlier and summarized in Exhibit 9.1, the largest contribution is from heritage tourism, followed at a one-third level of impact (relative to heritage tourism) by historic rehabilitation, and then distantly by the operations of the historic sites and organizations. The main reason for the differences in their total contributions is the varying orders of magnitude of the direct effects of the respective activities. Heritage tourism leads, with $432 million in annual spending, followed by the $123 million in historic rehabilitation, and then the much more modest annual expenditure—$25[1] million by the historic sites and organizations.

The respective component contributions must be viewed holistically, however. Vibrant historic organizations and restored historic sites throughout the state are essential to a healthy heritage tourism industry in New Jersey. In fact, the multiplier effects from the operations of historic sites and organizations compare quite favorably with those of the other activities of historic rehabilitation and heritage tourism, as is shown in Exhibit 9.2. In a parallel vein is the economic "bang" per million dollars of directly invested "buck" for the different historic preservation activities, also shown in Exhibit 9.2. Construction generates a relatively high number of jobs per $1 million invested, but actually the historic sites and organizations have the highest job generator of all (perhaps reflecting their more modest wages per job). The historic sites and organizations component also has relatively high income and GDP-GSP effects per million dollars invested (Exhibit 9.2).

Thus, in looking at the components of historic preservation benefits, there is no question that on one level—that of aggregate and individual contributions with respect to jobs, income, and production—heritage tourism and historic rehabilitation are the most significant. On other levels, however, such as multiplier effects and returns per increment (e.g., per $1 million) of investment, the historic sites and organizations are a significant component in their own right. Furthermore, while ascribing effects to

[1] While the $25 million outlay represents a reduced figure for calculation purposes to avoid double counting, that figure is net of the historic rehabilitation and visitor-supported revenues associated with the historic sites/organizations. The total gross expenditures (including historic rehabilitation and visitor-supported revenues) of the historic sites and organizations is $36 million. The $36 million is clearly a fraction of the outlays of $123 million and $432 million for historic rehabilitation and heritage tourism, respectively.

separate components of historic preservation is useful on one level, it is also an artificial construct. It is historic preservation in its collective whole that impacts on the economy, and certain activities would not realize their maximum vigor in the absence of others (e.g., heritage tourism without historic sites).

Nationwide Impacts

The details of the economic effects of the $580 million in direct spending related to historic preservation activity ($123 million, $432 million, and $25 million in spending for historic rehabilitation, heritage tourism, and the operation of historic sites and organizations respectively) are contained in Exhibits 9.3 to 9.8. Item 1 of Section II in Exhibit 9.3 shows, for instance, that the direct effects to the nation of spending related to New Jersey historic preservation activity translate into 9,806 new jobs, $210 million in income, and $330 million in GDP. The GDP/investment ratio (0.57) indicates significant levels of importing of goods and services into the state in the support of the activity. From previous Chapters it is clear that this importing is primarily due to activity not related to the rehabilitation of the buildings themselves, but rather to heritage tourism and the operation of historic sites. Multiplier effects add 11,769 more jobs, $363 million more in income, and $479 million more in GDP. Therefore, the total economic impacts of spending related to New Jersey historic preservation activity—the sum of its direct and indirect and induced effects—are 21,575 new jobs (9,806 + 11,769), $573 million in additional income ($210 million + $363 million), and $809 million added to GDP ($330 million + $479 million). In all instances, the indirect and induced effects exceed the direct effects (the traditional multipliers are greater than 2.0).

Of the total 21,575 jobs generated nationwide by New Jersey activities related to historic preservation, about 75 percent are concentrated in three major sectors: retail trade (7,689 jobs or 35.6 percent); services (5,914 jobs or 27.4 percent); and manufacturing (2,737 jobs or 12.7 percent). These same three industries account for about 65 percent of the total $573 million in labor income generated (Exhibit 9.3). The lower percentage for income relative to jobs is due to the relatively lower incomes generated in the retail and service sectors. Simple division of the number of jobs into the amount of labor income generated shows that nationwide the labor income per job supporting activity related to historic preservation is $16,408 for retail trade, $24,202 for services, and $38,460 for manufacturing. Because of the concentration of jobs in retail trade and services through heritage tourism and the operation of historic sites, the nation's average labor income per job is $26,545, substantially lower than the $33,926 average income for jobs generated through the state's historic building rehabilitation. Most of these are higher-paying construction jobs.

The dichotomy in job quality is similarly stark between jobs created indirectly and directly by New Jersey activity related to historic preservation. Items 1 and 2 in Section II of Exhibit 9.3 reveal that indirectly created jobs pay on average $30,840, while direct jobs pay on average $21,391—a difference of $9,449 per job. Hence, the low-paying jobs that are created directly in turn generate higher-paying jobs. Some, but not all, of the pay gap between direct and indirect jobs is due to the part-time nature of the direct jobs created in the retail trade and service industries. A finer breakout of national economic impacts by industry (Exhibit 9.4) shows that of the 5,914 jobs created in the service industries, about a quarter (1,564 jobs) are in the hotels/lodging category. Further, 5,231 jobs, or about 68 percent of the 7,689 retail jobs created through New

Jersey heritage tourism, are in eating / drinking establishments. These two industries are notorious for paying low wages and offer part-time job opportunities in unusually high

Exhibit 9.3
National Economic Impacts of
$580 in Annual Historic Preservation Spending in New Jersey

	Economic Component		
	Employment (jobs)	**Income (000$)**	**Gross Domestic Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*			
Private			
1. Agriculture	57	6,819	11,328
2. Agri. Serv., Forestry, & Fish	137	3,967	4,619
3. Mining	76	4,284	16,088
4. Construction	1,282	49,661	52,274
5. Manufacturing	2,737	105,265	156,225
6. Transport. & Public Utilities	893	42,232	78,104
7. Wholesale	458	19,613	51,933
8. Retail Trade	7,689	126,164	145,202
9. Finance, Ins., & Real Estate	1,707	61,399	108,141
10. Services	5,914	143,133	176,058
Private Subtotal	20,949	562,508	799,894
Public			
11. Government	626	10,210	9,574
Total Effects (Private and Public)	21,575	572,718	809,469
II. DISTRIBUTION OF EFFECTS/MULTIPLIER			
1. Direct Effects	9,806	209,763	330,326
2. Indirect and Induced Effects	11,769	362,955	479,142
3. Total Effects	21,575	572,718	809,469
4. Multipliers (3÷1)	2.200	2.730	2.451
III. COMPOSITION OF GROSS DOMESTIC PRODUCT			
1. Wages--Net of Taxes			518,193
2. Taxes			
a. Local			41,883
b. State			93,614
c. Federal			
General			93,089
Social Security			66,377
Federal Subtotal			159,466
d. Total taxes (2a+2b+2c)			294,963
3. Profits, dividends, rents, and other			(11,763)
4. Total Gross Domestic Product (1+2+3)			801,393
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE			
Employment (Jobs)			37.2
Income			$988,164
State Taxes			$161,446
Local Taxes			$72,263
Gross Domestic Product			$1,396,568

Note: Detail may not sum to totals due to rounding.
*Terms:
Direct Effect (National)—the amount of goods and services purchased in the nation.
Indirect Effects—the value of goods and services needed to support the provision of those direct economic effects.
Induced Effects—the value of goods and services needed by households that provide the direct and indirect labor.

Source: Rutgers University Center for Urban Policy Research, 1997.

Exhibit 9.4
National Economic Impacts of
$580 Million in Annual Historic Preservation Spending in New Jersey

INDUSTRY	Industry Component		
	Employment (jobs)	Income ($000)	Gross State Product ($000)
Agriculture	**57**	**6,819**	**11,328**
Dairy Prod., Poultry, & Eggs	9	1,327	1,757
Meat Animals & Misc. Livestock	19	1,770	2,267
Cotton	1	117	155
Grains & Misc. Crops	18	2,355	4,623
Tobacco	4	666	1,085
Fruits, Nuts, & Vegetables	2	277	972
Forest Prod.	0	65	168
Greenhouse & Nursery Prod.	4	242	301
Agri. Serv., Forestry, & Fish	**137**	**3,967**	**4,619**
Agri. Services (07)	65	1,105	1,161
Forestry (08)	15	87	525
Fishing, Hunting, & Trapping (09)	57	2,775	2,933
Mining	**76**	**4,284**	**16,088**
Metal Mining (10)	7	486	579
Coal Mining (12)	-	-	-
Oil & Gas Extraction (13)	56	3,259	14,577
Nonmetal Min.-Ex. Fuels (14)	14	539	932
Construction	**1,282**	**49,661**	**52,274**
General Bldg. Contractors (15)	358	14,930	15,715
Heavy Const. Contractors 16)	127	5,186	5,459
Special Trade Contractors (17)	797	29,545	31,100
Manufacturing	**2,737**	**105,265**	**156,225**
Food & Kindred Prod. (20)	422	15,926	26,973
Tobacco Manufactures (21)	9	560	2,886
Textile Mill Prod. (22)	92	2,268	3,393
Apparel & Other Prod. (23)	177	3,257	3,538
Lumber & Wood Prod. (24)	132	4,247	6,071
Furniture & Fixtures (25)	54	1,375	1,612
Paper & Allied Prod. (26)	101	5,120	8,601
Printing & Publishing (27)	340	11,786	15,612
Chemicals & Allied Prod. (28)	127	7,778	13,288
Petroleum & Coal Prod. (29)	25	2,495	7,654
Rubber & Misc. Plastics (30)	140	5,102	5,813
Leather & Leather Prod. (31)	46	933	1,139
Stone, Clay, & Glass (32)	134	4,963	5,911
Primary Metal Prod. (33)	100	5,666	6,302
Fabricated Metal Prod. (34)	224	9,274	12,289
Machinery, Except Elec. (35)	122	5,313	6,490
Electric & Elec. Equip. (36)	100	3,981	6,016
Transportation Equipment (37)	107	6,189	8,035
Instruments & Rel. Prod. (38)	92	3,462	3,694
Misc. Manufacturing Ind's. (39)	192	5,570	10,907

Exhibit 9.4 (continued)
National Economic Impacts of
$580 Million in Annual Historic Preservation Spending in New Jersey

INDUSTRY	Industry Component		
	Employment (jobs)	Income ($000)	Gross State Product ($000)
Transport. & Public Utilities	**893**	**42,232**	**78,104**
Railroad Transportation (40)	50	2,586	4,149
Local Pass. Transit (41)	156	3,998	4,472
Trucking & Warehousing (42)	216	8,569	8,992
Water Transportation (44)	20	735	1,127
Transportation by Air (45)	53	3,115	4,123
Pipe Lines-Ex. Nat. Gas (46)	3	174	825
Transportation Services (47)	34	1,385	1,522
Communication (48)	197	11,824	23,888
Elec., Gas, & Sanitary Serv. (49)	164	9,846	29,006
Wholesale	**458**	**19,613**	**51,933**
Whlsale-Durable Goods (50)	161	7,449	24,400
Whlsale-Nondurable Goods (51)	297	12,164	27,533
Retail Trade	**7,689**	**126,164**	**145,202**
Bldg. Mat.-Garden Supply (52)	115	3,220	3,552
General Merch. Stores (53)	484	8,311	12,193
Food Stores (54)	354	7,056	7,890
Auto. Dealers-Serv. Stat. (55)	364	10,404	11,639
Apparel & Access. Stores (56)	165	2,797	4,364
Furniture & Home Furnish. (57)	40	1,224	1,500
Eating & Drinking Places (58)	5,231	73,517	86,016
Miscellaneous Retail (59)	936	19,635	18,049
Finance, Ins., & Real Estate	**1,707**	**61,399**	**108,141**
Banking (60)	215	7,785	14,065
Nondep. Credit Institut. (61)	185	6,690	6,026
Security, Comm. Brokers (62)	83	6,602	9,109
Insurance Carriers (63)	226	9,883	10,604
Ins. Agents, Brokers (64)	374	14,411	15,145
Real Estate (65)	229	1,782	40,361
Holding and Invest. Off. (67)	394	14,246	12,831
Services	**5,914**	**143,133**	**176,058**
Hotels & Other Lodging (70)	1,564	26,817	50,917
Personal Services (72)	554	10,115	10,774
Business Services (73)	967	26,040	29,036
Auto Repair, Serv., Garages (75)	260	9,855	11,909
Misc. Repair Services (76)	177	4,887	5,157
Motion Pictures (78)	193	4,710	4,284
Amusement & Recreation (79)	232	5,846	6,723
Health Services (80)	264	9,179	9,711
Legal Services (81)	101	6,593	7,297
Educational Services (82)	103	2,030	2,204
Social Services (83)	112	1,555	1,745
Museums, Botan.-Zoo. Gardens (84)	124	1,998	1,967
Membership Organizations (86)	502	8,995	8,832
Engineer. & Manage. Serv. (87)	748	23,882	24,847
Miscellaneous Services (89)	12	632	657
Government	**626**	**10,210**	**9,574**
Total	**21,575**	**572,718**	**809,468**

Note: Detail may not sum to totals due to rounding.

Exhibit 9.5
National Employment Impacts by Occupation of Annual New Jersey Spending Related to Historic Sites ($580 Million)

OCCUPATION TITLE	Employment (jobs)
Total, All Occupations	**21,575**
Exec., Admin., and Management Occupations	**2,184**
Managerial and Administrative Occupations	1,643
Management Support Occupations	540
Professional Specialty Occupations	**926**
Engineers	136
Architects and Surveyors	26
Life Scientists	8
Computer, Math, and Operations Res. Analysts	60
Physical Scientists	17
Social Scientists	7
Social, Recreational, and Relig. Workers	63
Lawyers and Judicial Workers	40
Teachers, Librarians, and Counselors	134
Health Diagnosing Occupations	21
Health Assessment & Treating Occupations	92
Writers, Artists, and Entertainers	247
All Other Professional Workers	74
Technicians and Related Support Occupations	**405**
Health Technicians and Technologists	162
Engineering & Science Technicians & Technologists	131
Technicians, Except Health and Engin. & Science	113
Marketing and Sales Occupations	**2,442**
Cashiers	632
Counter and Rental Clerks	82
Insurance Sales Workers	92
Real Estate Agents, Brokers, & Appraisers	29
Salespersons, Retail	759
Securities and Financial Service Sales Workers	31
Stock Clerks, Sales Floor	197
Travel Agents	28
All Other Sales and Related Workers	594
Administrative Support Occupations, incl. Clerical	**3,652**
Adjusters, Investigators, & Collectors	195
Communications Equipment Operators	58
Computer & Peripheral Equipment Operators	43
Financial Records Processing Occupations	509
Information Clerks	346
Mail Clerks and Messengers	40
Postal Clerks and Mail Carriers	238
Mat'l Record., Sched., Dispatch, & Distrib. Occs.	327
Records Processing Occupations, except Financial	130
Secretaries, Stenographers, and Typists	650
Other Clerical and Administrative Support Workers	1,118

Exhibit 9.5 (continued)
National Employment Impacts by Occupation of Annual New Jersey Spending Related to Historic Sites ($580 Million)

OCCUPATION TITLE	Employment (jobs)
Service Occupations	**6,709**
Cleaning & Building Service Occs., except Private	874
Food Preparation and Service Occupations	4,939
Health Service Occupations	108
Personal Service Occupations	345
Protective Service Occupations	186
All Other Service Workers	258
Agric., Forestry, Fishing, & Related Occupations	**274**
Animal Caretakers, except Farm	40
Farm Occupations	98
Farm Operators and Managers	16
Fishers, Hunters, and Trappers	2
Forestry and Logging Occupations	14
Gardeners & Groundskeepers, except farm	82
Supervisors, Farming, Forestry, & Agricul. Occs.	9
All Other Agric., Forestry, Fishing, & Rel. Workers	15
Precision Production, Craft, & Repair Occupations	**2,161**
Blue-collar Worker Supervisors	267
Construction Trades	614
Extractive and Related Workers, Incl. Blasters	18
Mechanics, Installers, and Repairers	795
Production Occupations, Precision	438
Plant and System Occupations	28
Operators, Fabricators, and Laborers	**2,822**
Mach. Setters, Set-up Ops, Operators, & Tenders	824
Hand Workers, incl. Assemblers & Fabricators	334
Transp. & Material Moving Machine & Vehicle Ops.	843
Helpers, Laborers, & Material Movers, Hand	823

Note: Detail may not sum to totals due to rounding.

proportions. Exhibit 9.5 illustrates that low-paying marketing and sales, service, and administrative support occupations comprise nearly 60 percent of all jobs related to New Jersey's historic preservation activity. Blue-collar occupations (the last three major occupation categories in Exhibit 9.5) make up 23 percent of all jobs. Only a meager 12 percent of all jobs related to New Jersey historic preservation activity are in high-paying managerial-administrative and professional specialty jobs.

An evaluation of the job productivity (GDP per job) reveals a slimmer gap of $7,026 ($40,712 versus $33,686) between indirect and direct jobs supporting New Jersey's activity related to historic preservation (Exhibit 9.3). As we found out Chapter 5, the differences between the two indirect-to-direct-job pay gaps (labor income/job and GDP/job) is largely due to the nature of the spending on heritage tourism, which constitutes the lion's share (nearly three-quarters) of the $580 million in annual spending. At any rate, the pay gap between the indirectly and directly created jobs causes the traditional national employment multiplier (2.2) to be extraordinarily low.

State-Level Impacts

Exhibits 9.6 through 9.8 present the total economic effects of the $580 million in direct historic preservation spending in-state. Item 1 in Section II of Exhibit 9.6 shows that New Jersey retains about 7,119 jobs or 73 percent of the direct jobs (9,806 jobs) created nationally by activity related to New Jersey historic preservation. This percentage is substantially lower than the 93 percent of direct jobs generated by historic building rehabilitation that the state retains. Much of the spending on heritage tourism and on the operation of historic sites goes toward items that, although purchased at retail outlets in the state, are produced outside of the state (e.g., gifts, food items, gasoline). As the result, New Jersey retains a substantially lower proportion of the indirect and induced employment impacts—only about 26 percent (3,020 of 11,769 jobs). As stated throughout this report, the state's status as a suburb to New York City and Philadelphia serves to explain this phenomenon.

In sum, through activity related to historic preservation, New Jersey annually gains 10,140 jobs (47 percent of the total 21,575 jobs generated nationally), $263 million in income (46 percent of the $573 million in income generated nationally), and $423 million in wealth (52 percent of the $809 million added to national GDP). The economic benefits of historic preservation related activity that accrue to New Jersey are concentrated primarily in the direct effects. A large proportion of the direct jobs are in the relatively high-paying construction industry. Nevertheless, the impact of these jobs is offset by the even larger proportion of low-paying service and retail jobs. Hence, at $25,956, the average labor income per job in New Jersey generated through the state's historic preservation activity is nearly the same as the national average labor income per job of $26,545. Jobs that New Jersey gets indirectly through activity related to historic preservation, however, compare less favorably to those which the nation receives—$27,704 per job compared to $30,840 per job.

Finer grained detail of state impacts by industry (Exhibit 9.7) and occupation (Exhibit 9.8) reflect concentrations similar to those noted at the national level. The main difference, once again, is that the construction industry looms larger at the state level. Nonetheless, of the 10,140 total state-level jobs derived from historic preservation, the greatest concentrations are in eating/drinking places (2,251 jobs) and in hotels/other

Exhibit 9.6
In-State Economic and Tax Impacts of
$580 Million in Annual Historic Preservation Spending in New Jersey

	Economic Component		
	Employment (jobs)	**Income (000$)**	**Gross Domestic Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*			
Private			
1. Agriculture	9	39	160
2. Agri. Serv., Forestry, & Fish	28	570	1,562
3. Mining	10	274	445
4. Construction	1,019	41,248	46,790
5. Manufacturing	881	29,376	57,837
6. Transport. & Public Utilities	353	9,836	23,038
7. Wholesale	199	15,838	34,301
8. Retail Trade	3,367	63,394	90,055
9. Finance, Ins., & Real Estate	279	12,366	35,110
10. Services	3,764	86,775	130,202
Private Subtotal	9,909	259,702	419,440
Public			
11. Government	231	3,487	3,520
Total Effects (Private and Public)	10,140	263,189	422,960
II. DISTRIBUTION OF EFFECTS/MULTIPLIER			
1. Direct Effects	7,119	179,524	317,519
2. Indirect and Induced Effects	3,020	83,665	105,441
3. Total Effects	10,140	263,189	422,960
4. Multipliers (3÷1)	1.424	1.466	1.332
III. COMPOSITION OF GROSS DOMESTIC PRODUCT			
1. Wages--Net of Taxes			231,147
2. Taxes			
a. Local			23,841
b. State			71,882
c. Federal			
General			48,624
Social Security			34,683
Federal Subtotal			83,306
d. Total taxes (2a+2b+2c)			179,029
3. Profits, dividends, rents, and other			4,707
4. Total Gross Domestic Product (1+2+3)			414,884
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE			
Employment (Jobs)			17.5
Income			$454,159
State Taxes			$123,955
Local Taxes			$41,138
Gross Domestic Product			$729,777

Note: Detail may not sum to totals due to rounding.
*Terms:
Direct Effect (State)—the amount of goods and services purchased in New Jersey.
Indirect Effects—the value of goods and services needed to support the provision of those direct economic effects.
Induced Effects—the value of goods and services needed by households that provide the direct and indirect labor.

Source: Rutgers University Center for Urban Policy Research, 1997.

Exhibit 9.7
In-State Economic Impacts of
$580 Million in Annual Historic Preservation Spending in New Jersey

INDUSTRY	Industry Component		
	Employment (jobs)	Income ($000)	Gross State Product ($000)
Agriculture	**9**	**39**	**160**
Dairy Prod., Poultry, & Eggs	1	5	13
Meat Animals & Misc. Livestock	-	0	1
Cotton	-	-	-
Grains & Misc. Crops	0	0	8
Tobacco	2	9	56
Fruits, Nuts, & Vegetables	-	0	3
Forest Prod.	-	0	8
Greenhouse & Nursery Prod.	5	24	71
Agri. Serv., Forestry, & Fish	**28**	**570**	**1,562**
Agri. Services (07)	18	308	432
Forestry (08)	0	2	15
Fishing, Hunting, & Trapping (09)	9	260	1,114
Mining	**10**	**274**	**445**
Metal Mining (10)	-	-	-
Coal Mining (12)	-	-	-
Oil & Gas Extraction (13)	2	6	7
Nonmetal Min.-Ex. Fuels (14)	8	268	438
Construction	**1,019**	**41,248**	**46,790**
General Bldg. Contractors (15)	289	11,888	14,743
Heavy Const. Contractors 16)	84	4,423	4,705
Special Trade Contractors (17)	646	24,937	27,342
Manufacturing	**881**	**29,376**	**57,837**
Food & Kindred Prod. (20)	116	3,921	11,458
Tobacco Manufactures (21)	0	2	9
Textile Mill Prod. (22)	14	345	694
Apparel & Other Prod. (23)	27	556	944
Lumber & Wood Prod. (24)	75	1,865	2,844
Furniture & Fixtures (25)	8	274	358
Paper & Allied Prod. (26)	33	942	1,689
Printing & Publishing (27)	75	2,194	3,416
Chemicals & Allied Prod. (28)	74	2,891	6,403
Petroleum & Coal Prod. (29)	22	1,217	4,800
Rubber & Misc. Plastics (30)	28	759	1,268
Leather & Leather Prod. (31)	1	45	72
Stone, Clay, & Glass (32)	92	2,627	4,284
Primary Metal Prod. (33)	23	1,074	1,711
Fabricated Metal Prod. (34)	119	4,690	7,362
Machinery, Except Elec. (35)	49	1,611	2,482
Electric & Elec. Equip. (36)	50	1,548	2,355
Transportation Equipment (37)	9	444	872
Instruments & Rel. Prod. (38)	19	627	1,220
Misc. Manufacturing Ind's. (39)	47	1,744	3,597

Exhibit 9.7 (continued)
In-State Economic Impacts of
$580 Million in Annual Historic Preservation Spending in New Jersey

INDUSTRY	Industry Component: Employment (jobs)	Income ($000)	Gross State Product ($000)
Transport. & Public Utilities	**353**	**9,836**	**23,038**
Railroad Transportation (40)	21	716	1,409
Local Pass. Transit (41)	110	2,199	2,973
Trucking & Warehousing (42)	85	2,100	3,839
Water Transportation (44)	4	237	356
Transportation by Air (45)	9	356	734
Pipe Lines-Ex. Nat. Gas (46)	0	4	31
Transportation Services (47)	9	354	548
Communication (48)	56	2,768	9,402
Elec., Gas, & Sanitary Serv. (49)	60	1,101	3,746
Wholesale	**199**	**15,839**	**34,301**
Whlsale-Durable Goods (50)	99	5,344	14,553
Whlsale-Nondurable Goods (51)	100	10,494	19,748
Retail Trade	**3,367**	**63,394**	**90,055**
Bldg. Mat.-Garden Supply (52)	35	931	1,459
General Merch. Stores (53)	265	4,702	8,788
Food Stores (54)	157	3,337	5,119
Auto. Dealers-Serv. Stat. (55)	125	4,076	6,002
Apparel & Access. Stores (56)	73	1,398	2,928
Furniture & Home Furnish. (57)	15	417	769
Eating & Drinking Places (58)	2,251	39,534	52,069
Miscellaneous Retail (59)	447	8,999	12,921
Finance, Ins., & Real Estate	**279**	**12,366**	**35,110**
Banking (60)	49	2,350	4,763
Nondep. Credit Institut. (61)	35	1,629	1,781
Security, Comm. Brokers (62)	13	1,053	1,146
Insurance Carriers (63)	52	3,185	3,399
Ins. Agents, Brokers (64)	17	450	785
Real Estate (65)	85	2,384	21,799
Holding and Invest. Off. (67)	29	1,315	1,438
Services	**3,764**	**86,775**	**130,202**
Hotels & Other Lodging (70)	1,918	44,009	70,316
Personal Services (72)	283	4,929	6,944
Business Services (73)	282	2,462	3,509
Auto Repair, Serv., Garages (75)	81	2,555	7,473
Misc. Repair Services (76)	46	983	2,037
Motion Pictures (78)	51	1,438	1,720
Amusement & Recreation (79)	103	3,332	4,214
Health Services (80)	93	3,814	4,621
Legal Services (81)	46	2,629	3,494
Educational Services (82)	41	913	1,027
Social Services (83)	13	365	541
Museums, Botan.-Zoo. Gardens (84)	44	706	877
Membership Organizations (86)	310	5,550	6,783
Engineer. & Manage. Serv. (87)	447	12,875	16,313
Miscellaneous Services (89)	5	214	333

Government	**230**	**3,488**	**3,519**
Total	**10,140**	**263,189**	**422,961**

Note: Detail may not sum to totals due to rounding.

Exhibit 9.8
In-State Employment Impacts by Occupation of Annual New Jersey Historic Preservation Spending ($580 Million)

OCCUPATION TITLE	Employment (jobs)
Total, All Occupations	**10,140**
Exec., Admin., and Management Occupations	**953**
Managerial and Administrative Occupations	764
Management Support Occupations	188
Professional Specialty Occupations	**379**
Engineers	64
Architects and Surveyors	21
Life Scientists	3
Computer, Math, and Operations Res. Analysts	19
Physical Scientists	7
Social Scientists	1
Social, Recreational, and Relig. Workers	26
Lawyers and Judicial Workers	19
Teachers, Librarians, and Counselors	49
Health Diagnosing Occupations	10
Health Assessment & Treating Occupations	39
Writers, Artists, and Entertainers	87
All Other Professional Workers	30
Technicians and Related Support Occupations	**186**
Health Technicians and Technologists	77
Engineering & Science Technicians & Technologists	69
Technicians, Except Health and Engin. & Science	38
Marketing and Sales Occupations	**1,097**
Cashiers	311
Counter and Rental Clerks	32
Insurance Sales Workers	10
Real Estate Agents, Brokers, & Appraisers	11
Salespersons, Retail	355
Securities and Financial Service Sales Workers	4
Stock Clerks, Sales Floor	91
Travel Agents	17
All Other Sales and Related Workers	264
Administrative Support Occupations, incl. Clerical	**1,465**
Adjusters, Investigators, & Collectors	34
Communications Equipment Operators	30
Computer & Peripheral Equipment Operators	15
Financial Records Processing Occupations	231
Information Clerks	243
Mail Clerks and Messengers	15
Postal Clerks and Mail Carriers	45
Mat'l Record., Sched., Dispatch, & Distrib. Occs.	136

Records Processing Occupations, except Financial	43
Secretaries, Stenographers, and Typists	291
Other Clerical and Administrative Support Workers	383

Exhibit 9.8 (continued)
In-State Employment Impacts by Occupation of Annual New Jersey Historic Preservation Spending ($580 Million)

OCCUPATION TITLE	Employment (jobs)
Service Occupations	**3,645**
Cleaning & Building Service Occs., except Private	645
Food Preparation and Service Occupations	2,516
Health Service Occupations	37
Personal Service Occupations	228
Protective Service Occupations	88
All Other Service Workers	131
Agric., Forestry, Fishing, & Related Occupations	**105**
Animal Caretakers, except Farm	26
Farm Occupations	19
Farm Operators and Managers	2
Fishers, Hunters, and Trappers	0
Forestry and Logging Occupations	1
Gardeners & Groundskeepers, except farm	47
Supervisors, Farming, Forestry, & Agricul. Occs.	1
All Other Agric., Forestry, Fishing, & Rel. Workers	5
Precision Production, Craft, & Repair Occupations	**1,123**
Blue-collar Worker Supervisors	121
Construction Trades	465
Extractive and Related Workers, Incl. Blasters	7
Mechanics, Installers, and Repairers	361
Production Occupations, Precision	158
Plant and System Occupations	11
Operators, Fabricators, and Laborers	**1,187**
Mach. Setters, Set-up Ops, Operators, & Tenders	276
Hand Workers, incl. Assemblers & Fabricators	118
Transp. & Material Moving Machine & Vehicle Ops.	400
Helpers, Laborers, & Material Movers, Hand	394

Note: Detail may not sum to totals due to rounding.

lodging (1,918 jobs). Of the total $263 million generated in annual income, the eating/drinking and hotels/lodging industries garner $40 million and $44 million, respectively. The eating/drinking and hotels/lodging industries also comprise $52 million and $70 million, respectively, of the total $423 million increase in state gross domestic product (Exhibit 9.5). The breakout of impacts by occupation (Exhibit 9.8) also shows a correspondingly disproportionate number of jobs in the food preparation/processing category (2,516) and among both cashiers and retail salespersons (666 jobs).

RELATIVE ECONOMIC EFFECTS OF HISTORIC PRESERVATION VERSUS OTHER ACTIVITIES

Another relative issue to be considered—one that transcends the in-state/out-of-state effects of the prior section—is how preservation fares as an economic pump-primer vis-à-vis other non-preservation investments. If all spending generates both direct and multiplier effects, can preservationists lay claim to an array of economic benefits—such as those identified in this study—that are more substantial than any other kind of spending?

Two points need to be considered here. One is whether other investments would, in fact, "do the same" economically. The second, and perhaps more fundamental issue concerns the appropriate measure of the economic effects of an activity (whether preservation or any other). Is the full array of economic activity generated to be considered, or just the delta, or the increase in economic consequences of one type of spending versus another?

In analyzing whether other investments would generate economic effects similar to historic preservation one must first ask, "What are the appropriate other areas of spending to which preservation should be compared?" Reflecting preservation's educational facet, is an appropriate comparison elementary/secondary education outlays? Or reflecting preservation's aesthetic and entertainment (leisure time) components, would spending on the performing arts or the theater yield a more appropriate comparison?

In practice, since an important manifestation of historic preservation involves construction, a common frame of reference is how well preservation, in the form of historic rehabilitation, "stacks up" economically against alternative *construction* endeavors. Because this study details the economic effects of historic rehabilitation on four different types of buildings—single-family, multifamily, nonresidential, and civic-institutional (e.g., courthouses), a natural comparison would be to relate historic rehabilitation's effects by building type to the effects of new construction of the same type of buildings. Further, since historic preservation often involves public support in the form of bond monies (e.g., for rehabilitation grants) or tax incentives, another appropriate frame of reference would be public investment that draws on the public purse and serves the public welfare, such as infrastructure. One archetype is new highway construction.

Exhibit 9.9 shows, in side-by-side fashion, the relative economic effects of the historic rehabilitation of different types of buildings (e.g., single and multifamily) vis-à-vis new construction of the same types of buildings. It further shows, for comparison

Exhibit 9.9

Relative Economic Effects of Historic Rehabilitation versus New Construction

Geographic Level / Economic Effect	Construction Activity—Historic Rehabilitation and New Construction								
	Single-Family		Multifamily		Nonresidential		Highway	Civic / Institutional	
	Historic Rehabilitation	New Construction	Historic Rehabilitation	New Construction	Historic Rehabilitation	New Construction	New Construction	Historic Rehabilitation	New Construction
	Effects Per Million Dollars of Initial Expenditure								
National									
Employment (jobs)	36.7	36.0	36.4	36.1	38.3	36.1	33.6	37.8	36.9
Income ($000)	$1,240	$1,206	$1,226	$1,213	$1,302	$1,223	$1,197	$1,285	$1,250
GDP ($000)	$1,672	$1,604	$1,661	$1,606	$1,711	$1,600	$1,576	$1,695	$1,626
State Taxes ($000)	$106	$102	$105	$102	$110	$103	$101	$108	$105
Local Taxes ($000)	$89	$86	$88	$86	$92	$86	$85	$91	$88
Total Taxes ($000)	$530								
In-State									
Employment (jobs)	18.4	16.4	18.0	16.4	19.3	16.7	15.2	19.0	17.2
Income ($000)	$623	$578	$623	$577	$685	$600	$600	$675	$616
GSP ($000)	$937	$811	$915	$814	$964	$827	$806	$946	$843
State Taxes ($000)	$65	$59	$65	$59	$70	$61	$60	$69	$62
Local Taxes ($000)	$55	$49	$55	$49	$59	$51	$50	$58	$52
	Multipliers of Total Effects Compared to Direct Effects								
National									
Employment	2.87	2.79	2.95	2.78	2.84	2.79	3.12	2.84	2.78
Income	2.43	2.39	2.52	2.38	2.42	2.38	2.42	2.42	2.37
GDP	2.67	2.68	2.79	2.66	2.72	2.69	2.81	2.75	2.69
State									
Employment	1.52	1.51	1.56	1.52	1.55	1.53	1.63	1.55	1.54
Income	1.39	1.36	1.41	1.36	1.39	1.36	1.37	1.39	1.36
GSP	1.49	1.50	1.54	1.50	1.53	1.51	1.55	1.54	1.52

Notes: GDP = Gross Domestic Product
GSP = Gross State Product

See Appendix H for full details.

Source: Rutgers University, Center for Urban Policy Research, 1997.

sake, the economic effects of new highway construction. The economic impacts include total (direct and indirect/induced) income, wealth, and tax consequences per standard increment of investment ($1 million) at both the national and in-state levels (see Appendix H for details). Also shown (in Exhibit 9.9) are the multipliers (total effects compared to direct effects) for employment, income, and wealth for the competing investments.

The side-by-side comparisons in Exhibit 9.9 reveal that across all building and investment types, *historic preservation, in the form of historic rehabilitation, is a more potent economic pump-primer than new construction*. One million dollars spent on nonresidential historic rehabilitation, for instance, generates, at the national level, 38.3 jobs, $1,302,000 in income, $1,711,000 in gross domestic product (GDP), and $202,000 in state and local taxes. By contrast, $1 million spent on new nonresidential building generates nationally 36.1 jobs, $1,223,000 in income, $1,600,000 in GDP, and $189,000 in state and local taxes. The same size investment in new highway construction induces 33.6 jobs, $1,197,000 in income, $1,576,000 in GDP, and $186,000 in taxes.

But can historic preservation claim credit for all these generated economic effects or just the delta—that is, the enhanced benefit vis-à-vis other spending? Does historic rehabilitation's $1 million unit of investment in nonresidential buildings, in other words, garner, at the national level, *all* 38.3 jobs and $1,302,000 in income, or just the *added increment* vis-à-vis the same size investment in new nonresidential construction? If the latter case is true, the impact would be only 2.2 jobs (38.3 minus 36.1) and $79,000 in income ($1,302,000 minus $1,223,000) per $1 million investment increment—not the total 38.3 jobs and $1.3 million in income.

There are no easy answers. In fact, both measures of preservation's benefits are informative. Typically, when the economic impact of any given investment is analyzed—whether it be car manufacturing or defense spending—total benefits are reported. Yet, there is good reason to consider benefits at only the margin, or delta. By presenting an array of information in Exhibit 9.9, we are informing both points of view of how the benefits of historic preservation should be expressed. And on both counts—the total and the delta—preservation proves a "good" investment.

The bottom half of Exhibit 9.9 presents the set of traditional multipliers used for different types of construction. When measuring their impact on employment, income, and GDP (or GSP) for both the nation and the State of New Jersey, however, these multipliers can be highly misleading, because they measure total regional impacts per unit of regional direct effect. But they are presented here, because they are the most familiar measure to policy analysts.

It is the divisor, i.e., regional direct effects, that makes the traditional multipliers less than useful. Because the direct effects in the traditional multiplier are in the same units as the total impacts, the intensity of the direct effect—as compared to that for the indirect and induced effects—becomes an important factor in determining the magnitude of the traditional employment multiplier. Generally speaking, this factor is not at all important to analysts who want to measure multiplier effects. The possibility of differences in intensity of labor, income, or even GDP between the direct and indirect/induced effects makes it impossible to draw inferences from multiplier magnitudes across industries or events in a region or even for a single industry across regions.

Another reason the multipliers are less than useful is that analysts usually want to know how the totality of investment dollars affects an economy, not just some portion of the funds represented by the regional direct effects—the denominator of the traditional multipliers. This issue is important only when the economic disturbance, the impact of which is being measured, is demand-based (e.g., the increase in demand by museums for paper goods) as opposed to output-based (e.g., the amount of rehabilitation activity in New Jersey). In the case of an output-based change, the regional change ***is*** the total change. When a change in demand is involved, the demanding agent does not care ***where*** the demand goods and services come from. Hence, the total direct effect is discounted based upon the probability that the goods and services will be provided by local establishments.

Because the "bang for the buck" multipliers that we have used to compare the economic effects of various project types measure total regional impacts per unit of total direct effect in terms of millions of dollars only, the difficulties of the traditional multiplier are overcome on both counts. Our multipliers are return-on-investment type measures. Since the denominator of our "impacts per $ million" multiplier is not in the same units as its numerator, it is possible to compare the multiplier across regions and industries. Moreover, since the denominator is always the full direct effect, determining whether the economic disturbance is a demand or an output disturbance is unnecessary when a comparison is made. These multipliers are also readily understood, because they reflect, simply put, the total economic impacts that result from a million dollars of initial expenditure.

The figures in Exhibit 9.9 also show some of the pitfalls of impact interpretation. The traditional multipliers in the lower portion of the Exhibit would lead one to believe that in terms of employment and GDP effects, the construction of new highways would be the "wisest" investment alternative. The traditional multipliers of 3.12 (nation) and 1.63 (state) for employment and 2.81 and 1.55 for GDP (GSP) for the nation and State of New Jersey, respectively, are the largest in their rows of the exhibit. Inspection of the same "bang for the buck" multipliers on the upper half of the exhibit, show an opposite result, however. New highway construction appears to be the *least* lucrative investment of the set.

The reasons for this flip-flop in the ranking of new highway construction are multifold. First, highway construction jobs are among the highest-paying jobs in the construction industry. Hence, the earnings of highway construction workers ***do*** support more other jobs through induced effects than do the earnings of building construction workers, as implied by the relatively large size of the traditional multiplier. *But* because highway construction jobs are so lucrative, not as many construction jobs are created per million dollars of direct effect as might be otherwise. This fact lowers the denominator of the traditional multiplier, thus inflating the multiplier itself. The "bang for the buck" multiplier, meanwhile, tells analysts more precisely what they should expect for each million that is invested in a given activity. On that basis, investment in construction related to historic preservation has a large "bang for the buck" relative to "general" (nonhistoric) construction.

One other consideration of what comprises a "good investment" is the relative comparison of historic preservation investment versus investment in such sectors of the economy as manufacturing, publishing, and so on. On this basis, historic preservation also shows economic advantages, as illustrated below (see Appendix H for details):

Economic Impacts Per Million Dollars of Initial Expenditure in

Economic Effect	Nonresidential Historic Rehabilitation	Book Publishing	Pharmaceutical Production	Electronic Component Production
National				
Employment (jobs)	38.3	35.3	28.4	30.9
Income ($000)	$1,302	$1,160	$1,045	$1,018
GDP	$1,711	$1,722	$1,546	$1,483
State taxes ($000)	$110	$103	$93	$87
Local taxes ($000)	$92	$86	$79	$74

APPLICATIONS OF THE FINDINGS OF THIS STUDY

As noted earlier (Chapter One), this is the most comprehensive statewide study of historic preservation's economic effects ever conducted in the United States. It also develops, in multiple instances, preservation-specific data, including "recipes" for preservation construction. The "bang for the buck" comparisons noted above are also a contribution to this field of study. But there are many other "practical" as well as policy analysis benefits from the current investigation. Some examples are noted below.

Data and Systems for the "Practical" Projection of the Economic Benefits of Historic Preservation

Others who wish to estimate the economic benefits of historic preservation can readily use the data and systems developed in this study. For instance, assume that a local historic commission wanted to project the economic benefits of $10 million of single-family rehabilitation occurring in a historic district; or a county historic museum, with a $2 million budget, wanted to present to the county council the economic effects of its operations. These projections could easily be made by referring to the base data contained in this study. Exhibit 9.9 shows the employment, income, and GDP effects per $1 million of investment in single-family (and other historic) properties. By a tenfold scaling up of the figures shown in this exhibit, the local historic commission could easily calculate that the $10 million in historic district rehabilitation generates in New Jersey 184 jobs, $6.2 million in income, $9.4 million in GSP, $650,000 in state taxes, and $550,000 in local (all New Jersey communities) taxes. The historic county museum could reference Exhibit 9.2 and, by extrapolation, report New Jersey economic benefits of 60 jobs, $1.1 million in income, $1.6 million in GSP, $109,000 in state taxes, and $91,000 in local taxes.

This information can be broken down further by reference to the exhibits contained in Appendix H, which gives data by *industry* on the impacts per $1 million increment of investment in historic rehabilitation in different building types (as well as, for comparison, the impacts per $1 million of new construction investment in the same building types). Exhibit H.2, for example, shows that 36 percent of the in-state jobs created from single-family historic rehabilitation is in construction and 16 percent in manufacturing. The local historic commission, in the above example, could then readily calculate that of the 184 New Jersey jobs fostered by renovations in the historic district, 66 jobs are in construction and 29 jobs are in manufacturing.

The point of providing these data, which can readily be produced, is to inform the public and government officials that preservation makes an economic contribution. Besides improving the quality of life, preservation contributes to economic well being. This information can help turn the perspective of historic preservation being viewed as an economic "consumer" (e.g., in the form of local property tax exemption) to that of being an economic "producer."

The present study, by setting forth preservation's benefits, informs policy analysis. Some illustrative applications follow. One example is at the state level, the other, at the federal level. The first concerns financing to foster historic rehabilitation made available by the New Jersey Historic Trust through a state bond program; the second, the federal preservation tax credit.

Analysis of Support to New Jersey Historic Rehabilitation Provided by the New Jersey Historic Trust

The State of New Jersey has one of the nation's largest and most successful grants program to foster historic rehabilitation with monies raised from state bond issues (Historic Preservation Bond Program, or HPBP). These "bricks and mortar" HPBP grants are awarded by the New Jersey Historic Trust (NJHT).

By way of background, the NJHT, established by statute in 1967, is a nonprofit, state-affiliated organization created to preserve and protect New Jersey's historic resources. The NJHT has broad powers to initiate and promote preservation programs, with one important activity being the awarding of HPBP competitive grants to repair and restore historic properties owned by public agencies and nonprofit organizations. A sample of the 152 awards made to date includes rehabilitation of the New Jersey State House and Annex, Monmouth Battlefield State Park, and Cape May Point Lighthouse. The projects include some of New Jersey's defining historic resources and are, not coincidentally, important tourist attractions.

The HPBP was capitalized by a $60 million bond issue. It is anticipated that ultimately about $54.9 million in grants will be awarded under the HPBP for grants and loans, with the balance allocated for administrative expenses. Current (mid-year 1997) cumulative awards of $40,986,717 have leveraged a total investment of $259,853,385 in the historic sites that receive these awards. Total historic rehabilitation project activity ensuing from the NJHT's $40,986,717 in grants, therefore, is $300,840,102 ($40,986,717 + $259,853,385). Using a ratio of $7.34 of total historic rehabilitation project activity for each dollar awarded, about $403 million in cumulative historic rehabilitation project activity based on the HPBP should be expected when all of the funds ($54.9 million) are spent ($54.9 million x $7.34).

This $403 million in historic rehabilitation activity that is fostered by the HPBP generates additional secondary economic activity and benefits. These economic impacts, which are added through indirect and induced consequences, are calculated by applying the Regional Science Research Corporation's input–output model to the $403 million in total direct historic rehabilitation activity.

The detail of this $403 million direct rehabilitation expenditure plus the multiplier effects is shown in Appendix I and is summarized in Exhibit 9.10.

Exhibit 9.10
Total Economic Impacts of the Cumulative Historic Rehabilitation Fostered by the New Jersey Historic Trust ($403 Million)

	In New Jersey	Outside New Jersey	Total (U.S.)
Jobs (person years)	6,199	7,286	13,485
Income ($000)	$222,389	$235,593	$457,982

tourism

outlays in the state by roughly $23 million annually. The total (direct and indirect/induced) annual effects from this $23 million added by heritage tourism are summarized in Exhibit 9.11.

Exhibit 9.11
Total Annual Heritage Tourism Spending Impacts ($23 Million) of the Cumulative NJHT-Induced Historic Rehabilitation

	In New Jersey	Outside New Jersey	Total (U.S.)
Jobs (person years)	375	447	822
Income ($000)	$8,914	$11,376	$20,290
GDP / GSP ($000)	$15,173	$14,450	$29,623
Total Taxes ($000)	$7,544	$4,338	$11,882
Federal ($000)	$3,418	$2,847	$6,265
State ($000)	$3,293	$818	$4,111
Local ($000)	$833	$672	$1,508

The interest paid on the HPBP bonds is exempt from state (and federal) taxes. Since the effective state income tax rate is about 5 percent, the loss to the state from the $12 million in interest paid to in-state bondholders is $600,000.

Interest paid to out-of-state bondholders costs New Jersey $36 million in interest payments. In addition, the households of these out-of-state bondholders (as opposed to the households of the in-state bondholders) are unlikely to spend their interest payments in New Jersey. If they did, their spending would generate to New Jersey $1.6 million in state and local tax revenues. Therefore, the out-of-state bondholders cost New Jersey about $37.6 million ($36 million + $1.6 million).

The total interest-related cost of the HPBP, therefore, is the sum of the in-state bond holders' cost of $0.6 million and the out-of-state bond holders' cost of $37.6 million, for a total interest-related expense of about $38 million. The total debit to state taxpayers of the HPBP, therefore, is $98 million ($60 million principal and $38 million interest-related) over the 20-year term of its underlying bond cycle.

But the economic activity fostered by the HPBP induces state and local tax payments. From the historic rehabilitation fostered by the HPBP, there is a one-time (since construction occurs once) taxpayer gain of $23 million in state taxes and $19 million in local taxes (Exhibit 9.10). The heritage tourism fostered by the HPBP results in state tax gains of $3.3 million and local tax gains of $0.8 million in *annually recurring* tax payments (Exhibit 9.11). There is likely to be some lag, however, in the time that a capital investment is made in historic rehabilitation and the ensuing growth of heritage tourism, so that the annual tax gains just noted will likely not be realized for every year of the 20-year bond cycle. Assuming a 10 percent discount is applied to the tax gains to account for this lagged effect,[4] the enhanced tourism occurring because of the HPBP will increase state and local taxes over the 20-year bond period by an annual average of $3.0 million ($3.3 million x .9) and $0.7 million ($0.8 million x .9), respectively. Thus, over the 20-year bond cycle span, state taxpayers garner $60 million ($3 million x 20) and local taxpayers $14 million ($0.7 million x 20) from the added heritage tourism, for a total of $74 million. The total taxpayer credit over the twenty years from the combination of the HPBP-fostered historic preservation and enhanced tourism is therefore $116 million.

The net cost to the taxpayer is the difference between the cumulative taxpayers' debit and taxpayers' credit. In the current instance, the HPBP costs taxpayers in New Jersey $98 million. That amount is nearly offset by the credit to state taxpayers alone of $83 million from tax payments generated by the HPBP projects (i.e., from the construction activity) and the heritage tourism they foster. When the benefit to local taxpayers is added—some $33 million—the full taxpayer credit of $116 million exceeds the HPBP taxpayer cost of $98 million.

[4] The 10 percent discount due to a lag in the growth of tourism after historic rehabilitation is accounted for by assuming that visitation to the sites increases annually by an increment of 20 percent of its total potential during the first five years. Thus, in the first year, 20 percent of the tourism potential of the sites is achieved; 40 percent in the second year; 60 percent in the third year; 80 percent in the fourth year; and 100 percent thereafter. The total amount by which visitation is discounted over the course of the first four years, therefore, is 80 percent (100 minus 20) plus 60 percent (100 minus 40) plus 40 percent (100 minus 60) plus 20 percent (100 minus 80), or 200 percent of the annual tourism potential. This 200 percent means that two years of tourism potential are not achieved over the course of the 20-year period. Two years = 10 percent of twenty years.

HPBP-Fostered Activity	HPBP Taxpayer Credits Over 20 Years		
	Credits (in $ millions)		
	State Taxpayers	Local Taxpayers	Total Credited to Taxpayers
• Historic Rehabilitation	23	19	42
• Heritage Tourism	60	14	74
TOTAL	$83	$33	$116

Note: HPBP taxpayer credits represent added revenues to state and local tax coffers, respectively, from the HBPB-fostered activities.

The numbers above should be regarded as gross estimates. Recall that the study objective is not to derive a precise accounting but rather to apply the data and economic tools developed here to inform policy analysis of such programs as the New Jersey HPBP (numerous other states have similar programs). This review shows that when the economic activity and the ensuing tax payments fostered by publicly supported rehabilitation grants programs (such as the HPBP) are considered, the magnitude of induced economic activity and tax payments are such that there is negligible or even no net cost to the taxpayer.

The net cost of the Federal Preservation Tax Incentive, as discussed below, can be analyzed along similar lines.

Analysis of the Federal Preservation Tax Incentive

The Federal Preservation Tax Incentive (FPTI)—currently a 20 percent federal tax credit for historic rehabilitation of income-producing properties—is, as noted in Chapter One, the most significant federal preservation incentive. For fiscal year (FY) 1995, there were a total of $469 million in tax credit projects. Of the 548 approved projects, 47 percent involved housing, 23 percent were exclusively nonresidential (e.g., office or commercial), and 30 percent were mixed-use developments. Assuming for the moment that this project breakout equates with the dollar investment, the $469 million in historic rehabilitation encompasses $220.4 million, $107.9 million, and $140.7 million of housing, nonresidential, and mixed-use historic rehabilitation investment, respectively.

The input–output model developed in this study is applied to these respective outlays based on the detailed construction data matrices by property type described in Appendix B. (For mixed-use development, blended data for housing and nonresidential construction profiles are applied.) The results for the respective project categories—housing, nonresidential, and mixed use—are obtained and then summed to a national aggregate total, shown in Exhibit 9.12.

In brief, the $469 million of FPTI-aided historic rehabilitation resulted in a total impact (encompassing direct and secondary impacts) of 15,780 person years of work, $519 million in wages, and $695 million in gross domestic product (GDP). As would be expected, much of the jobs, wages, and GDP are concentrated in the construction, manufacturing, and services sectors, but there are additional benefits to all sectors of the economy, as Exhibit 9.12 shows.

Exhibit 9.12
Economic and Tax Impacts of Historic Rehabilitation Aided by the Federal Preservation Tax Incentive
(Fiscal Year 1995—$469 million Rehabilitation Investment)

	Economic Component		
	Employment (jobs)	**Wages (000$)**	**Gross Domestic Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*			
Private			
1. Agriculture	29	$3,415	$5,669
2. Agriculture services	131	2,098	3,544
3. Mining	85	4,402	14,160
4. Construction	3,513	132,354	139,320
5. Manufacturing	3,136	119,926	164,902
6. Transport. & public utilities	713	33,892	62,653
7. Wholesale trade	432	18,321	50,786
8. Retail trade	2,503	45,784	52,027
9. Finance, insurance, and real estate	1,516	54,471	88,062
10. Services	3,238	97,050	107,142
Private subtotal	15,295	$511,698	$688,229
Public			
11. Government	485	7,527	6,970
Total Effects (Private and Public)	15,780	$519,225	$695,199
II. DISTRIBUTION OF EFFECTS/MULTIPLIER			
1. Direct effects	5,416	$208,632	$251,113
2. Indirect and induced effects	10,364	310,593	444,087
3. Total effects	15,780	$519,225	$695,199
4. Multipliers (3÷1)	2.914	2.489	2.768
III. COMPOSITION OF GROSS DOMESTIC PRODUCT			
1. Wages–Net of taxes			$469,793
2. Taxes			
a. Local			37,114
b. State			44,063
c. Federal			
General			79,948
Social Security			57,006
Federal Subtotal			136,954
d. Total taxes (2a+2b+2c)			218,131
3. Profits, dividends, rents, other			7,275
4. Total Gross Regional Product (1 + 2 + 3)			$695,199

Note: Detail may not sum to totals due to rounding.

*Terms:

Direct Effect (National)—the amount of goods and services purchased in the nation.

Indirect Effects—the value of goods and services needed to support the provision of those direct economic effects.

Induced Effects—the value of goods and services needed by households that provide the direct and indirect labor required to rehabilitate the historic structures.

Source: Rutgers University Center for Urban Policy Research, 1997.

The income and wealth created by the FPTI historic rehabilitation noted above are taxed, and the ensuing revenues are detailed in Exhibit 9.12. The $469 million FPTI-aided historic rehabilitation in FY 1995 increased local taxes by $37 million and state taxes by $44 million. These include taxes on property, corporate and personal income, sales, as well as other local and state levies.

At the national level, federal taxes on personal and business income and related federal levies amounted to $80 million. (This category is termed "general federal taxes" in Exhibit 9.12.) An additional $57 million was paid in federal Social Security, for a total of $137 million in federal taxes.

These figures allow comparison of FPTI "federal tax expenditures," as they are termed[5] versus revenues. In FY 1995, the tax expenditure of the FPTI was equal to 20 percent of the FPTI-aided rehabilitation of $469 million, or $94 million. But the $94 million tax expenditure induced hundreds of millions of dollars of economic activity that, in turn, generated $137 million in total federal taxes. Thus, the CUPR analysis shows that for every dollar allowed for a federal preservation tax credit, the United States Treasury received a return of $1.46 in tax revenues ($137 million tax return divided by $94 million tax expenditure).

Thus, tax incentives for historic rehabilitation, such as the FPTI, not only foster preservation but also are an important economic catalyst. Moreover, the federal tax revenues generated from the FPTI's economic pump-priming effects more than offset its federal tax expenditure. Perhaps states should be thinking about state income tax credits for historic preservation.

SUMMARY

Historic preservation has come into its own in the United States only in recent decades, and clearly much remains to be done. One area is to better understand preservation's economic benefits. Work has begun to inform us in this regard (see bibliography), and the current investigation adds to our body of knowledge.

This study has intertwined streams. It is a statewide investigation of the many ways that preservation influences a state's economy; it is the most extensive such statewide study ever done. At the same time, the data and analytic tools developed here have important implications far beyond New Jersey. The "recipes" of the labor and material components of historic rehabilitation allow for a more refined projection of the economic effects of such construction. The analysis of the heritage traveler gives the field a glimpse of how many such travelers there are as well as their socioeconomic profile and spending patterns. Insight is also afforded by knowing more about the state's historic sites and organizations. By bringing these different components together, their interconnectedness can be better appreciated. This was illustrated by the analysis of the HPBP, which integrated historic rehabilitation with enhanced attractiveness of historic sites and demonstrated how rehabilitation could foster heritage travel.

The present investigation also brings forth a powerful economic tool in the form of the Regional Science Research Corporation's (RSRC) input–output model. Preservationists should be more aware of input–output analysis, and the RSRC's model is one

[5] Federal tax expenditures are "costs" to the federal government in the form of taxes not collected because a tax incentive is offered.

of the better applications in this regard, especially when it is calibrated with the preservation-specific data developed for this study. This model can be used at various levels: the more technical-minded should consult Appendix C; those less concerned about the internal "black box" can readily just use the base figures summarized in Exhibits 9.2 and 9.9.

This study also points to areas where our knowledge is weaker. There is no current equivalent of an input–output model that can inform us with precision about property value effects of landmark designation and historic preservation. Values, on average, are likely enhanced, but the point is that we don't know by how much, nor will the outcome be the same in all circumstances. On a different note, there is much we do not know about linkages, such as the connections between historic rehabilitation, nonhistoric rehabilitation, and new construction in a Trenton or any other community. Basic measures are also open to question, including how economic benefits should be counted: as a total, or on an incremental basis (i.e., the delta of preservation's effects).

It is hoped that this study will contribute to the continued study of, and dialogue on, the economic effects of historic preservation.