Economic Impacts of Historic Preservation in South Dakota

Research Conducted for	Research Conducted by
SOUTH DAKOTA STATE HISTORICAL SOCIETY **STATE HISTORIC PRESERVATION OFFICE** Jay D. Vogt, Director and State Historic Preservation Officer 900 Governors Drive Pierre, SD 57501	**CENTER FOR URBAN POLICY RESEARCH** *Principal Investigators* Michael L. Lahr David Listokin WITH Matthew Kusy Amy Pivak Kaitlynn Davis and Jenna Fagan Edward J. Bloustein School of Planning and Public Policy Rutgers, The State University of New Jersey 33 Livingston Avenue, Suite 400 New Brunswick, NJ 08901-1982 Deb Sheals Historic Preservation Consultant 29 South Ninth Street #204 Columbia, MO 65201

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Forward

South Dakota is home to some of the most recognized historic places in the United States. Mount Rushmore, visited by nearly three million people annually, is known far and wide as a symbol of freedom and democracy. The colorful legends of Wild Bill Hickok and Calamity Jane make Deadwood a nationally-recognized destination, and the beloved stories of Laura Ingalls Wilder still attract people to De Smet to see the places Laura described in the *Little House* books or to attend the annual Laura Ingalls Wilder Pageant. In addition, South Dakota has sixteen National Historic Landmarks and six national parks.

However, South Dakota also has thousands of other historic places that, while not nationally known, are still significant in state and local history. In all, over 6,700 buildings, structures, objects, and sites from 65 of South Dakota's 66 counties are listed on the National Register of Historic Places. Further, nearly 200 local historical societies, museums, archives, interpretive centers, and historic sites operate across the state. These historic properties and history organizations demonstrate that history is an important component of South Dakota life today.

Despite the number and quality of historic attractions found here, very little has been done to quantify the economic impact of history in South Dakota on a statewide basis. The South Dakota State Historical Society's historic preservation office therefore commissioned this study to examine three main areas: historic rehabilitations, heritage tourism, and historic sites and museums in South Dakota. Through a competitive selection process, the South Dakota State Historical Society selected the Center for Urban Policy Research at Rutgers University to complete the study. The South Dakota State Historical Society funded this study with funds from the National Park Service's Historic Preservation Fund grant program.

Upon visiting a renovated historic building, people generally recognize the importance of preserving and promoting historic places. Very few people look at a renovated historic building bustling with activity and think, "Gee, I wish we had demolished that instead." Yankton, SD, for example, is full of skeptics who initially opposed the rehabilitation of the Meridian Bridge but have since acknowledged the tremendous popularity it has garnered as a pedestrian bridge. But while the benefit of historic places may be easy to see on the surface, the numbers behind the bricks and mortar are the focus of this study.

I am excited to present this study as I believe it demonstrates that capitalizing on our history through preserving historic buildings, supporting museums and historic sites, and promoting heritage tourism is significantly benefiting South Dakota.

Jay D. Vogt
Director, South Dakota State Historical Society
South Dakota State Historic Preservation Officer

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EXECUTIVE SUMMARY – ECONOMIC IMPACTS OF HISTORIC PRESERVATION IN SOUTH DAKOTA

STUDY OBJECTIVE AND ORGANIZATION

This study examines the many significant economic effects of historic preservation in South Dakota. The study examines the *total* economic effects of historic preservation, encompassing both the *direct* and *multiplier* effects. The *direct impact* component consists of labor and material purchases made specifically for the preservation activity. The *multiplier* effects incorporate what are referred to as *indirect* and *induced* economic consequences. The *indirect impact* component consists of spending on goods and services by industries that produce the items purchased for the historic preservation activity. The *induced impact* component focuses on the expenditures made by the households of workers involved either directly or indirectly with the activity. To illustrate, lumber purchased at a hardware store for historic rehabilitation is a direct impact. The purchases of the mill that produced the lumber are an indirect impact. The household expenditures of the workers at both the mill and the hardware store are induced impacts.

Economists estimate direct, indirect, and induced effects using an input-output model (I-O). This study specifies the total economic effects of major elements of historic preservation in South Dakota through a state of the art I-O model developed by the Rutgers University Center for Urban Policy Research (CUPR) for the National Park Service, Division of Cultural Resources, National Center for Preservation Technology and Training. The model is termed the Preservation Economic Impact Model (PEIM).

In the current analysis in South Dakota, the PEIM is applied to both *annual* (2011) historic preservation investment in this state and to the *cumulative* (1982-2011) investment of historic rehabilitation applied in South Dakota. The PEIM is first applied to an *annual* (2011) outlay of major components of historic preservation investment. The annual South Dakota historic preservation components considered by the PEIM include *historic rehabilitation* spending in South Dakota aided by major federal and state/local subsidy programs[1] ($22.64 million in 2011)[2], *heritage tourism* outlays in South Dakota ($237.25 million in 2011), and the budgetary spending by South Dakota *historic museums* ($15.25 million in 2011)—for a total of $275.14 million in 2011. The PEIM is then also applied to *cumulative* (1982-2011) $329.76 million expenditures attributable to *historic rehabilitation* in South Dakota that has been aided by major federal and state/local subsidy programs[3] over this 30-year period. (The $329.76 million is expressed in inflation-adjusted 2011 dollars, taking into account inflation over time.) The results of the PEIM model include many fields of data. The fields most relevant to this study are the total impacts of the following:

- **Jobs:** *Employment, both part- and full-time, by place of work, estimated using the typical job characteristics of each industry.* (Manufacturing jobs, for example, tend to be full-time; 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 in-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, where several individuals might fill one job-year on any given project.

- **Income:** *"Earned" or labor income, specifically wages, salaries, and proprietors' income*. Income does not include non-wage compensation (such as benefits, pensions, or insurance); transfer payments; or dividends, interest, or rents.

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[1] The major federal and state/local subsidy programs for historic rehabilitation include: the federal historic tax credit effected in South Dakota, historic rehabilitation-related Transportation Enhancement Activity (TEA) grants from the federal government, the multi-nature historic rehabilitation support from Deadwood gaming revenues (Deadwood historic rehabilitation outlays, South Dakota State Historical Society [SDSHS] Deadwood Fund Grants, and Outside of Deadwood Grant), the Sioux Falls Historic Façade Easement Program, and the State Historic Preservation Property Tax Moratorium.

[2] More technically, the historic rehabilitation spending of $22.64 million is the annual historic rehabilitation average over the 2007 through 2011 time span.

[3] See programs listed in footnote 1.

- **Wealth:** *Value added—the sub-national equivalent of gross domestic product (GDP).* At the state level, this is called gross state product (GSP) or, in some public data, GDP by state. 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 non-labor 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).

  Within input-output analysis, "output" is also not the same as business revenues, for several reasons. It is probably better defined as net business receipts, 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 calculations of value added and income generated.

  State tax revenues include income, excise, sales, and other state taxes, estimated from calculations of value added and income generated (e.g. visitor purchases).

  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 sales and other taxes.

PROFILE OF HISTORIC REHABILITATION IN SOUTH DAKOTA

- Before quantifying the economic impacts from historic rehabilitation in South Dakota, it is instructive to first examine the profile of this activity and specifically what historic rehabilitation in South Dakota was examined by this study.

- Summary Exhibit 1 shows the annual and total spending (in inflation-adjusted 2011 dollars) for historic rehabilitation funded by major federal and state/local programs over 1982 through 2011 in South Dakota. As indicated earlier, the total is about $330 million and the annual average over recent years (2007-2011) is $22.6 million.

Summary Exhibit 1: South Dakota Historic Rehabilitation Program Spending by Year (Real 2011 $ Values)

Year	1) SDSHS[4] Deadwood Fund Grants	2) Outside of Deadwood Grant	3) Deadwood Historic Preservation Budget	4) Sioux Falls Historic Façade Easement Program	5) State Historic Property Tax Moratorium	6) Federal Historic Tax Credits	7) TEA Grants[†]	Year Total
1982	-	-	-	-	-	$4,524,348.65	-	$4,524,348.65
1983	-	-	-	-	$1,347,855.23	-	-	$1,347,855.23
1984	-	-	-	-	-	$492,913.99	-	$492,913.99
1985	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-
1989	-	-	$1,919,855.35	-	-	$10,342,655.09	-	$12,262,510.45
1990	-	-	$5,177,791.71	-	-	-	-	$5,177,791.71
1991	-	-	$5,177,791.71	-	-	-	-	$5,177,791.71
1992	-	-	$1,217,669.72	-	$2,248,377.63	$1,229,969.42	-	$4,696,016.78
1993	-	-	$1,161,433.16	-	$577,977.84	$8,931,924.97	-	$10,671,335.96
1994	-	-	$1,738,941.37	-	$446,581.17	$4,813,152.58	$3,510,294.14	$10,508,969.26
1995	-	-	$2,910,470.52	-	$2,680,545.84	$5,641,085.08	$2,215,735.73	$13,447,837.18
1996	-	-	$1,615,550.80	-	$3,050,769.85	$2,875,861.29	$2,834,869.22	$10,377,051.16
1997	$498,690.15	-	$2,520,000.56	-	$615,640.61	$15,229,062.09	-	$18,863,393.41
1998	$570,199.41	-	$2,466,254.28	-	$253,141.34	$10,377,194.95	-	$13,666,789.97
1999	$191,128.98	-	$2,538,727.34	-	$2,128,436.04	$4,529,279.28	$97,652.03	$9,485,223.67
2000	$465,920.23	-	$1,397,795.20	-	$6,032,327.60	$4,607,591.33	-	$12,503,634.36
2001	$312,571.83	-	$1,558,997.29	-	$1,819,654.71	$1,008,091.36	$967,512.74	$5,666,827.93
2002	$467,103.92	$683,183.04	$1,142,077.56	-	$3,113,197.24	$3,054,524.95	$675,659.48	$9,135,746.19
2003	$464,256.57	$667,029.39	$640,945.86	$23,494.71	$9,492,864.79	$16,064,276.74	-	$27,352,868.06
2004	$350,381.66	$401,610.62	$534,725.45	-	$3,787,136.43	$10,020,134.18	-	$15,093,988.33
2005	$280,959.28	$471,294.34	$275,708.10	$1,107,658.80	$1,508,667.74	$1,751,512.57	$4,329,006.90	$9,724,807.73
2006	$261,887.34	$489,927.47	$353,153.83	$2,158,459.09	$7,583,579.97	$5,518,691.91	-	$16,365,699.60
2007	$177,914.22	$366,140.34	$564,617.88	$3,545,860.74	$5,568,709.36	$10,477,526.02	$478,963.18	$21,179,731.75
2008	$206,506.28	$414,510.28	$640,038.50	-	$30,661,365.01	$6,966,811.56	-	$38,889,231.64
2009	$222,943.99	$429,678.11	$624,086.42	$720,859.32	$2,417,667.70	$6,281,692.86	-	$10,696,928.40
2010	$78,661.37	$433,955.34	$555,875.32	-	$9,913,651.50	$11,966,819.14	$5,014,078.53	$27,963,041.20
2011	-	$207,000.00	$451,500.00	-	$200,000.00	$13,627,333.33	-	$14,485,833.33
Totals	**$4,549,125.23**	**$4,564,328.93**	**$37,184,007.92**	**$7,556,332.65**	**$95,448,147.61**	**$160,332,453.34**	**$20,123,771.97**	**$329,758,167.64**
Annual Avg. 1982-2011	$151,637.51	$152,144.30	$1,239,466.93	$251,877.76	$3,181,604.92	$5,344,415.11	$670,792.40	$10,991,938.92
Annual Avg. 2007-2011	**$137,205.17**	**$370,256.81**	**$567,223.63**	**$853,344.01**	**$9,752,278.72**	**$9,864,036.58**	**$1,098,608.34**	**$22,642,953.27**
Median Value*	$296,765.55	$431,816.72	$1,217,669.72	$1,107,658.80	$2,417,667.70	$5,641,085.08	$2,215,735.73	$10,684,132.18

*Median does not include years when no money was used from a particular program (e.g. 1982-1996 for SDSHS Deadwood Fund Grants were not included in the 1982-2011 annual average)

[†] Transportation Enhancement Activity (TEA) grants (related to historic rehabilitation) from three major federal transportation programs: Intermodal Surface Transportation Efficiency Act (ISTEA), Transportation Equity Act for the 21st Century (TEA-21) and Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

[4] South Dakota State Historical Society

- Major programs are federal historic tax credits, historic rehabilitation-related Transportation Enhancement Activity (TEA) grants from the federal government, the multi-nature support from Deadwood gaming (Deadwood historic rehabilitation outlays, South Dakota State Historical Society [SDSHS] Deadwood Fund Grants, Outside of Deadwood Grant), the Sioux Falls Historic Façade Easement Program, and the State Historic Preservation Property Tax Moratorium. A summary of the relative spending for each of these programs is shown in Summary Exhibit 2.

Summary Exhibit 2: South Dakota Rehabilitation Spending by Program (Real 2011 $ Value)

Historic Rehabilitation Subsidy Program	Cumulative (1982-2011) Historic Rehabilitation		Annual Average (2007-2011) Historic Rehabilitation	
I. STATE/LOCAL PROGRAMS	**$**	**%**	**$**	**%**
1) SDSHS Deadwood Fund Grants	4,549,125.23	1.4	137,205.17	0.6
2) Outside of Deadwood Grant	4,564,328.93	1.4	370,256.81	1.6
3) Deadwood Historic Preservation Budget	37,184,007.92	11.3	567,223.63	2.5
Subtotal All Deadwood	*46,297,462.08*	*14.1*	*1,074,685.61*	*4.7*
4) Sioux Falls Historic Façade Easement Program	7,556,332.65	2.3	853,344.01	3.8
5) State Historic Property Tax Moratorium	95,448,147.61	28.9	9,752,278.72	43.1
Subtotal All State/Local	*149,301,942.34*	*45.3*	*11,680,308.34*	*51.6*
II. FEDERAL PROGRAMS				
6) Federal Historic Tax Credits	160,332,453.34	48.6	9,864,036.58	43.6
7) TEA Grants	20,123,771.97	6.1	1,098,608.34	4.8
Subtotal All Federal	*180,456,225.31*	*54.7*	*10,962,644.92*	*48.4*
Total All Programs	**329,758,167.64**	**100.0**	**22,642,953.27**	**100.0**

- In an exemplary application of creative federalism, historic rehabilitation in South Dakota is aided in about equal measure (Summary Exhibit 2) by both federal programs (historic tax credits and TEA) and state/local programs (numerous Deadwood-based aids, Property Tax Moratorium, and Sioux Falls Historic Façade Easement). Of further note and as is evident from Summary Exhibit 2, gaming revenues from Deadwood are invaluable for supporting historic rehabilitation in South Dakota.

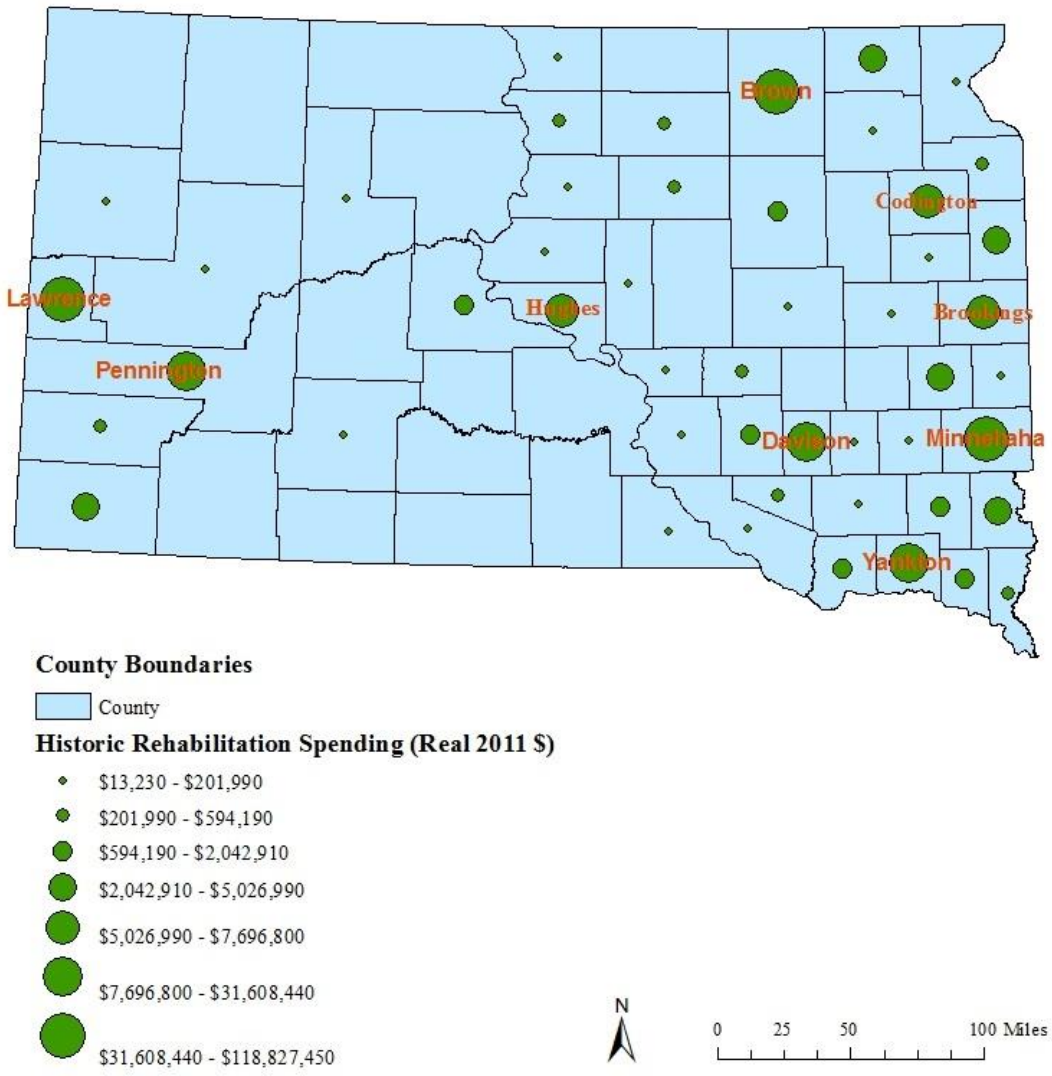
- To gain further insight, we break down historic rehabilitation spending in South Dakota by type of building. The highest amount of spending (both cumulatively and on average between 2007 through 2011) is on commercial buildings, followed by residential (mostly multi-family) and then civic/institutional buildings. The distribution of this spending is shown in Summary Exhibit 3.

Summary Exhibit 3: South Dakota Rehabilitation Spending by Property Type (Real 2011 $ Value)

Building Type	Cumulative (1982-2011) Historic Rehabilitation		Annual Average (2007-2011) Historic Rehabilitation	
	$	**%**	**$**	**%**
Residential Single Family	11,344,040.07	3.4	604,890.60	2.7
Residential Multi-Family	78,062,788.46	23.7	4,603,082.45	20.3
Residential Subtotal	*89,406,828.53*	*27.1*	*5,207,973.05*	*23.0*
Commercial	160,575,216.44	48.7	14,095,083.33	62.2
Civic/Institutional	79,776,122.67	24.2	3,339,896.88	14.8
Total	**329,758,167.64**	**100.0**	**22,642,953.27**	**100.0**

- Summary Exhibit 4 shows the spatial distribution of the cumulative $330 million of historic rehabilitation in South Dakota funded by major federal and state/local subsidy programs over 1982 through 2011. While many counties in the state have realized such rehabilitation, major levels of such renovation have occurred in such counties as Brookings, Brown, Codington, Davison, Hughes, Lawrence, Minnehaha, Pennington, and Yankton. These counties contain the largest cities in South Dakota, such as Brookings, Aberdeen, Watertown, Mitchell, Pierre, Spearfish, Sioux Falls, Rapid City, and Yankton.

Summary Exhibit 4: South Dakota: County Map of all Cumulative Historic Rehabilitation Spending, 1982-2011 (Total: $329,758,168)



Source: U.S. Census 2010 TIGER/Line; Historic Preservation Office of the South Dakota State Historical Society
Note: Historic rehabilitation encompasses 7 categories of renovation detailed in the historic rehabilitation section of the report

- To secure a better sense of the spatial distribution of historic rehabilitation spending, we examine Census data regarding zip codes in South Dakota. Summary Exhibit 5 indicates the socioeconomic and housing characteristics of the places (zip codes – lines 2.a, 2.b and 2.c) where the $330 million in cumulative 1982-2011 historic rehabilitation funded by the major federal and state/local subsidy programs occurred. For context, Summary Exhibit 5 also indicates these same characteristics for *all* zip codes in South Dakota (line 1), not just those where rehabilitation was effected. Summary Exhibit 5 demonstrates that the zip codes where the historic rehabilitation has been effected in South Dakota have socioeconomic and housing characteristics that mirror the state average. The only exception is population density, where understandably we find that historic rehabilitation is generally effected in South Dakota zip codes with a relatively higher population density.

Summary Exhibit 5: Selected Census Data for Overall State of South Dakota and Areas with Historic Rehabilitation Spending from 1982-2011
Zip Codes and 2000/2010 Census Data

POPULATION CHARACTERISTICS						
	POPULATION DENSITY (PER SQUARE MILES)*	% WHITE*	% MINORITIES (NON-WHITE & HISPANIC)*	MEDIAN HOUSEHOLD INCOME	% POVERTY	% UNEMPLOYED
1 Total South Dakota						
Average of all zip codes in South Dakota	10.7	85.8%	14.2%	$35,709	12.8%	3.0%
2 Historic Rehabilitation Spending Locations						
2.a Average of all zip codes with any historic rehabilitation spending	20.81	88.9%	11.1%	$36,144	10.5%	2.8%
2.b Average of all zip codes with historic rehabilitation spending over $100,000	40.22	88.3%	11.7%	$36,407	10.3%	2.9%
2.c Average of top 10 zip codes with historic rehabilitation spending	133.19	86.4%	13.6%	$33,717	11.9%	3.4%

HOUSING CHARACTERISTICS				
	% RENTER OCCUPIED HOUSING*	MEDIAN HOUSING VALUE (ALL OWNER-OCCUPIED)	PAY MORE THAN 30% OF INCOME FOR OWNER-OCCUPIED HOUSING	PAY MORE THAN 30% OF INCOME FOR RENTAL HOUSING
3 Total South Dakota				
Average of all zip codes in South Dakota	32.0%	$73,195	15.1%	29.2%
4 Historic Rehabilitation Spending Locations				
4.a Average of all zip codes with any historic rehabilitation spending	35.0%	$78,910	14.9%	30.7%
4.b Average of all zip codes with historic rehabilitation spending over $100,000	37.4%	$81,695	14.7%	31.6%
4.c Average of top 10 zip codes with historic rehabilitation spending	43.4%	$78,354	15.1%	32.6%

Source: South Dakota historic rehabilitation project database and Rutgers University analysis of South Dakota Census (2000 and 2010) data by zip code tabulation area (ZCTA)
*Demarks analysis where Census 2010 data used, all other categories used Census 2000 data.

ECONOMIC CONTRIBUTIONS OF HISTORIC PRESERVATION IN SOUTH DAKOTA

- The guiding objective of this study is to quantify the economic contributions from historic preservation in South Dakota. Our major findings in this regard are highlighted below and also summarized in Exhibits 6 and 7 on the following pages. Additional tabular detail is presented as well, with the following offered as a handy topic and exhibit guide for the reader.

  I. *Annual* Economic Impacts of South Dakota Historic Rehabilitation, Heritage Tourism, and Museum Spending ($275 million 2011)
     - Overall Impacts – Summary Exhibits 6, 8, 9, 10, 11
     - Detailed Impacts (by activity and national or in-state effects)
       i. All three activities – Summary Exhibits 18 (national) and 19 (in-state)
       ii. Historic Rehabilitation alone – Summary Exhibits 22 (national) and 23 (in-state)
       iii. Heritage Tourism alone – Summary Exhibits 24 (national) and 25 (in-state)

  II. *Cumulative* Economic Impacts of South Dakota Historic Rehabilitation ($330 million, 1982-2011)
     - Overall impacts – Summary Exhibits 7 and 12
     - Detailed Impacts (by activity and national or in-state effects) – Summary Exhibits 20 (national) and 21 (in-state)

  III. *Qualitative* Economic and Other Contributions of South Dakota Historic Preservation
     - Four case studies – Summary Exhibits 13-16 (13 – Rapid City, 14 – Yankton, 15 – Gary, and 16 – Sioux Falls)
     - Examples of downtown historic preservation investment and revitalization – Exhibit 17

- Summary Exhibit 6 shows the *annual economic* impacts of three components of South Dakota yearly historic preservation activity as of 2011: *rehabilitation of historic structures* ($22.64 million[5]), *heritage tourism* ($237.25 million), and *historic museums* ($15.25 million). These three items together comprise a total of $275.14 million annually in direct spending. This spending creates about 5,500 jobs within South Dakota that generate $283.9 million in output, $96.3 million in labor income, $152.2 million in gross state product (GSP), about $123 million to the state's total wealth (in-state wealth, which encompasses GSP less federal taxes) and $15.8 million in South Dakota state and local taxes.

- Summary Exhibit 7 quantifies the *cumulative impacts of historic rehabilitation in South Dakota* funded by major federal and state/local programs. This rehabilitation has had long-running impacts on the state. From 1982 through 2011, cumulative investment in South Dakota-based historic rehabilitation funded by major federal and state/local subsidy programs was $329.76 million. (All cumulative dollar values are expressed in 2011 inflation-adjusted dollars.) This investment has created 4,810 jobs statewide in South Dakota, contributing $343.2 million in output in South Dakota, $198.4 million in GSP, $159.3 million in income, $151.9 million in net wealth to South Dakota (GSP less federal taxes), and a cumulative $10.4 million in South Dakota state and local taxes.

[5] This is the annual average over 2007 through 2011

SUMMARY EXHIBIT 6
Summary of the Annual Economic Impacts of Historic Preservation in South Dakota, 2011

		I *Historic Rehabilitation*	II *Heritage Tourism*	III *Historic Museums*	***Total Examined Economic Impacts***
SOUTH DAKOTA DIRECT EFFECTS		**$22.64 million** annually of historic rehabilitation expenditures results in:	**$237.25 million** annually of heritage travel-attributed expenditures results in:	**$15.25 million** annually of construction and added retail payroll results in:	**$275.14 million** ***(I + II + III)***
↓	**National Total (Direct and Multiplier) Impacts**				
NATIONAL TOTAL IMPACTS (DIRECT AND MULTIPLIER)	Jobs (person-years)	453	5,821	282	**6,535**
	Income ($ million)	15.8	110.7	8.3	**134.4**
	Output ($ million)	41.9	373.6	24.3	**438.4**
	GDP* ($ million)	20.7	180.6	16.0	**218.8**
	Taxes ($ million)	4.6	46.0	2.6	**52.9**
	Federal ($ million)	*3.4*	*26.4*	*1.8*	***31.6***
	Local/State ($ million)	*1.2*	*19.6*	*0.8*	***21.3***
↓	**In-State South Dakota Total (Direct and Multiplier) Impacts**				
SOUTH DAKOTA PORTION OF NATIONAL TOTAL IMPACTS	Jobs (person-years)	330	4,970	219	**5,511**
	Income ($ million)	10.9	79.3	6.0	**96.3**
	Output ($ million)	23.5	243.3	15.9	**283.9**
	GSP* ($ million)	13.6	124.4	12.3	**152.2**
	Taxes ($ million)	3.9	39.1	2.3	**45.0**
	Federal ($ million)	*3.2*	*24.4*	*1.7*	***29.2***
	Local/State ($ million)	*0.7*	*14.7*	*0.6*	***15.8***
	In-state wealth* ($ million)	10.4	100.0	10.6	**123.0**

Source: Rutgers University, Center for Urban Policy Research, 2012.
*GDP=Gross Domestic Product; GSP = Gross State Product; In-state wealth = GSP less federal taxes.
Note: Totals may differ from indicated subtotals because of rounding.

SUMMARY EXHIBIT 7
Summary of the Cumulative Economic Impacts of Historic Rehabilitation in South Dakota, 1982-2011

		I *Historic Rehabilitation*	***Total Examined Economic Impacts***
SOUTH DAKOTA DIRECT EFFECTS		**$329.76 million** cumulative of historic rehabilitation expenditures results in:	**$329.76 million** ***(I)***
↓	**National Total (Direct and Multiplier) Impacts**		
NATIONAL TOTAL IMPACTS (DIRECT AND MULTIPLIER)	Jobs (person-years)	6,600	**6,600**
	Income ($ million)	230.7	**230.7**
	Output ($ million)	610.3	**610.3**
	GDP* ($ million)	301.8	**301.8**
	Taxes ($ million)	66.7	**66.7**
	Federal ($ million)	*49.7*	***49.7***
	Local/State ($ million)	*17.0*	***17.0***
↓	**In-State South Dakota Total (Direct and Multiplier) Impacts**		
SOUTH DAKOTA PORTION OF NATIONAL TOTAL IMPACTS	Jobs (person-years)	4,810	**4,810**
	Income ($ million)	159.3	**159.3**
	Output ($ million)	343.2	**343.2**
	GSP* ($ million)	198.4	**198.4**
	Taxes ($ million)	56.9	**56.9**
	Federal ($ million)	*46.5*	***46.5***
	Local/State ($ million)	*10.4*	***10.4***
	In-state wealth* ($ million)	151.9	**151.9**

Source: Rutgers University, Center for Urban Policy Research, 2012.
*GDP=Gross Domestic Product; GSP = Gross State Product; In-state wealth = GSP less federal taxes.
Note: Totals may differ from indicated subtotals because of rounding.

ECONOMIC IMPACTS OF ANNUAL SOUTH DAKOTA HISTORIC REHABILITATION (2011)

- Economic benefits from historic rehabilitation are enjoyed throughout the South Dakota economy. The total economic impacts to the nation from the $22.6 million in annual statewide historic rehabilitation spending include 453 jobs generating an additional $42 million in output, $16 million in income and $21 million in GDP. At the state of South Dakota level, the $22.6 million in annual (2011) historic rehabilitation spending translates to 330 jobs, $11 million in labor income, $14 million in GSP and $0.7 million in annual state and local South Dakota taxes. The in-state wealth (GSP minus federal taxes) resulting from rehabilitation expenditures amounts to $10.4 million, indicating a high 76 percent retention rate (Summary Exhibit 8).

SUMMARY EXHIBIT 8
Total Economic Impacts of Annual South Dakota
Historic Building Rehabilitation ($22.6 million), 2011

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	330	123	453
Income ($millions)	10.9	4.9	15.8
Output ($millions)	23.5	18.4	41.9
GDP/GSP[a] ($millions)	13.6	7.1	20.7
Total taxes ($millions)	3.9	.7	4.6
Federal ($millions)	*3.2*	*0.2*	*3.4*
State/Local ($millions)	*0.7*	*0.5*	*1.2*
In-State wealth[b] ($millions)	10.4	---	---

[a] GDP/GSP = Gross Domestic Product/Gross State Product.
[b] In-State wealth = GSP minus federal taxes.

- The benefits that accrue to South Dakotans from annual investment in historic rehabilitation projects are extensive (Summary Exhibits 22 and 23). As with all spending examined in this study, every sector of the state's economy sees their payrolls and production increased. Just over half of the South Dakota-based jobs from the annual rehabilitation investment (178 of 330 jobs) and South Dakota gross state product ($7.4 million of $13.6 million GSP) created by annual historic rehabilitation within South Dakota accrue to the state's construction industry; this is as one would expect, given the share of such projects that require the employment of building contractors. Other South Dakota major beneficiaries are services (54 jobs, $1.7 million in GSP) as well as retail trade (39 jobs, $1.1 million in GSP) and manufacturing (30 jobs, $1.4 million in GSP).

ECONOMIC IMPACTS OF ANNUAL SOUTH DAKOTA HERITAGE TOURISM (2011)

- In 2011, direct domestic travel expenditures in South Dakota amounted to approximately $1 billion. Clearly, travel and tourism are significant to South Dakota's well-being and as an industry, South Dakota tourism is one of the state's top revenue producers.

- Heritage tourism is an important component of the South Dakota travel industry. For the purposes of the current investigation, we define heritage travelers as those who indicated the following trip activities on intercept surveys conducted in this state: "Museum/Historic Places," "Native American Heritage" and "Old West History."

- Of the total 15.6 million "person-stays" of tourists in South Dakota, heritage travelers as defined above comprise about 3.4 million "person-stays" or 22 percent.

- Compared to non-heritage travelers to South Dakota, heritage travelers to this state have the following characteristics:

Heritage Traveler Characteristics	Heritage versus Non-Heritage Travelers
• Stay longer in South Dakota	• 5.26 versus 3.23 average trip length in days
• Spend more	• $67.32 $/person-day versus $50.56 $/person-day
• Have a larger travel party size	• 3.36 versus 3.06
• Are more likely to come from "afar" (more distant regions in the United States, e.g., New England and the middle Atlantic states, and Europe and Asia)	• 5% from Middle Atlantic States [NJ, NY and PA] versus 2%
• Are less likely to have been to SD before current trip	• 64% versus 75%
• Are more likely to have South Dakota as their primary destination	• 65% versus 50%
• Are more likely to have the following SD cities as their primary destination: Rapid City Custer Deadwood	 • 28% versus 22% • 8% versus 4% • 7% versus 4%
• More likely to visit the SD tourism website	• 28% versus 18%
• More likely to use certain forms of transportation in SD trip airplane rental car	 • 5% versus 2% • 6% versus 2%
• More likely to enjoy certain types of trip activities Visiting National/State parks Local Attraction/Events Scenic Drives	 • 80% versus 35% • 73% versus 31% • 85% versus 51%

- At a minimum, South Dakota heritage travel amounts to an estimated $237 million in 2011, or about 22.4 percent of the total approximate $1 billion domestic travel expenditures in South Dakota.

- The total national economic impacts from the $237 million in annual 2011 South Dakota heritage travel include 5,821 jobs generating $373.6 million in output, $180.6 million in GDP, and $111 million in income at the national level. At the state of South Dakota level, the $237 million in South Dakota heritage travel translates annually to 4,970 jobs, an additional $243 million in South Dakota output, $124 million in-state GSP, and $79 million in income. The in-state wealth (GSP minus federal taxes) deriving from heritage tourism amounts to just over $100 million with $14.7 million realized in state and local South Dakota taxes (Summary Exhibit 9).

SUMMARY EXHIBIT 9
Total Economic Impacts of Annual South Dakota Heritage Tourism Spending ($237 million), 2011

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	4,970	851	5,821
Income ($millions)	79.3	31.4	110.7
Output ($millions)	243.3	130.3	373.6
GDP/GSP ($millions)	124.4	56.2	180.6
Total taxes ($millions)	39.1	6.9	46.0
Federal ($millions)	24.4	2.0	26.4
State/Local ($millions)	14.7	4.9	19.6
In-state wealth ($millions)	100.0	---	---

- With regard to heritage tourism, it is no surprise that the vast majority of annual employment and GSP gains within the state are located in retail trade (2,833 jobs, $56.4 million in GSP) and services (1,715 jobs, $43.0 million in GSP) sectors, since these would include the businesses with which tourists would most likely interact—gift shops, gas stations, restaurants, lodging, etc. (Summary Exhibits 24 and 25). However, due to the indirect and induced effects, significant impacts reverberate throughout the state's economy, most prominently in the finance, insurance, and real estate (FIRE) sector (97 jobs, $8.0 million GSP) and the transportation and public utilities sector (132 jobs, $6.7 million GSP). Wholesale trade firms see 100 jobs created that contribute just over $4.8 million to the state's pre-tax wealth or gross state product, and the manufacturing group adds 74 jobs with $4.2 million in GSP.

- As just detailed, heritage tourism in South Dakota generates considerable economic benefit in terms of jobs, wealth created, income earned, etc. A further contribution is that the above economic activity is often disproportionately derived from residents traveling from out-of-state. Thus, the economic benefit from South Dakota heritage travel is disproportionately importing new dollars of economic activity to South Dakota—an optimal strategy of economic pump priming. Additionally, heritage travel in South Dakota is contextually most important to the economic vitality of the host communities containing the historic resources that are visited.

ECONOMIC IMPACTS OF ANNUAL SOUTH DAKOTA HISTORIC MUSEUMS (2011)

- In addition to historic museums constituting an important draw for heritage tourists, these sites and museums have capital and operating spending that contributes to South Dakota's economy. We conservatively estimate that the annual spending by South Dakota's historic museums amounts to $15.2 million.

- The overall effects to the nation of the $15.2 million in spending are $24.3 million in additional industrial output, 282 jobs created, $8.3 million in added income, and $16 million of wealth injected into the national economy. Based on the very local nature of historic site visitation and employment, it is not at all surprising that most economic benefits are retained within the state of South Dakota; for example, 219 of 282 jobs (78 percent) are retained within state lines. Other in-state economic benefits from the operation of South Dakota historic museums include $15.9 million in output and $12.3 million in GSP (Summary Exhibit 10).

SUMMARY EXHIBIT 10
Total Economic Impacts of Annual South Dakota
Historic Museums ($15.2 million), 2011

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	219	63	282
Income ($million)	6.0	2.3	8.3
Output ($million)	15.9	8.4	24.3
GDP/GSP ($million)	12.3	3.7	16.0
Total taxes ($million)	2.3	0.3	2.6
Federal ($million)	1.7	0.1	1.8
State/Local ($million)	0.6	0.2	0.8
In-state wealth ($million)	10.6	---	---

ECONOMIC IMPACTS OF COMBINED $275 MILLION ANNUAL SOUTH DAKOTA HISTORIC PRESERVATION ACTIVITY: HISTORIC REHABILITATION, HERITAGE TOURISM, AND HISTORIC MUSEUMS (2011)

- The combined effects of historic preservation activity can be calculated by summing the individual components mentioned above. We estimate that the annual spending on historic preservation in South Dakota amounts to $275 million.

- The national economic impacts from the annual (2011) South Dakota $275 million of historic preservation activity include 6,535 jobs, $438 million in output, $134 million in income, $219 million in GDP and $53 million in combined federal, state and local taxes (Summary Exhibit 11).

- Of the 6,535 total national jobs generated nationally by annual $275 million spending in activities related to historic preservation in South Dakota, nearly eight in ten are concentrated in two major sectors: retail trade (2,971 jobs or 45 percent) and services (2,172 jobs or 33 percent). The next largest beneficiary is manufacturing (461 jobs, 7 percent). Combined, these three sectors account for a similar combined share of the total output, labor income and GDP generated (Summary Exhibit 18).

- South Dakota retains about 5,511 jobs (84 percent of the 6,535 direct jobs created nationally) by activity related to South Dakota historic preservation. Through annual $275 million activity related to historic preservation, South Dakota annually gains $284 million in industrial output (65 percent of the national total), 5,511 jobs (84 percent of the national total), $96 million in earned income (72 percent of the national total), and $152 million in Gross State Product or GSP (70 percent of the national total). In addition, the annual South Dakota historic preservation investment garners over $8 million in state taxes and over $5 million annually in local taxes. The annual contribution to South Dakota in-state wealth (GSP less federal taxes) is $123 million (Summary Exhibit 11).

SUMMARY EXHIBIT 11
Total Economic Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation, Heritage Tourism, and Historic Museums ($275 million), 2011

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	5,511	1,024	6,535
Income ($million)	96.3	38.1	134.4
Output ($million)	283.9	154.5	438.4
GDP/GSP ($million)	152.2	66.6	218.8
Total taxes ($million)	45.0	7.9	52.9
Federal ($million)	29.2	2.4	31.6
State/Local ($million)	15.8	5.5	21.3
In-state wealth ($million)	123.0	---	---

- As at the national level, the main economic sectors benefiting from the annual $275 million in historic preservation spending in South Dakota which generates total in-state impacts of 5,511 jobs, $152 million in GSP and $96 million in income includes retail trade (2,892 jobs, $58 million in GSP and $36 million in income) and services (1,946 jobs, $57 million in GSP and $36 million in income). Because of the interconnections of the economy, however, many economic sectors in South Dakota—from wholesale trade to real estate—realize gains from historic preservation in this state (see Summary Exhibit 19 for details).

ECONOMIC IMPACTS FROM THE CUMULATIVE $330 MILLION INVESTMENT IN HISTORIC REHABILITATION IN SOUTH DAKOTA (1982-2011)

- With regard to the $330 million in cumulative effects from the aggregate historic rehabilitation funded by major federal and state/local programs in South Dakota over 1982 through 2011, those investments contributed 6,600 jobs to the national economy, as well as $610.3 million in industrial output, $301.8 million in gross domestic product, $230.7 million in earned income, and $66.7 million in taxes. When out-of-state effects are excluded, South Dakota benefited from the aggregate historic rehabilitation a total of 4,810 jobs, as well as an additional $343.2 million in output by the state's businesses, $198.4 million in new gross state product (GSP or gross wealth), $159.3 million in added salary for South Dakota residents, and a total of $10.4 million deposited in the coffers of state and local governments across the state. Overall, net in-state wealth in South Dakota (GSP minus federal taxes) grew by $151.9 million as a result of this rehabilitation (Summary Exhibit 12).

SUMMARY EXHIBIT 12
Cumulative Economic Impact of South Dakota Historic Rehabilitation ($330 million), 1982-2011

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	4,810	1,790	6,600
Income ($millions)	159.3	71.5	230.7
Output ($millions)	343.2	267.1	610.3
GDP/GSP ($millions)	198.4	103.4	301.8
Total taxes ($millions)	56.9	9.8	66.7
Federal ($millions)	*46.5*	*3.2*	*49.7*
State/Local ($millions)	*10.4*	*6.6*	*17.0*
In-State wealth ($millions)	151.9	---	---

- Of the total $198 million in South Dakota gross state product generated by the $330 million aggregate investment historic rehabilitation, the biggest GSP gains were in construction ($108 million) and

services ($25 million). Major industrial components within the construction group include general building contractors ($78 million GSP) and heavy construction contractors ($19 million GSP). Their large-scale counterparts in the services group include engineering and management services ($11 million GSP) and legal services ($4.4 million GSP).

- While the construction and services sectors in South Dakota reaped the major gains from the $330 million in cumulative historic rehabilitation investment over the 1982 through 2011 period, other sectors benefited as well. For example, South Dakota manufacturing realized $20.5 million in GSP, $17.2 million in income, and $63.1 million in output. (See Summary Exhibit 21 for further details.)

- What in-state occupations benefited the most? Of the total 4,810 jobs generated to South Dakota from the cumulative $330 million historic rehabilitation investment, major beneficiaries included precision production, craft and repair occupations (1,496 jobs), operators, fabricators and laborers (833 jobs), and administrative support occupations (662 jobs).

QUALITATIVE IMPACTS OF INVESTMENT IN HISTORIC REHABILITATION IN SOUTH DAKOTA

- Thus far, the analysis has quantified the economic impacts of historic preservation spending in South Dakota as estimated by the Rutgers Input-Output model (PEIM). We get a further perspective on these impacts through qualitative case study analysis. The latter describe what transpired on a case-by-case basis and provide not only the local economic impacts, but additionally what the rehabilitation has meant to the local community.

- As part of the current investigation, four case studies were conducted and these are synopsized in Summary Exhibits 13 through 16. The four cases involved the rehabilitation of the:

    - Windsor Block (Rapid City, Pennington County)
    - Charles Gurney Hotel (Yankton, Yankton County)
    - South Dakota School for the Blind (Gary, Deuel County)
    - Security Bank Building (Sioux Falls, Minnehaha County)

- All of these case studies used a variety of subsidies to rehabilitate important historic buildings, often involving adaptive reuse. The programs tapped by the cases included:

    - Federal historic tax credit
    - SDSHS Deadwood Fund Grants
    - South Dakota Historic Property Tax Moratorium
    - Sioux Falls Façade Easement
    - HOME Funds

- The four case studies had many positive historic preservation, downtown revitalization, affordable housing, economic development, and other benefits. For instance, the Rapid City Windsor Block project comprised this community's largest downtown rehabilitation project in two decades, spurred additional downtown retail sales, provided attractive space to both existing and new community businesses, and offered upscale downtown residences. The historic rehabilitation of the Charles Gurney Hotel preserved an impressive late 19th-century building on the edge of downtown Yankton while at the same time offered affordable housing for the disabled and senior citizens.

- Additionally, numerous downtowns throughout South Dakota exist as vibrant examples of places that have benefited from rehabilitation spending. Pictures of several such downtowns in the state benefiting from historic preservation and related activities are included below.

- In short, the quantitative job, income and other consequences from historic preservation that are detailed by the PEIM and were presented earlier do not fully capture the benefits of historic preservation in South Dakota, for there are many qualitative gains as well from this state's preservation activities.

THE ECONOMIC BENEFITS OF HISTORIC PRESERVATION IN SOUTH DAKOTA: A FINAL LOOK

- It is instructive to recap some of the key economic and other impacts from historic preservation in South Dakota.
- A *cumulative* (1982-2011) $330 million in *historic rehabilitation* in South Dakota aided by major federal and state/local subsidies has realized extensive total (direct and multiplier) economic impacts to South Dakota including about 4,800 jobs, $343 million in output, $198 million in gross state product, and $159 million in income. All this South Dakota-based economic activity has further generated about $57 million in taxes, comprised of approximately $47 million in federal taxes and $10 million in local/state taxes (about $7 million in South Dakota state taxes and $3 million in local taxes). (The economic and tax impacts to the nation—South Dakota and all other states—is yet larger, but we shall not recap that here.)
- An *annual* $275 million in a broad array of South Dakota *historic preservation* activities (historic rehabilitation, heritage tourism and the operation of historic museums) also realizes extensive total (direct and multiplier) economic benefits to the state. These include 5,500 jobs, $284 million in output, $152 million in gross state product, $96 million in income and $45 million in taxes ($29 million federal, $8 million state, and $7 million local).
- We also find that $1 million invested in historic rehabilitation generates an equal if not sometimes superior economic impact in-state to South Dakota across multiple dimensions (employment, income, output, and Gross State Product) relative to a similar investment in other construction endeavors (new construction of different types and infrastructure [highway] improvements) as well as other forms of economic activity in South Dakota (agriculture, manufacturing, and banking). Thus, adding historic rehabilitation to a menu of other construction investments and other economic activities makes for a holistically stronger overall South Dakota economy.
- Finally, the case studies point to many qualitative benefits of historic preservation including providing affordable housing, fostering downtown economic development and encouraging adaptive reuse.
- It is further important to realize that our estimate of economic benefits from historic preservation in South Dakota is *understated* for various reasons:
    - For technical reasons, our enumeration of the South Dakota historic preservation spending quantified in this study (historic rehabilitation, heritage tourism and history museum budgets) is likely understated. For example, a more expansive definition of what travel characteristics "flag" a heritage traveler would have resulted in a higher estimate of annual heritage travel spending than the $275 million entered into the PEIM. In addition, because of data limitations, our annual estimate of $15 million of heritage museum spending is also very understated.

- Significant economic benefits that accrue from historic preservation in this state that have *not* been quantified by Rutgers University because they went beyond the scope of the current investigation. For example, in considering historic rehabilitation, we focus only on *construction*—a one-time investment. In fact, there are recurring year-by-year economic returns from historic rehabilitation. These *recurring* benefits include the renovated South Dakota historic rehabilitation enhancing tourism in the future, specifically heritage and cultural travel (a multi-billion dollar industry); the historic rehabilitation providing adaptively-reused and other commercial space for businesses that annually have a payroll and tax payments; and the positive historic rehabilitation impact on property values, which then yearly have tax, wealth and other benefits. We have also not counted the well-known (though difficult to measure) tendency of historic rehabilitation to boost investor and neighborhood confidence and induce a broader trend toward community-wide revitalization.
- In a related fashion, we are not capturing how the enhanced "quality of life" (QOL) realized by the historic rehabilitation furthers the state economy and state tax generation. The case studies show how historic preservation in South Dakota improved the QOL in communities across the state. An enhanced QOL, in turn, realizes economic and state tax gains from attracting-retaining the "creative class" and more generally from enhanced worker efficiency, reduced medical expenses, and the like.
- In short, the previously specified multi-million dollar economic and tax gains from historic preservation in South Dakota is a considerable understatement of the larger recurring economic activity associated with this endeavor—from the multi-year operation of and employment in adaptively reused buildings, property appreciation, and QOL—and with it, multiple rounds of added revenue to the South Dakota economy and state and local tax coffers.

SUMMARY EXHIBIT 13
Case Study: Windsor Block
629 St. Joseph St., Rapid City, Pennington County, South Dakota

Construction Date:	1886
Original Use:	Retail
Date of Rehabilitation:	2006-2012
New Use:	Mixed Use (Retail/ Housing)
Total Project Costs:	$1.4 million
Housing Units Created:	9, average monthly rent of $1,200
Incentives Used:	Federal Historic Tax Credit, State Historic Property Tax Moratorium, SDSHS Deadwood Fund Grant

The largest historic rehab in downtown Rapid City in over a decade removed a 1960s slipcover to reveal a late 19th-century architectural gem and added new upscale downtown housing.

Community Benefits

- Long-vacant second floor space converted to upscale loft apartments.
- Largest single rehabilitation project in the center city in two decades.
- Added two new businesses and gave well-established downtown businesses improved quarters.
- Increased sales in the retail spaces, and added customers from the lofts resulted in increased sales tax revenue for the downtown area.

Critical Contributions of Preservation Programs

- Federal Historic Tax Credits
- State Historic Property Tax Moratorium
- Deadwood Fund Grant from SDSHS
  - The $10,000 grant helped finance repairs after the removal of modern materials from part of the façade, which allowed the property to be counted as a contributing resource in the existing historic district.

The project began in earnest in 2008, just as the Great Recession was beginning, and owner Dan Senftner recently noted that he "could not have done the project without the tax credits and the moratorium."

This project was very much a local venture. The owner is a long-time resident of Rapid City, the contractors were almost all local, and the financing and professional service providers were all from South Dakota. Senftner made a conscious effort to use local businesses whenever possible.

The project not only created a one of a kind space, it also accounted for well over one million dollars in trade for Rapid City businesses. It was also good for the ongoing business climate of downtown Rapid City. Existing businesses were able to expand, interesting new businesses found a place to start up, and the housing base of the area was diversified.

SUMMARY EXHIBIT 14
Case Study: Charles Gurney Hotel
120 E. 3rd Street, Yankton, Yankton County, South Dakota

Current Name:	Sir Charles Apartments
Construction Date:	1891
Original Use:	Hotel
Date of Rehabilitation:	2010
New Use:	Housing
Total Project Costs:	$3,925,323
Housing Units Created:	34
Incentives Used:	State Historic Property Tax Moratorium, South Dakota Housing Development Authority (SDHDA) HOME Funds, SDHA Preservation Loan, and Federal Low Income Housing Tax Credit

The recent rehabilitation of the historic Charles Gurney Hotel not only saved a landmark building in downtown Yankton, but also provided safe, secure independent living facilities for the disabled and senior citizens.

Impact of this Project

- Most of the $3.9 million in project costs were spent with local companies.
- Retained 34 units of affordable housing.
- Preserved an impressive late 19th-century building on the edge of downtown Yankton.
- Garnered praise from preservationists and affordable housing advocates alike.
- Greatly increased the safety of the building and allowed a consolidation of services for the residents.

Critical Contributions of Preservation/Other Programs

- HOME Funds: $0.8 million
- Housing Tax Credits: $2.3 million
- State Historic Property Tax Moratorium
  - This will keep property tax rates at their former level for eight years, for a total savings of approximately $80,000

In 2011, the project was one of a handful across the country to receive the coveted Doorknocker Award from HUD. The owners were recognized "for their outstanding work in producing affordable housing…This project is critical to retaining affordability and assistance" for disabled clients in the community.

The project has garnered similar praise from local preservationists. Historic Yankton, Inc. recently wrote that the hotel "is an important historic structure representing Yankton's early development in its location, style and materials used… [an] enormous contribution to Yankton, on so many levels!"

SUMMARY EXHIBIT 15
Case Study: South Dakota School for the Blind
1312 Coteau, Gary, Deuel County, South Dakota

Current Name:	Buffalo Ridge Resort
Construction Date:	1900-1930s
Original Use:	State School for the Blind
Dates of Rehabilitation:	2009-2010
New Use:	Resort, Corporate Offices
Total Project Costs:	$2.2 million (Phase 1)
Housing Units Created:	19 hotel rooms and over two dozen campsites
Incentives Used:	State Historic Property Tax Moratorium, State aid for hazardous material removal, utility company rebates

A recent restoration project transformed a long-vacant school campus into a modern resort and business center. Buildings which once housed blind school children have been returned to use, breathing new life into the small town that has welcomed the resort as much as it did the children who attended school there in the early years of the 20th century.

Community Benefits

- Long-vacant landmark returned to productive life.
- Well over a million dollars in wages paid to area residents during the construction phase.
- Project resolved to use local contractors whenever possible and was a boon to the local construction industry.

Long-Range Economic Impacts

- Permanent employment for 56 people, in a town of 635.
- A corporate office that leases space in one of the buildings accounts for eight more jobs and the corporation relocated to Gary from Minnesota soon after the rehabilitation was completed.
- Increased tourism in the region has resulted in higher sales tax revenues and increased property values.

The restored complex is once again a social and economic hub for Gary and the surrounding countryside: the campus today is as full of life as it was when it housed the state's only school for the blind. And, just as the original School for the Blind brought social as well as economic benefits to the community, Buffalo Ridge Resort has impacted the everyday lives of area residents.

A retiree to Gary noted she and her husband "are always happy… that… the restoration project is attracting new business to our community. It's so refreshing to have such a place in our town…Having the cultural opportunities Buffalo Ridge offers has truly enhanced our lives here."

SUMMARY EXHIBIT 16
Case Study: Security Bank Building
101 S. Main St., Sioux Falls, Minnehaha County, South Dakota

Construction Date:	1916
Original Use:	Bank and Offices
Date of Rehabilitation:	2007-2011
New Use:	Housing and Offices
Total Project Costs:	$7 million
Housing Units Created:	13
Incentives Used:	Federal Historic Tax Credits, Sioux Falls Façade Easement Program, and State Historic Property Tax Moratorium

The rehabilitation of the Security Bank Building illustrates the important role historic preservation can play in downtown revitalization. Rehabilitation of this local landmark created popular new downtown housing and one-of-a-kind office space for a prominent local law firm.

Impact of this Project

- Landmark building transformed from half-empty to fully-leased.
- The number of employees working in the building tripled.
- New housing addresses long-range planning objectives for Sioux Falls.
- Downtown redevelopment capitalizes on existing infrastructure.

Critical Contributions of Preservation Programs

- Federal Historic Tax Credit
- Sioux Falls Façade Easement program
- State Historic Property Tax Moratorium
  - $350,000 in savings over an eight year term

Additionally, all seven million dollars spent on the rehab stayed in South Dakota. The building owners are all from Sioux Falls, and all of the work on the building was done by South Dakota companies. Financing was handled by local banks as well.

Sioux Falls native and building co-owner Norman Drake recently observed that project "costs would have been prohibitive without the development incentives." Federal, state and local programs have been financially beneficial to government entities as well as the property owners and city.

- *Federal* tax credits have leveraged more than four dollars of private investment for every dollar of the tax credit.

- The *state* property tax moratorium provides property tax relief.

- The *local* Sioux Falls Façade Easement program is financing and encouraging the citywide protection of historic building features for years to come.

Summary Exhibit 17: Qualitative Impacts of Historic Preservation in South Dakota
Examples of Downtown Historic Preservation Investment and Revitalization

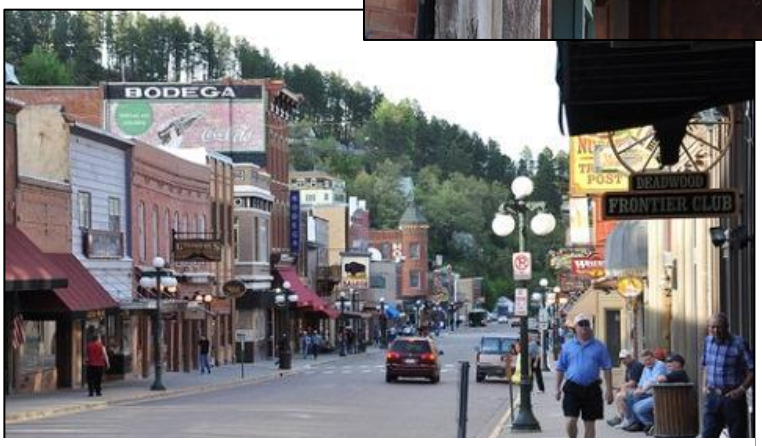
South Dakota Community	*Illustrative Investment*
Aberdeen	Aberdeen is the third largest city in South Dakota. Downtown Aberdeen is characterized by numerous historic buildings and is listed in the National Register of Historic Places. Aberdeen Downtown Association (ADA) works with business owners to enhance the historic merits of their establishments and preserve the historic character of the downtown area. Brown County Courthouse Cupola, Aberdeen, SD. *Flickr Creative Commons. 2007. Seth Werkheiser. DSCF6689* Aberdeen Commercial Historic District, South Main Street: Aberdeen, SD. Aberdeen Community Theatre. *http://aberdeencommunitytheatre.com/?page_id=2*

Deadwood

The city of Deadwood is a National Historic Landmark of just over 1,000 people that has a rich history as a rough and tumble gold rush town. The try-your-luck ethos of Deadwood's prospecting heritage lives on is its varied gaming scene—over 80 gaming halls can be found within Deadwood, many of which carry historical significance. About 60% of the Deadwood Chamber of Commerce's annual budget is allocated toward advertising and promoting Deadwood. They annually produce and distribute the Official Guide to Deadwood (about 100,000 annually according to the Chamber's website) highlighting tourism opportunities in the city.

Reenactment of the shooting of Wild Bill Hickok on Deadwood, SD's historic Main Street. *© 2010, Deadwood.org. Johnny Sundby Photography, Jerry Rawlings and Mark Norby.*

Business on Deadwood, SD's historic Main Street uses local history to draw patronage. *Flickr Creative Commons. 2009. Kent Kanouse. Deadwood, South Dakota.*



Streetscape view, historic Main Street, Deadwood, SD. *Flickr: 2009. Kent Kanouse. Deadwood, South Dakota*.

Mitchell

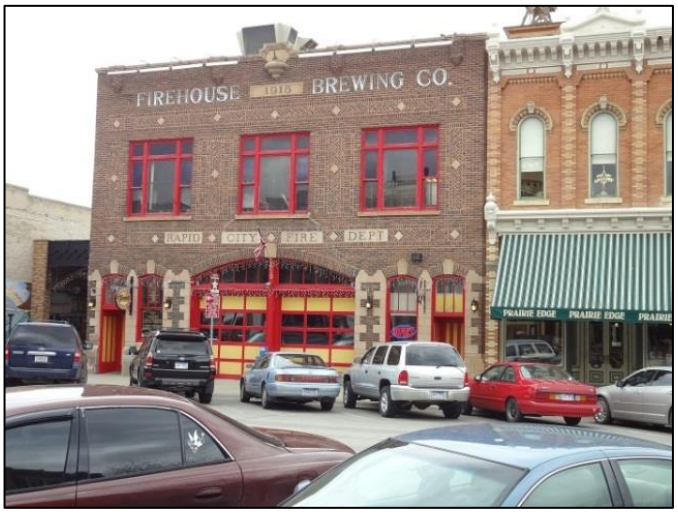
Mitchell is a small city of just over 15,000 people and is the county seat of Davison County. The city has a National Register-listed downtown commercial district. Its most unique attraction is the Mitchell Corn Palace, a large events complex that is covered in dried corn kernels to create murals, which are changed annually. Mitchell Main Street and Beyond (MMSB) is an economic development program that was established to promote downtown tourism and business development. The organization coordinates a Revolving Loan Fund, from which $210,000 has already been distributed to local businesses to help offset the costs of development and improvements.

Historic Corn Palace, downtown Mitchell, South Dakota. *Wikimedia Commons. 2008. Parkerdr. CornPalace2008.*

This motorcycle mural on the Mitchell Corn Palace represents the importance of the annual Sturgis motorcycle rally to the state's economy. *Flickr Creative Commons. 2010. Craig Bennet. Corn Motorcycle Mosaic.*

Rapid City

Rapid City, with a National Register-listed downtown commercial district, is the second largest city in South Dakota. The former outpost for Black Hills gold miners is today an outpost for regional tourists, many of whom are travelling to Mount Rushmore, which is located 20 miles from Rapid City. Presidents is a theme that carries throughout Rapid City, and visitors can learn about the United States Presidents by walking through the downtown area to see the bronze statues made for each president. The Rapid City Downtown Association is the entity responsible for business development and promotion. Some of its functions to downtown businesses are publicity (both online and in print), participation in event planning, and networking opportunities. The Downtown Association also works to enhance and revitalize the downtown area with public amenities, such as Main Street Square, a public green space with a seasonal ice rink that serves as a hub for downtown cultural events.

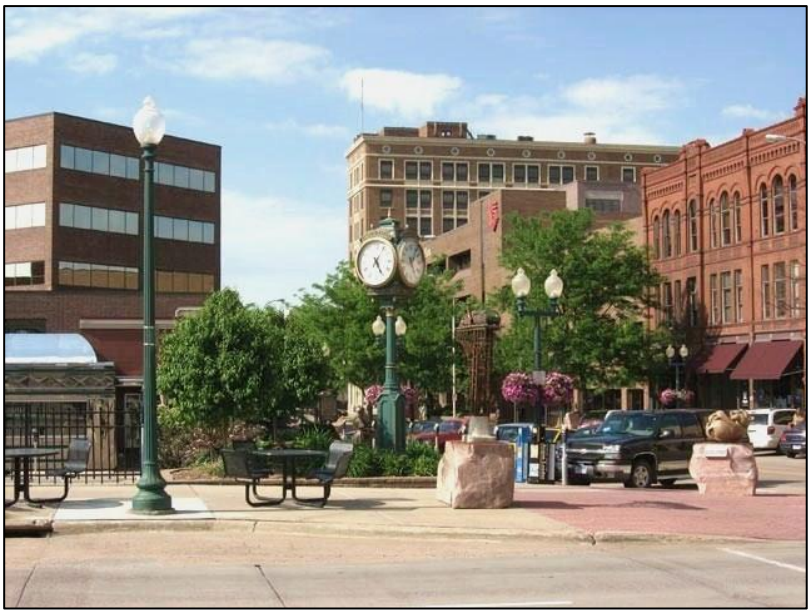


Firehouse Brewing Company in Rapid City Historic Commercial District. *Courtesy Debbie Sheals.*

Downtown Rapid City features the City of Presidents, a series of life-size bronze statues of our nation's past presidents along the city's streets and sidewalks. Pictured is the bronze statue of President James Monroe. *Flickr Creative Commons. 2008. rachaelvoorhees. Top of the Mornin'.*

Sioux Falls

Sioux Falls is the largest city in South Dakota, with a population of 158,000. The Sioux Falls Downtown Historic District is listed on the National Register. Local economic development initiatives are managed by Downtown Sioux Falls, Inc., a nonprofit corporation. DTSF coordinates a number of events to bring together community members and regional tourists. Some of these events include the annual summer Sculpture Walk, Party in the Park (a free outdoor music event), the Sioux Empire Fair, and the summer First Friday series, which features evening concerts and business promotions. Downtown Sioux Falls focuses on advertising and public relations to help bring in both visitors and new residents to this rapidly growing city. Downtown Sioux Falls has also been providing "Loft Tours" as a way of promoting adaptive reuse of their downtown buildings.



Sioux Falls Downtown. *Wikimedia Commons. 2008. John Platek. Downtown Sioux Falls.*

Old Courthouse Museum in Sioux Falls. *© 2011 Downtown Sioux Falls, Inc. Photo taken by Chris Reistroffer. www.dstf.com.*

EXPLANATION OF DIVISION-LEVEL ECONOMIC IMPACTS SPECIFIED IN THE CURRENT STUDY

The economic division-level results specified in the current study (Summary Exhibits 18-25) include the sections explained below.

Section I: Total Effects

Total effects by division, including both direct and multiplier (indirect and induced) effects.

Section II: Distribution of Effects Multiplier

- II.1 Sum of all division direct effects.
- II.2 Sum of all division multiplier (indirect and induced) effects.
- II.3 Total effects (the sum of II.1 and II.2).
- II.4 Multiplier ratio of total effects (II.3) divided by direct effects (II.1).

Section III: Composition of GSP

- III.1 Wages, net of taxes paid at the employer's location.[a]
- III.2 Taxes, local state and federal.
- III.3 Profits, dividends, rents, and other (depending on the year of the GDP data used in the analysis and the geography and sector involved, these may be either positive or negative.)
- III.4 Total GSP (the sum of III.1, III.2, and III.3).

Section IV: Tax Accounts

The sum of taxes remitted by businesses (see Section III) and households (where the latter are not included in the section III GSP). Section IV encompasses, for both businesses and households:

- IV.1 Wages, net of taxes at place of employment (for businesses) or place of residence (for non-commuting households).
- IV.2 Taxes by level of government (local, state, or federal) and type (e.g., for the federal level, general taxes or Social Security). Note: the taxes in Section III are for business only, while the taxes in Section IV include both the business taxes from Section III and household-generated taxes.

[a] Wages net of taxes are not the same as income (shown in Section I). Income includes wages, salaries, proprietor's income, and employer-paid taxes.

SUMMARY EXHIBIT 18
Total National Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation, Heritage Tourism, and Historic Museums ($275 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	6,575.4	15	398.7	560.8
2. Agri. Serv., Forestry, & Fish	707.1	7	284.1	636.4
3. Mining	4,873.3	13	846.8	2,278.5
4. Construction	16,145.9	222	7,288.3	10,027.1
5. Manufacturing	92,921.1	461	19,680.4	30,875.5
6. Transport. & Public Utilities	25,991.0	233	6,914.2	12,928.2
7. Wholesale	18,751.4	183	7,625.3	9,261.0
8. Retail Trade	106,822.6	2,971	37,438.5	59,933.0
9. Finance, Ins., & Real Estate	36,626.0	229	10,892.1	25,426.9
10. Services	126,297.7	2,172	42,190.3	65,578.3
11. Government	2,638.6	29	798.4	1,244.7
Total Effects (Private and Public)	438,350.0	6,535	134,357.2	218,750.4
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	246,517.3	4,783	80,343.3	127,843.9
2. Indirect and Induced Effects	191,832.6	1,752	54,013.8	90,906.5
3. Total Effects	438,350.0	6,535	134,357.2	218,750.4
4. Multipliers (3/1)	1.778	1.366	1.672	1.711
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				132,759.8
2. Taxes				35,063.1
a. Local				8,425.5
b. State				10,493.2
c. Federal				16,144.4
General				5,403.1
Social Security				10,741.2
3. Profits, dividends, rents, and other				50,927.5
4. Total Gross State Product (1+2+3)				218,750.4
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		132,759.8	100,183.3	
2. Taxes		35,063.1	17,811.8	52,874.9
a. Local		8,425.5	2,370.6	10,796.2
b. State		10,493.2	0.0	10,493.2
c. Federal		16,144.4	15,441.2	31,585.5
General		5,403.1	15,441.2	20,844.3
Social Security		10,741.2	0.0	10,741.2
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				23.8
Income				488,318
State/Local Taxes				77,376
Gross State Product				795,044
INITIAL EXPENDITURE IN DOLLARS				275,142,547

SUMMARY EXHIBIT 19
Total In-State Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation, Heritage Tourism, and Historic Museums ($275 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	364.7	1	22.3	36.2
2. Agri. Serv., Forestry, & Fish	369.8	4	177.5	332.8
3. Mining	185.7	1	55.7	112.5
4. Construction	12,734.8	190	6,226.4	8,376.0
5. Manufacturing	17,356.2	107	4,009.8	5,708.5
6. Transport. & Public Utilities	14,632.6	142	3,992.7	7,397.8
7. Wholesale	10,639.3	108	4,326.5	5,254.6
8. Retail Trade	103,785.7	2,892	36,354.1	58,117.0
9. Finance, Ins., & Real Estate	13,398.0	115	5,043.9	9,243.6
10. Services	110,011.7	1,946	35,955.8	57,422.6
11. Government	436.4	4	138.2	237.7
Total Effects (Private and Public)	283,915.0	5,511	96,302.8	152,239.4
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	210,724.5	4,573	71,791.5	113,946.3
2. Indirect and Induced Effects	73,190.5	938	24,511.2	38,293.1
3. Total Effects	283,915.0	5,511	96,302.8	152,239.4
4. Multipliers (3/1)	1.347	1.205	1.341	1.336
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				98,191.5
2. Taxes				27,880.4
a. Local				5,210.0
b. State				8,272.6
c. Federal				14,397.8
General				4,072.7
Social Security				10,325.2
3. Profits, dividends, rents, and other				26,167.4
4. Total Gross State Product (1+2+3)				152,239.4
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		98,191.5	96,302.8	
2. Taxes		27,880.4	17,121.9	45,002.3
a. Local		5,210.0	2,278.8	7,488.8
b. State		8,272.6	0.0	8,272.6
c. Federal		14,397.8	14,843.1	29,240.9
General		4,072.7	14,843.1	18,915.7
Social Security		10,325.2	0.0	10,325.2
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				20.0
Income				350,010
State/Local Taxes				57,284
Gross State Product				553,311
INITIAL EXPENDITURE IN DOLLARS				275,142,547

SUMMARY EXHIBIT 20
Total National Economic & Tax Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	4,234.6	12	312.6	424.8
2. Agri. Serv., Forestry, & Fish	3,652.2	32	1,331.9	3,286.9
3. Mining	11,903.6	75	3,340.4	7,151.3
4. Construction	146,160.9	2,630	85,866.7	109,823.6
5. Manufacturing	223,094.2	1,241	53,113.1	68,893.5
6. Transport. & Public Utilities	32,267.6	229	8,396.7	16,012.3
7. Wholesale	26,029.4	242	10,584.9	12,855.5
8. Retail Trade	29,999.7	686	11,039.6	19,534.3
9. Finance, Ins., & Real Estate	41,321.8	296	15,395.4	26,782.6
10. Services	89,008.0	1,129	40,490.6	35,772.2
11. Government	2,595.2	29	787.1	1,233.8
Total Effects (Private and Public)	610,267.1	6,600	230,659.1	301,770.9
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	329,752.5	3,972	146,430.3	172,759.2
2. Indirect and Induced Effects	280,514.6	2,628	84,228.9	129,011.6
3. Total Effects	610,267.1	6,600	230,659.1	301,770.9
4. Multipliers (3/1)	1.851	1.662	1.575	1.747
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				195,938.2
2. Taxes				37,550.3
a. Local				6,858.9
b. State				6,270.2
c. Federal				24,421.1
General				6,864.4
Social Security				17,556.7
3. Profits, dividends, rents, and other				68,282.4
4. Total Gross State Product (1+2+3)				301,770.9
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		195,938.2	163,751.4	
2. Taxes		37,550.3	29,113.7	66,664.0
a. Local		6,858.9	3,874.9	10,733.8
b. State		6,270.2	0.0	6,270.2
c. Federal		24,421.1	25,238.9	49,660.0
General		6,864.4	25,238.9	32,103.2
Social Security		17,556.7	0.0	17,556.7
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				20.0
Income				699,480
State/Local Taxes				51,565
Gross State Product				915,128
INITIAL EXPENDITURE IN DOLLARS				329,758,168

SUMMARY EXHIBIT 21
Total In-State Economic & Tax Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	213.0	1	22.5	37.7
2. Agri. Serv., Forestry, & Fish	2,190.3	25	1,085.4	1,971.2
3. Mining	2,086.4	16	724.5	1,390.3
4. Construction	142,166.5	2,595	84,696.0	107,960.8
5. Manufacturing	63,107.2	442	17,210.5	20,488.7
6. Transport. & Public Utilities	14,640.7	100	3,675.0	7,319.1
7. Wholesale	11,213.9	108	4,560.2	5,538.4
8. Retail Trade	25,318.7	565	9,367.7	16,737.4
9. Finance, Ins., & Real Estate	17,669.8	166	7,431.2	11,793.1
10. Services	64,309.0	789	30,378.9	25,000.2
11. Government	326.3	3	103.0	176.3
Total Effects (Private and Public)	343,241.7	4,810	159,254.8	198,413.2
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	238,012.2	3,432	122,351.1	143,015.4
2. Indirect and Induced Effects	105,229.5	1,378	36,903.7	55,397.8
3. Total Effects	343,241.7	4,810	159,254.8	198,413.2
4. Multipliers (3/1)	1.442	1.402	1.302	1.387
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				132,875.6
2. Taxes				28,626.0
a. Local				3,075.7
b. State				3,598.1
c. Federal				21,952.2
General				4,877.6
Social Security				17,074.6
3. Profits, dividends, rents, and other				36,911.5
4. Total Gross State Product (1+2+3)				198,413.2
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		132,875.6	159,254.8	
2. Taxes		28,626.0	28,314.3	56,940.3
a. Local		3,075.7	3,768.5	6,844.2
b. State		3,598.1	0.0	3,598.1
c. Federal		21,952.2	24,545.8	46,498.1
General		4,877.6	24,545.8	29,423.4
Social Security		17,074.6	0.0	17,074.6
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				14.6
Income				482,944
State/Local Taxes				31,666
Gross State Product				601,693
INITIAL EXPENDITURE IN DOLLARS				329,758,168

SUMMARY EXHIBIT 22
Total National Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	291.7	1	21.5	29.3
2. Agri. Serv., Forestry, & Fish	240.3	2	86.1	216.2
3. Mining	798.2	5	223.1	478.6
4. Construction	10,017.9	180	5,897.5	7,538.1
5. Manufacturing	15,392.7	86	3,663.2	4,741.8
6. Transport. & Public Utilities	2,212.3	16	575.3	1,097.1
7. Wholesale	1,781.8	17	724.6	880.0
8. Retail Trade	2,057.9	47	757.2	1,339.9
9. Finance, Ins., & Real Estate	2,838.2	20	1,057.0	1,839.9
10. Services	6,131.0	78	2,788.7	2,463.2
11. Government	178.5	2	54.1	84.9
Total Effects (Private and Public)	41,940.5	453	15,848.3	20,708.9
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	22,642.6	273	10,054.6	11,842.0
2. Indirect and Induced Effects	19,297.9	181	5,793.7	8,866.9
3. Total Effects	41,940.5	453	15,848.3	20,708.9
4. Multipliers (3/1)	1.852	1.663	1.576	1.749
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				13,439.4
2. Taxes				2,575.0
a. Local				470.1
b. State				429.9
c. Federal				1,675.1
General				470.5
Social Security				1,204.6
3. Profits, dividends, rents, and other				4,694.5
4. Total Gross State Product (1+2+3)				20,708.9
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		13,439.4	11,235.3	
2. Taxes		2,575.0	1,997.5	4,572.6
a. Local		470.1	265.9	736.0
b. State		429.9	0.0	429.9
c. Federal		1,675.1	1,731.7	3,406.7
General		470.5	1,731.7	2,202.1
Social Security		1,204.6	0.0	1,204.6
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				20.0
Income				699,923
State/Local Taxes				51,488
Gross State Product				914,586
INITIAL EXPENDITURE IN DOLLARS				22,642,953

SUMMARY EXHIBIT 23
Total In-State Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	14.5	0	1.5	2.5
2. Agri. Serv., Forestry, & Fish	140.5	2	69.4	126.4
3. Mining	139.1	1	48.2	92.6
4. Construction	9,742.8	178	5,817.0	7,409.9
5. Manufacturing	4,313.3	30	1,177.2	1,400.7
6. Transport. & Public Utilities	1,002.9	7	251.6	501.1
7. Wholesale	761.4	7	309.6	376.0
8. Retail Trade	1,736.1	39	642.3	1,147.6
9. Finance, Ins., & Real Estate	1,212.9	11	510.0	809.6
10. Services	4,428.5	54	2,091.8	1,720.9
11. Government	22.4	0	7.1	12.1
Total Effects (Private and Public)	23,514.2	330	10,925.8	13,599.6
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	16,296.1	235	8,393.5	9,799.5
2. Indirect and Induced Effects	7,218.1	95	2,532.3	3,800.1
3. Total Effects	23,514.2	330	10,925.8	13,599.6
4. Multipliers (3/1)	1.443	1.402	1.302	1.388
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				9,103.1
2. Taxes				1,961.6
a. Local				210.0
b. State				246.1
c. Federal				1,505.4
General				334.0
Social Security				1,171.4
3. Profits, dividends, rents, and other				2,535.0
4. Total Gross State Product (1+2+3)				13,599.6
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		9,103.1	10,925.8	
2. Taxes		1,961.6	1,942.5	3,904.1
a. Local		210.0	258.5	468.5
b. State		246.1	0.0	246.1
c. Federal		1,505.4	1,684.0	3,189.4
General		334.0	1,684.0	2,018.0
Social Security		1,171.4	0.0	1,171.4
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				14.6
Income				482,524
State/Local Taxes				31,563
Gross State Product				600,611
INITIAL EXPENDITURE IN DOLLARS				22,642,953

SUMMARY EXHIBIT 24
Total National Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	6,141.5	14	367.2	518.3
2. Agri. Serv., Forestry, & Fish	456.8	4	193.9	411.1
3. Mining	3,989.6	8	609.5	1,758.9
4. Construction	5,907.3	40	1,341.5	2,399.2
5. Manufacturing	75,465.9	365	15,573.9	25,434.7
6. Transport. & Public Utilities	22,965.4	211	6,133.7	11,429.4
7. Wholesale	16,660.9	163	6,775.2	8,228.5
8. Retail Trade	103,710.6	2,900	36,293.9	57,909.1
9. Finance, Ins., & Real Estate	32,221.4	198	9,251.2	22,575.0
10. Services	103,647.7	1,892	33,426.7	48,777.2
11. Government	2,386.5	27	722.0	1,124.9
Total Effects (Private and Public)	373,553.6	5,821	110,688.7	180,566.3
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	208,627.2	4,329	64,842.3	102,279.1
2. Indirect and Induced Effects	164,926.4	1,492	45,846.4	78,287.1
3. Total Effects	373,553.6	5,821	110,688.7	180,566.3
4. Multipliers (3/1)	1.791	1.345	1.707	1.765
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				106,003.9
2. Taxes				31,311.8
a. Local				7,754.3
b. State				9,868.5
c. Federal				13,689.0
General				4,824.5
Social Security				8,864.5
3. Profits, dividends, rents, and other				43,250.6
4. Total Gross State Product (1+2+3)				180,566.3
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		106,003.9	82,679.5	
2. Taxes		31,311.8	14,699.8	46,011.6
a. Local		7,754.3	1,956.5	9,710.7
b. State		9,868.5	0.0	9,868.5
c. Federal		13,689.0	12,743.3	26,432.3
General		4,824.5	12,743.3	17,567.8
Social Security		8,864.5	0.0	8,864.5
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				24.5
Income				466,545
State/Local Taxes				82,525
Gross State Product				761,074
INITIAL EXPENDITURE IN DOLLARS				237,252,046

SUMMARY EXHIBIT 25
Total In-State Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	344.7	1	20.3	32.8
2. Agri. Serv., Forestry, & Fish	226.1	2	106.5	203.5
3. Mining	44.6	0	7.1	19.0
4. Construction	2,874.4	12	393.8	927.9
5. Manufacturing	12,710.7	74	2,750.8	4,199.3
6. Transport. & Public Utilities	13,166.3	132	3,627.4	6,666.8
7. Wholesale	9,744.3	100	3,962.5	4,812.6
8. Retail Trade	101,147.0	2,833	35,378.6	56,376.1
9. Finance, Ins., & Real Estate	11,500.5	97	4,243.2	7,980.0
10. Services	91,109.5	1,715	28,637.0	42,981.7
11. Government	402.7	4	127.6	219.6
Total Effects (Private and Public)	243,270.9	4,970	79,254.7	124,419.2
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	180,690.6	4,174	58,490.8	91,782.6
2. Indirect and Induced Effects	62,580.3	797	20,763.9	32,636.6
3. Total Effects	243,270.9	4,970	79,254.7	124,419.2
4. Multipliers (3/1)	1.346	1.191	1.355	1.356
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				77,905.9
2. Taxes				24,968.2
a. Local				4,895.5
b. State				7,901.6
c. Federal				12,171.1
General				3,673.8
Social Security				8,497.4
3. Profits, dividends, rents, and other				21,545.1
4. Total Gross State Product (1+2+3)				124,419.2
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		77,905.9	79,254.7	
2. Taxes		24,968.2	14,090.9	39,059.1
a. Local		4,895.5	1,875.4	6,770.9
b. State		7,901.6	0.0	7,901.6
c. Federal		12,171.1	12,215.5	24,386.6
General		3,673.8	12,215.5	15,889.3
Social Security		8,497.4	0.0	8,497.4
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				20.9
Income				334,053
State/Local Taxes				61,844
Gross State Product				524,418
INITIAL EXPENDITURE IN DOLLARS				237,252,046

CHAPTER 1 – INTRODUCTION AND STUDY PERSPECTIVE

THE NEED FOR INFORMATION ON HISTORIC PRESERVATION ECONOMICS

Until almost the mid-twentieth century, the idea of historic preservation was alien to the American reverence for the new. There were but a handful of exceptions. Independence Hall, slated for demolition, was purchased by the City of Philadelphia in 1816, and Mount Vernon was saved by a valiant private women's group in the 1850s. Private philanthropy from the Rockefeller family helped restore Colonial Williamsburg in the mid-1920s. In the mid-1930s, there was some nascent public preservation action. The federal government, authorized by the 1935 Historic Sites Act, began identifying landmarks on the National Register of Historic Sites and Buildings. In the 1930s, a handful of communities, most notably Charleston, S.C., in 1931 and New Orleans in 1937, established local preservation commissions to identify and protect selected historic districts.

These preservation activities, however, were the exceptions. More typical was destruction of even acknowledged landmarks. Pennsylvania Station in New York City is a prime example. Federal programs, ranging from urban renewal to the interstate highway systems, fueled the demolition of the nation's historic built environment. Partly in reaction to the widespread loss of historic properties, a system for preservation had developed by the 1960s. At the federal level, the National Historic Preservation Act (NHPA) of 1966 created a National Register of Historic Places and a review process, Section 106 of the NHPA, to evaluate federal undertakings that threatened National Register-eligible resources. With federal funds from NHPA, state historic preservation offices (SHPOs) were established to help identify sites and structures to be placed on the National Register. Many states further enacted their own procedures to evaluate state and local government actions that threatened historic properties.

Most significant was the establishment of local preservation commissions. These were created by ordinances to identify historic resources and then take appropriate action to designate these resources as landmarks. Once designated, the landmarks could not be demolished, nor could their facades be altered in a historically inaccurate fashion without review by the commission. At minimum, these actions would be advisory only.

In a short period of time, historic preservation has mushroomed in scope. There were about 1,000 entries on the National Register of Historic Places in 1968; today there are nearly 90,000. In the last decade, the National Trust for Historic Preservation's Main Street Program, designed to revitalize older downtowns, has grown from a handful to over 2,000 successful examples nationwide. Local historic commissions totaled only about 20 as of the mid-1950s. Civic spirit fueled by the Bicentennial increased that number to 100, and today there are over 2,000 local commissions. Other barometers of historic preservation activity also show quantum increases; still, preservation remains the exception rather than the rule.

Preservation has accomplished much. Icons that have been saved, such as Grand Central Station in New York, are important to the perception of quality of life. Less dramatic, but equally as important, is the preservation of properties of statewide and local significance throughout the United States. The aesthetic and quality-of-life benefits of preservation are generally acknowledged. However, doubts are often expressed about the quantifiable economic contribution of preservation. While proponents of investment in such areas as public infrastructure and new housing construction tout the job, income, and other financial benefits of their respective activities, historic preservationists are much less vocal about the economic benefits that accrue from their activities.

A dearth of information on the economic benefits of preservation has unfortunate consequences, especially in competing for public and other support. Take, for instance, the federal Historic Rehabilitation Tax Credit Program (ITC). Initiated in 1976, the ITC has generated about $100 billion in investment in historic preservation, encompassing about 42,000 separate projects. The ITC is the most significant federal financial support for preservation, eclipsing the Historic Preservation Fund that

supports grants to State Historic Preservation Offices (SHPOs). Despite its accomplishments, the ITC has been under assault from those working to reduce federal tax incentives. In 1986, the ITC tax credit was reduced from 25 to 20 percent, and there are periodic calls for further reductions or even elimination of the ITC. Critics of the ITC cite its costs to the Federal Treasury. Preservationists, however, have until recently failed to document the ITC's full economic benefits. This omission, in part due to the fact that a methodology for documenting the ITC's benefits was not readily at hand, put preservationists at a competitive disadvantage compared with those arguing for federal tax breaks for other investments (e.g., highways and other infrastructure), who can marshal arrays of statistics to support their respective causes.

Parallel developments exist at the state level. As the federal government has cut back and states have ascended as implementers and funders, state activity has become more significant in historic preservation. Numerous states, including Florida, Maryland, Texas, and Vermont, have passed bond issues to foster preservation. But there are many demands on the public purse, and preservation is in competition for state support for other investments ranging from adding new or repairing existing highways to providing affordable mortgages for new housing. Preservationists often do not have hard numbers on the economic benefits of their projects, unlike the proponents of competing investments. The same is true when other state preservation incentives are proposed, such as a state income tax credit. State legislators might be more inclined to support such a credit if they were presented with evidence that their home constituencies would benefit from increased jobs, income, and spending as a result of the credit-induced preservation. Yet, such evidence is often not readily available because the procedures for measuring the economic benefits deriving from preservation have not been available until recent research.

In summary, the dearth of "hard" economic numbers on preservation and the historical lack of procedures to quantify these benefits have significant adverse implications. This is unfortunate, since historic preservation generates extensive economic benefits. In fact, preservation's benefits often surpass those yielded by such alternative public sector investments as infrastructure and new housing construction. This study documents the benefits of preservation and develops procedures for assessing its economic effects that others may apply. The focus of the study is the state of South Dakota.

To set the perspective for the current investigation, prior literature is briefly reviewed here. (An extensive listing of relevant literature and annotations of critical studies are contained in the bibliography in Appendix C.)

LITERATURE ON THE ECONOMIC IMPACTS OF HISTORIC PRESERVATION

Studies conducted in the late 1970s and early 1980s, although nominally addressing the economic benefits of historic preservation, focused less on economic benefits and more on financial feasibility. (This was a time when the feasibility of preservation vis-à-vis new construction was still an issue.) For example, *The Economic Benefits of Preserving Old Buildings* (National Trust for Historic Preservation 1982) considered such topics as hidden assets of old buildings, the costs of preservation, the types of government grants available for the preservation process, and the advantages of historic preservation from a financier's viewpoint.

Some of the early literature did introduce economic effects into the discussion, typically in anecdotal or case-study fashion. For instance, *The Contributions of Historic Preservation to Urban Revitalization* (Advisory Council on Historic Preservation 1979) investigated the effect of historic preservation activities in Alexandria (Virginia), Galveston (Texas), Savannah (Georgia), and Seattle (Washington). According to the Advisory Council on Historic Preservation, historic designation and attendant preservation activities provide many benefits, including saving important properties from demolition, fostering construction, and providing a concentrated area of interest to attract tourists and metropolitan-area visitors. Designation also was found to have the beneficial effect of strengthening property values—an impact documented by

comparing the selling prices of buildings located within versus outside historic districts in Alexandria and other cities studied.

The economic topics considered by the Advisory Council on Historic Preservation in 1979—preservation's relationship to property values, tourism, and construction—have been revisited numerous times, typically on a case-study basis (see bibliography). For instance, Samuels (1981) examined increases in property values in designated historic neighborhoods in Washington, D.C. Schaeffer and Ahern (1988), Benson and Klein (1988), Ford (1989), Gale (1991), and Leithe et al. (1991) did similar property value analyses in Chicago, Cleveland, Baltimore, Washington, and Galveston, respectively.

Construction and tourism effects from preservation have also been studied by numerous authors. For instance, Lane (1982) and Johnson and Sullivan (1992) examined the tourism benefits of Civil War battlefield visitation. Avault and Van Buren (1985) examined the economic contributions of historic rehabilitation construction activity in Boston, and a similar analysis was done in Atlanta by the Center for Business and Economic Studies (1986).

Our review of the existing literature shows some changes over time. The geographical scale of analysis in considering economic impact has expanded. Whereas earlier the focus was typically a neighborhood or two (e.g., Philadelphia's Society Hill or Seattle's Pioneer Square), investigations are now more commonly citywide (e.g., Fredericksburg, Virginia, and Galveston, Texas), and there have been some examples of statewide studies, such as in Kentucky, Missouri, Colorado, Virginia (Preservation Alliance of Virginia 1996), Rhode Island (University of Rhode Island 1993), and CUPR's own study of historic preservation activity in Arkansas in 2005. In combination, some of these more geographically broad studies have examined not only the direct but the total economic effects of historic preservation, the latter including multiplier benefits to the larger state and regional economies.

For example, the University of Rhode Island (1993) reviewed the impacts of the Rhode Island Historical Preservation Commission's (RIHPC) programs on the state economy in the areas of employment, wages, value added, and tax revenues generated. To that end, the study used computer models of the state economy to incorporate both direct and multiplier impacts. The study found that the greatest impacts of RIHPC's programs were in the construction-related industries, with retail sales and service industries affected positively as well.

A general approach for examining the total (direct and multiplier) impacts of preservation was developed by Joni Leithe, Thomas Muller, John Peterson, and Susan Robinson of the Government Finance Research Center (Leithe et al. 1991) for the National Trust for Historic Preservation. This work, important to the field, included approaches for estimating the benefits of construction activity, real estate activity (e.g., historic property value appreciation), and commercial activity (e.g., enhanced tourism). Leithe et al. applied the approach in Fredericksburg, VA, and Galveston, TX (Government Finance Officers Association 1995). In Fredericksburg, for instance, they found historic preservation had the following effects:

- Over an eight-year period, 777 projects totaling $12.7 million were undertaken in the historic district. These projects created approximately 293 construction jobs and approximately 284 jobs in sales and manufacturing.

- Property values, both residential and commercial, experienced a dramatic increase. Between 1971 and 1990, residential property values in the historic district increased an average of 674 percent as compared with a 410 percent average increase in properties located elsewhere in the city.

- In 1989 alone, $11.7 million in tourist purchases were made within the historic district, and another $17.4 million outside the district, with secondary impacts resulting in $13.8 million.

No overview of literature on the subject would be complete without mentioning *The Economics of Historic Preservation* by Donovan Rypkema (this study was updated in 2005), which compiled results from numerous studies showing the economic benefits of preservation. Rypkema also was the author of the Virginia report (Preservation Alliance of Virginia 1996) that summarized how preservation benefited the state's economy through tourism, construction, business development, and property value enhancement. Rypkema has conducted numerous other statewide historic preservation economic impact studies. His numerous and important contributions to the field are noted in the bibliography to this study.

We should also note studies by the authors of the current investigation that have focused on several states, in New Jersey, Texas, Florida, Oklahoma, Kansas, Nebraska and elsewhere. For example, the New Jersey and Texas reports considered the direct and total (with multiplier) effects of different components of historic preservation in these states, including historic rehabilitation, heritage tourism, and the operation of historic museums. The current analysis considers the similar aspects of historic preservation in South Dakota.

CURRENT STUDY SCOPE AND APPROACH

The current investigation builds from, and adds to, the state of the art as reflected in the extant literature. Some of the distinguishing characteristics of the current study are its

1. statewide scope
2. development of preservation-specific data
3. use of a state of the art input-output model

Statewide Scope

The current investigation is truly statewide in scope. It estimates statewide figures on the amount of historic rehabilitation, heritage tourism, and the operation of historic museums. Other state investigations have not done this to the same scale.

Development of Preservation-Specific Data

The current investigation expends considerable effort to quantify preservation-specific data. Two examples are the year-by-year investment in historic rehabilitation in South Dakota by various preservation assistance programs from 1982 through 2011 and the magnitude and profile of heritage tourism in South Dakota. Some other studies have developed preservation-specific information, such as the profile and spending of heritage versus non-heritage tourists (Preservation Alliance of Virginia 1996), but few do this to the extent accomplished here. Thus, the chapter on heritage tourism in this study develops side-by-side profiles of all tourists who visit historic and non-historic sites, as well as such subgroups as heritage versus non-heritage day-trippers, and heritage versus non-heritage overnighters. This side-by-side profiling is accomplished for many types of characteristics, such as demographic background, trip origin, and trip spending, with the latter differentiated into numerous components. The point is not detail for detail's sake, but rather that the more precisely the profile and spending of heritage travelers is detailed, the more precise will be the projection of economic impact of this aspect of preservation.

The more refined development of preservation-specific data is especially pronounced in the current study in regard to the breakdown of historic rehabilitation expenditures. Many studies to date use "canned

programs" that have information on rehabilitation in general. But historic rehabilitation is not the same as general rehabilitation. To that end, the current study deconstructs in great detail the components of historic rehabilitation. This detailed breakdown permits a much more precise estimate of the economic impacts of historic rehabilitation, which in turn is one of the most important components of historic preservation.

Use of a State of the Art Input-Output Model

As other recent studies have done, the current investigation of the economic impacts of historic preservation considers direct effects of preservation-related activities as well as indirect and induced economic impacts. (See Appendix A for more information on the mathematical logistics of the input-output model.) The total or multiplier effect, often referred to as the ripple effect, has three segments:

1. A *direct effect* (the initial drop causing the ripple effects) is the change in purchases due to a change in economic activity.
2. An *indirect effect* is the change in the purchases of suppliers to the economic activity directly experiencing change.
3. An *induced effect* is the change in consumer spending that is generated by changes in labor income within the region as a result of the direct and indirect effects.

To illustrate briefly, the *direct effects* encompass the goods and services immediately involved in the economic activity analyzed, such as historic rehabilitation. For historic rehabilitation, this could include carpenters hired and construction materials purchased. *Indirect effects* encompass the value of goods and services needed to support the provision of the direct effects (e.g., materials purchases by construction suppliers). *Induced effects* include the goods and services needed by households to provide the direct and indirect labor required to rehabilitate a historic structure (e.g., food purchases by the carpenters' or suppliers' households). The estimation of indirect and induced effects is accomplished by what is referred to as an input-output model.

In this study, the projection of the total or multiplier effects of historic preservation is accomplished by application of an input-output model developed by the authors. It is called the Preservation Economic Impact Model (PEIM) and was first developed for the National Park Service. This model offers significant advantages in detailing the total economic effects of an activity (such as historic rehabilitation), including multiplier effects (see appendix A). The analysis in the subsequent chapters first presents the direct effects of the components of historic preservation—historic rehabilitation, heritage tourism, and the operation of historic museums—and then applies the PEIM to derive the effects.

CHAPTER 2 – SOUTH DAKOTA HISTORIC REHABILITATION

INTRODUCTION AND SUMMARY

This chapter first describes the profile and magnitude of historic rehabilitation in South Dakota. The chapter then considers how the direct South Dakota historic rehabilitation investment translates into total economic impacts, including multiplier effects. The results of the analysis are summarized below:

ECONOMIC IMPACTS OF ANNUAL SOUTH DAKOTA HISTORIC REHABILITATION (1982-2011)

This study quantifies the historic rehabilitation in South Dakota funded by seven state/local and federal rehabilitation programs between 1982 and 2011. These include three Deadwood-related aids (SDSHS Deadwood Fund Grants, Outside of Deadwood Grant, and Deadwood Historic Preservation Budget), the Sioux Falls Historic Façade Easement Program, the South Dakota Historic Property Tax Moratorium, the Federal Historic Rehabilitation Tax Credit, and projects aided by federal Transportation Enhancement Grants.

In inflation-adjusted 2011 dollars, the cumulative 1982-2011 historic rehabilitation investment in South Dakota from the seven programs enumerated above amounts to $329.8 million. The *annual* average investment in historic rehabilitation in South Dakota from the seven programs over recent years (2007-2011) is $22.6 million (in inflation-adjusted 2011 dollars).

The direct effects of historic rehabilitation are translated into multiplier effects, which encompass such dimensions as *jobs* (employment by place of work), *income* (total wages, salaries, and proprietor's income), *output* (value of shipments), *gross domestic product* or GDP (total wealth accumulated, referred to at the state level as gross state product or GSP), *taxes* (federal, state, and local), and *in-state wealth* (GSP less federal tax "leakage").

The total economic impacts to the nation from the $22.6 million in annual statewide historic rehabilitation spending include 453 jobs generating an additional $42 million in output, $16 million in income and $21 million in GDP. At the state of South Dakota level, the $22.6 million in annual (2007-2011) historic rehabilitation spending translates to 330 jobs, $11 million in labor income, $14 million in GSP and $0.7 million in annual state and local South Dakota taxes. The in-state wealth (GSP minus federal taxes) resulting from rehabilitation expenditures amounts to $10.4 million, indicating a high 76 percent retention rate.

EXHIBIT 2.1
Total Economic Impacts of Annual South Dakota
Historic Building Rehabilitation ($22.6 million, Annual Average 2007-2011)

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	330	123	453
Income ($millions)	10.9	4.9	15.8
Output ($millions)	23.5	18.4	41.9
GDP/GSP[a] ($millions)	13.6	7.1	20.7
Total taxes ($millions)	3.9	.7	4.6
Federal ($millions)	*3.2*	*0.2*	*3.4*
State/Local ($millions)	*0.7*	*0.5*	*1.2*
In-State wealth[b] ($millions)	10.4	---	---

[a] GDP/GSP = Gross Domestic Product/Gross State Product.
[b] In-State wealth = GSP minus federal taxes.

With regard to the $330 million in cumulative effects from the aggregate historic rehabilitation funded by major federal and state/local programs in South Dakota over 1982 through 2011, those investments contributed 6,600 jobs to the national economy, as well as $610.3 million in industrial output, $301.8 million in gross domestic product, $230.7 million in earned income, and $66.7 million in taxes. When out-of-state effects are excluded, South Dakota benefited from the aggregate historic rehabilitation a total of 4,810 jobs, as well as an additional $343.2 million in output by the state's businesses, $198.4 million in new gross state product (GSP or gross wealth), $159.3 million in added salary for South Dakota residents, and a total of $10.4 million deposited in the coffers of state and local governments across the state. Overall, net in-state wealth in South Dakota (GSP minus federal taxes) grew by $151.9 million as a result of this rehabilitation (Exhibit 2.2).

EXHIBIT 2.2
Total Economic Impacts of Cumulative South Dakota Historic Building Rehabilitation ($330 million, 1982-2011)

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	4,810	1,790	6,600
Income ($millions)	159.3	71.4	230.7
Output ($millions)	343.2	267.1	610.3
GDP/GSP[a] ($millions)	198.4	103.4	301.8
Total taxes ($millions)	56.9	9.8	66.7
Federal ($millions)	*46.5*	*3.2*	*49.7*
State/Local ($millions)	*10.4*	*6.6*	*17.0*
In-State wealth[b] ($millions)	151.9	---	---

[a] GDP/GSP = Gross Domestic Product/Gross State Product.
[b] In-State wealth = GSP minus federal taxes.

The benefits that accrue to South Dakotans from cumulative (1982-2011) investment in historic rehabilitation projects ($330 million) are extensive. As with all spending examined in this study, every sector of the state's economy sees their payrolls and production increased. Just over half of the South Dakota-based jobs from the cumulative rehabilitation investment (2,595 of 4,810 jobs) and South Dakota gross state product ($108 million of $198.4 million GSP) created by historic rehabilitation within South Dakota accrue to the state's construction industry; this is as one would expect, given the share of such projects that require the employment of contractors. Other South Dakota major beneficiaries are services (789 jobs, $25 million in GSP) as well as the retail trade (565 jobs, $16.7 million in GSP) and manufacturing (442 jobs, $20.5 million in GSP).

HISTORIC REHABILITATION SPENDING METHODOLOGY

This study examines data for seven state/local and federal programs supporting historic preservation in South Dakota.

State/Local Programs

1. SDSHS Deadwood Fund Grants – The Deadwood Fund program is administered by the South Dakota State Historic Preservation Office (SHPO) of the South Dakota State Historical Society and provides matching grants to assist with the preservation, restoration, or rehabilitation of historic properties listed on or eligible for the National Register of Historic Places in South Dakota. The grants are funded by a portion of gaming revenue generated in Deadwood, South Dakota.

2. Outside of Deadwood Grant – This matching grant program is administered by the Deadwood Historic Preservation Commission and is available for the maintenance, rehabilitation, and interpretation

of historic properties outside of Deadwood in South Dakota that have a meaningful connection to the history of Deadwood. Only non-profit or public entities are eligible to apply for these grants.

3. Deadwood Historic Preservation Budget – Since the legalization of gaming in Deadwood in 1989, the Deadwood Historic Preservation Commission receives funds from gaming tax revenues to be used for a historic preservation program in Deadwood. This amount is approximately $7 million annually and funds a broad array of activities like maintenance and preservation of city-owned historic resources, preservation grant programs, improvement of the Deadwood water and other utility-infrastructure systems, various museums and visitor centers, salaries and operations of the Deadwood Historic Preservation Office, and historic interpretation and education efforts. The current study only counts the portion of the total Deadwood Historic preservation budget that has subsidized historic rehabilitation, about $1 million annually.

4. Sioux Falls Historic Façade Easement Program – The City of Sioux Falls offers a façade easement program whereby the owner of a participating historic building agrees to make approved improvements to the building façade and transfers to the city an easement on the character-defining façade. By purchasing a façade easement, the City of Sioux Falls is able to meet its revitalization goals, acquire a real estate asset, and provide a source of funding for important core development projects.

5. South Dakota Historic Property Tax Moratorium – The South Dakota Historic Property Tax Moratorium is administered by the South Dakota State Historic Preservation Office. Owners of historic property listed on the State or National Registers of Historic Places may apply for the moratorium for certified improvements to the historic property. If approved, an eight-year moratorium is placed on the property tax assessment of the certified improvements.

Federal Programs

6. Federal Historic Rehabilitation Tax Credit – Administered jointly between the National Park Service, the Internal Revenue Service, and State Historic Preservation Offices, the Federal Historic Rehabilitation Tax Credit offers a 20% income tax credit on the qualified expenditures associated with the rehabilitation of a certified historic structure. The credit is available for properties rehabilitated for commercial, industrial, agricultural, or rental residential purposes, but is not available for properties used exclusively as the owner's private residence.

7. Transportation Enhancement Grants – Transportation Enhancement Activities (TEA) are federally funded, community based projects that enhance the transportation system through preservation of visual and cultural resources and that improve the quality of life for South Dakotans. TEA projects must have a link to the transportation system and be one of twelve eligible activities. The grants are administered by the South Dakota Department of Transportation. This study only counts TEA investment in South Dakota that involves historic rehabilitation.

Exhibit 2.3 details historic rehabilitation spending by program for the years 1982 through 2011.

We emphasize again that our study enumeration only counts historic rehabilitation, not preservation spending more generally. For instance, Deadwood gaming monies fund many supports for historic preservation (e.g., improving water and sewer infrastructure in that city and subsidizing museums and other activities) that are not counted as historic rehabilitation. The total Deadwood support for broad historic preservation purposes—for rehabilitation and many other activities—are detailed in Exhibit 2.4. As is immediately evident from comparing columns one through three in both exhibits, the total Deadwood monies for broad preservation purposes (Exhibit 2.4) are much larger than the Deadwood

monies used exclusively for historic rehabilitation (Exhibit 2.3)—the latter is what is examined by this chapter.

Further, in counting historic rehabilitation, we include *all monies spent, both grant support and matching*. Exhibit 2.5 shows the grant support only for the major state/local and federal subsidies for historic rehabilitation in South Dakota. Not surprisingly, the "grant alone" tallies by program in Exhibit 2.5 are almost always less than the full historic rehabilitation (grant and match) combined tallies by program shown in Exhibit 2.3. We focus on the full historic rehabilitation expenditures in this chapter; that is, the Exhibit 2.3 figures.

Exhibit 2.3: South Dakota Historic Rehabilitation Program Dollar Spending (Grants and Match, Duplicates Removed) by Year (Nominal $ Values)

Year	1) SDSHS Deadwood Fund Grants	2) Outside of Deadwood Grant	3) Deadwood Historic Preservation Budget	4) Sioux Falls Historic Façade Easement Program	5) State Historic Property Tax Moratorium	6) Federal Historic Tax Credits	7) TEA Grants†	Year Total
1982	-	-	-	-	-	$1,722,222.22	-	$1,722,222.22
1983	-	-	-	-	$500,000.00	-	-	$500,000.00
1984	-	-	-	-	-	$184,444.44	-	$184,444.44
1985	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-
1989	-	-	$825,000.00	-	-	$4,444,444.44	-	$5,269,444.44
1990	-	-	$2,225,000.00	-	-	-	-	$2,225,000.00
1991	-	-	$2,225,000.00	-	-	-	-	$2,225,000.00
1992	-	-	$550,000.00	-	$1,020,000.00	$555,555.56	-	$2,125,555.56
1993	-	-	$540,000.00	-	$291,554.00	$4,152,834.33	-	$4,984,388.33
1994	-	-	$837,188.00	-	$215,000.00	$2,317,222.22	$1,689,980.00	$5,059,390.22
1995	-	-	$1,461,748.00	-	$1,367,000.00	$2,833,165.56	$1,112,826.00	$6,774,739.56
1996	-	-	$832,010.00	-	$1,571,149.00	$1,490,156.32	$1,459,960.00	$5,353,275.32
1997	$270,915.85	-	$1,347,509.00	-	$369,500.00	$8,166,291.72	-	$10,154,216.57
1998	$318,888.25	-	$1,379,271.00	-	$176,497.00	$5,831,666.67	-	$7,706,322.92
1999	$110,185.08	-	$1,463,566.00	-	$1,280,000.00	$2,611,111.11	$56,296.00	$5,521,158.19
2000	$279,181.44	-	$837,565.00	-	$3,862,672.22	$2,760,888.89	-	$7,740,307.55
2001	$197,112.47	-	$983,127.00	-	$1,294,207.00	$640,555.56	$610,128.00	$3,725,130.03
2002	$316,899.79	$448,944.00	$750,500.00	-	$2,133,200.00	$2,018,290.00	$444,000.00	$6,111,833.79
2003	$316,160.80	$454,250.00	$436,487.00	$16,000.00	$6,578,012.85	$10,958,088.89	-	$18,758,999.54
2004	$256,818.78	$294,368.00	$391,937.00	-	$2,934,384.00	$7,344,444.44	-	$11,221,952.22
2005	$236,631.26	$390,597.00	$228,500.00	$918,000.00	$1,322,755.96	$1,451,609.96	$3,587,773.00	$8,135,867.18
2006	$245,088.00	$458,500.00	$330,500.00	$2,020,000.00	$7,217,699.48	$5,164,683.33	-	$15,436,470.81
2007	$176,616.65	$363,470.00	$560,500.00	$3,520,000.00	$5,549,443.68	$10,401,111.11	$475,470.00	$21,046,611.44
2008	$214,721.35	$431,000.00	$665,500.00	-	$31,880,159.96	$7,243,959.71	-	$40,435,341.02
2009	$225,770.98	$435,126.54	$632,000.00	$730,000.00	$2,440,920.75	$6,360,557.78	-	$10,824,376.05
2010	$78,537.50	$433,272.00	$555,000.00	-	$9,899,275.00	$11,948,117.78	$5,006,183.00	$27,920,385.28
2011	-	$207,000.00	$451,500.00	-	$200,000.00	$13,627,333.33	-	$14,485,833.33
Totals	**$3,243,528.20**	**$3,916,527.54**	**$20,509,408.00**	**$7,204,000.00**	**$82,103,430.90**	**$114,228,755.38**	**$14,442,616.00**	**$245,648,266.02**
Ann. Avg., 1982-2011	$108,117.61	$130,550.92	$683,646.93	$240,133.33	$2,736,781.03	$3,807,625.18	$481,420.53	$8,188,275.53
Ann. Avg., 2007-2011	**$139,129.30**	**$373,973.71**	**$572,900.00**	**$850,000.00**	**$9,993,959.88**	**$9,916,215.94**	**$1,096,330.60**	**$22,942,509.42**
Median Values*	$240,859.63	$432,136.00	$750,500.00	$918,000.00	$1,367,000.00	$4,152,834.33	$1,112,826.00	$6,443,286.67

*Median does not include years when no money was used from a particular program (e.g. 1982-1996 for SDSHS Deadwood Fund Grants were not included in the 1982-2011 annual average)

†Transportation Enhancement Activity (TEA) grants (related to historic rehabilitation) from three major federal transportation programs: Intermodal Surface Transportation Efficiency Act (ISTEA), Transportation Equity Act for the 21st Century (TEA-21) and Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

Exhibit 2.4: Deadwood, South Dakota Total Funding (Grants and Match, Duplicates Removed/Not Removed) for all Historic Preservation Purposes (Historic Rehabilitation, Museums, Infrastructure, etc.) by Year (Nominal $ Values)

Year	1) SDSHS Deadwood Fund Grants	2) Outside of Deadwood Grant	3) Deadwood Historic Preservation Budget	Year Total (no duplicates removed)	Year Total (duplicates removed)**
1989	-	-	$6,283,400.00	$6,283,400.00	$6,283,400.00
1990	-	-	$7,509,000.00	$7,509,000.00	$7,509,000.00
1991	-	-	$6,925,000.00	$6,925,000.00	$6,925,000.00
1992	-	-	$5,442,300.00	$5,442,300.00	$5,442,300.00
1993	-	-	$4,862,513.00	$4,862,513.00	$4,862,513.00
1994	-	-	$6,994,741.00	$6,994,741.00	$6,994,741.00
1995	-	-	$6,592,000.00	$6,592,000.00	$6,592,000.00
1996	-	-	$6,816,881.00	$6,816,881.00	$6,816,881.00
1997	$323,779.46	-	$7,480,000.00	$7,803,779.46	$7,803,779.46
1998	$339,578.41	-	$8,526,202.00	$8,865,780.41	$8,865,780.41
1999	$110,185.08	-	$9,077,043.00	$9,187,228.08	$9,187,228.08
2000	$310,057.44	-	$9,726,216.00	$10,036,273.44	$10,036,273.44
2001	$220,046.74	-	$9,515,000.00	$9,735,046.74	$9,735,046.74
2002	$450,365.26	$448,944.00	$9,515,000.00	$10,414,309.26	$10,189,837.26
2003	$606,140.68	$456,820.00	$9,460,000.00	$10,522,960.68	$10,294,550.68
2004	$288,621.34	$404,368.00	$9,460,000.00	$10,152,989.34	$9,950,805.34
2005	$328,129.26	$448,097.00	$9,460,000.00	$10,236,226.26	$10,012,177.76
2006	$267,612.80	$513,500.00	$6,965,348.00	$7,746,460.80	$7,489,710.80
2007	$225,096.67	$466,470.00	$7,097,949.00	$7,789,515.67	$7,556,280.67
2008	$342,501.40	$431,000.00	$7,169,000.00	$7,942,501.40	$7,727,001.40
2009	$338,677.39	$581,526.54	$7,180,000.00	$8,100,203.93	$7,809,440.66
2010	$277,616.48	$578,396.00	$6,984,550.00	$7,840,562.48	$7,551,364.48
2011	$121,988.00	$499,900.00	$6,800,000.00	$7,421,888.00	$7,171,938.00
Totals	**$4,550,396.41**	**$4,829,021.54**	**$175,842,143.00**	**$185,221,560.95**	**$182,807,050.18**
Ann. Avg., 1989-2011	$197,843.32	$209,957.46	$7,645,310.57	$8,053,111.35	$7,948,132.62
Ann. Avg., 2007-2011	**$261,175.99**	**$511,458.51**	**$7,046,299.80**	**$7,818,934.30**	**$7,563,205.04**
Median Values*	$310,057.44	$461,645.00	$7,169,000.00	$7,803,779.46	$7,556,280.67

*Median does not include years when no money was used from a particular program (e.g. 1982-1996 for SDSHS Deadwood Fund Grants were not included in the 1982-2011 annual average)

**The "Outside of Deadwood Grants" are part of the Deadwood Historic Preservation Commission's budget. To avoid double counting when adding these columns together, we divided the Outside of Deadwood grants column in half. This removed the grant amount and just left the match amount.

Exhibit 2.5: South Dakota Historic Rehabilitation Program Grants Alone (No Match and Duplicates Removed/Not Removed) by Year (Nominal $ Values)

Year	1) SDSHS Deadwood Fund Grants	2) Outside of Deadwood Grant	3) Deadwood Historic Preservation Budget	4) Sioux Falls Historic Façade Easement Program	5) State Historic Property Tax Moratorium	6) Federal Historic Tax Credits	7) TEA Grants†	Year Total (no duplicates removed)	Year Total (duplicates removed)**
1982	-	-	-	-	-	$1,722,222.22	-	$1,722,222.22	$1,722,222.22
1983	-	-	-	-	$500,000.00	-	-	$500,000.00	$500,000.00
1984	-	-	-	-	-	$184,444.44	-	$184,444.44	$184,444.44
1985	-	-	-	-	-	-	-	$0.00	$0.00
1986	-	-	-	-	-	-	-	$0.00	$0.00
1987	-	-	-	-	-	-	-	$0.00	$0.00
1988	-	-	-	-	-	-	-	$0.00	$0.00
1989	-	-	$825,000.00	-	-	$4,444,444.44	-	$5,269,444.44	$5,269,444.44
1990	-	-	$2,225,000.00	-	-	-	-	$2,225,000.00	$2,225,000.00
1991	-	-	$2,225,000.00	-	-	-	-	$2,225,000.00	$2,225,000.00
1992	-	-	$550,000.00	-	$1,020,000.00	$555,555.56	$300,000.00	$2,425,555.56	$2,425,555.56
1993	-	-	$540,000.00	-	$291,554.00	$4,152,834.33	$330,079.00	$5,314,467.33	$5,314,467.33
1994	-	-	$837,188.00	-	$215,000.00	$2,317,222.22	$1,528,350.00	$4,897,760.22	$4,897,760.22
1995	-	-	$1,461,748.00	-	$1,367,000.00	$2,833,165.56	$1,308,605.00	$6,970,518.56	$6,970,518.56
1996	-	-	$832,010.00	-	$1,571,149.00	$1,490,156.32	$2,706,145.00	$6,599,460.32	$6,599,460.32
1997	$161,572.40	-	$1,347,509.00	-	$369,500.00	$8,166,291.72	$0.00	$10,044,873.12	$10,044,873.12
1998	$122,641.00	-	$1,379,271.00	-	$176,497.00	$5,831,666.67	$362,802.00	$7,872,877.67	$7,872,877.67
1999	$44,800.00	-	$1,463,566.00	-	$1,280,000.00	$2,611,111.11	$44,700.00	$5,444,177.11	$5,444,177.11
2000	$79,845.86	-	$837,565.00	-	$3,862,672.22	$2,760,888.89	$598,400.00	$8,139,371.97	$8,139,371.97
2001	$121,527.24	-	$983,127.00	-	$1,294,207.00	$640,555.56	$640,000.00	$3,679,416.80	$3,679,416.80
2002	$229,065.00	$224,472.00	$750,500.00	$137,400.00	$2,133,200.00	$2,018,290.00	$363,858.00	$5,856,785.00	$5,744,549.00
2003	$300,715.00	$228,410.00	$436,487.00	$110,200.00	$6,578,012.85	$10,958,088.89	$410,000.00	$19,021,913.74	$18,907,708.74
2004	$118,042.75	$202,184.00	$391,937.00	$100,000.00	$2,934,384.00	$7,344,444.44	$0.00	$11,090,992.19	$10,989,900.19
2005	$168,585.00	$224,048.50	$228,500.00	$282,069.00	$1,322,755.96	$1,451,609.96	$1,373,437.00	$5,051,005.42	$4,938,981.17
2006	$107,330.00	$256,750.00	$330,500.00	$391,275.00	$7,217,699.48	$5,164,683.33	$74,000.00	$13,542,237.81	$13,413,862.81
2007	$108,189.00	$233,235.00	$560,500.00	$250,000.00	$5,549,443.68	$10,401,111.11	$390,000.00	$17,492,478.79	$17,375,861.29
2008	$125,854.00	$215,500.00	$665,500.00	$142,500.00	$31,880,159.96	$7,243,959.71	$0.00	$40,273,473.67	$40,165,723.67
2009	$145,224.40	$290,763.27	$632,000.00	$154,800.00	$2,440,920.75	$6,360,557.78	$0.00	$10,024,266.20	$9,878,884.57
2010	$138,477.00	$289,198.00	$555,000.00	$0.00	$9,899,275.00	$11,948,117.78	$5,006,183.00	$27,836,250.78	$27,691,651.78
2011	$121,988.00	$249,950.00	$451,500.00	$0.00	$200,000.00	$13,627,333.33	$0.00	$14,650,771.33	$14,525,796.33
Totals	**$2,093,856.65**	**$2,414,510.77**	**$20,509,408.00**	**$1,568,244.00**	**$82,103,430.90**	**$114,228,755.38**	**$15,436,559.00**	**$238,354,764.70**	**$237,147,509.31**
Ann. Avg., 1982-2011	$69,795.22	$80,483.69	$683,646.93	$52,274.80	$2,736,781.03	$3,807,625.18	$514,551.97	$7,945,158.82	$7,904,916.98
Ann. Avg., 2007-2011	**$127,946.48**	**$255,729.25**	**$572,900.00**	**$109,460.00**	**$9,993,959.88**	**$9,916,215.94**	**$1,079,236.60**	**$22,055,448.15**	**$21,927,583.53**
Median Values*	$122,641.00	$168,106.47	$750,500.00	$139,950.00	$1,367,000.00	$4,152,834.33	$410,000.00	$15,000,303.49	$14,916,250.25

*Median does not include years when no money was used from a particular program (e.g. 1982-1996 for SDSHS Deadwood Fund Grants were not included in the 1982-2011 annual average)

**The "Outside of Deadwood Grants" are part of the Deadwood Historic Preservation Commission's budget. To avoid double counting when adding these columns together, we divided the Outside of Deadwood grants column in half. This removed the grant amount and just left the match amount.

† Transportation Enhancement Activity (TEA) grants (related to historic rehabilitation) from three major federal transportation programs: Intermodal Surface Transportation Efficiency Act (ISTEA), Transportation Equity Act for the 21st Century (TEA-21) and Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

In short, we quantify the full measure of historic rehabilitation (grants and match) associated with the seven major federal and state/local programs in South Dakota supporting such rehabilitation over 1982-2011. This investment is further sorted by *Type of Historic Rehabilitation* by four building categories: single family residential, multi-family residential, commercial, and civic/institutional. The differentiation of historic rehabilitation by building type is a refinement required by the economic model we use to quantify the economic contributions of historic rehabilitation.

The specific methodology used by program to quantify total rehabilitation spending (grant and match) by building type and year is summarized below.

1. The State Historical Society's Deadwood Fund Grant Program – Cash-match, in-kind match and the grant amount spent for each project were added to get the total rehabilitation spending. Data for projects from 1997 through 2010 were provided and sorted by the year the project was reviewed (i.e. Deadwood Review year) and by property type (Residential – Single Family, Residential – Multi-family, Commercial, or Civic/Institutional). Projects with no dollar amounts provided were not included in the spending totals.

2. The Deadwood Historic Preservation Commission's Outside of Deadwood Grant Program – Match amount and grant amount for each project were added to get the total rehabilitation spending in this program. Data for projects from 2002 to 2011 were provided and sorted by year and property type.

3. The Deadwood Historic Preservation Commission Budget – Expenditures on the fixed capital assets of the city and the Deadwood Grant and Loan Funds from 2009, 2010 and 2011 were used to find the total rehabilitation spending from the Historic Preservation Commission Budget. Spending was sorted by year and property type.

4. The Sioux Falls Historic Façade Easement Program – The building permit valuation to date for each project was used to find the total rehabilitation spending from this program. Data for projects from 2003 to 2009 were provided and sorted by year and property type. A valuation for the Boyce-Greeley South project was not provided and therefore was not included in the total program spending.

5. The State Historic Preservation Property Tax Moratorium Program – The total moratorium-indicated rehabilitation cost of each project was used to find the total historic rehabilitation spending from this program. If a project application did not provide total cost and the rehabilitation cost from the current year was provided, this value was assumed to be the total cost. However, if no costs were provided (total or current year), the project was not included in the total program spending. Projects were sorted by Tax State Historic Preservation Office (SHPO) ID year (from 1983 to 2011) and property type.

6. The Federal Historic Preservation Tax Incentives Program – This is a 20 percent federal tax credit applied to "qualified" rehabilitation costs. The total tax credit-indicated rehabilitation cost of each project divided by 0.9[6] was used to find the total historic rehabilitation spending from this program. If no cost was provided, the project was not included in the total program spending. Projects were sorted by Tax SHPO ID year (from 1982 to 2011) and property type. In instances where a Tax SHPO ID was not provided, the project completion year was used for sorting.

7. The Federal Highway Administration's Transportation Enhancement Activities Program – Total costs for Transportation Enhancement projects in categories 6 (Historic preservation) and 7

[6] Case study investigation nationally suggests that the "qualified" for tax credit rehabilitation cost is equal to about 90 percent of the actual total project rehabilitation outlay.

(Rehabilitation and operation of historic transportation buildings, structures, or facilities) were used to find the total program spending. Total costs consist of federal funds, ARRA funds and local funds. Project spending was sorted by year (from 1994 to 2010) and property type (Commercial or Civic/Institutional).

The results of the above analysis are reported in Exhibits 2.3 and 2.6. The former shows the historic rehabilitation investment by year (from 1982 through 2011) and by individual program. Exhibit 2.6 shows the historic rehabilitation investment by year and by building type (residential single-family, residential multi-family, commercial and civic/institutional.

Exhibit 2.6: South Dakota Historic Rehabilitation Dollar Spending by Property Type & Year (Nominal $ Values)

Year	Residential - Single Family	Residential - Multi-Family	Commercial	Civic/ Institutional	Year Total
1982	-	$1,722,222.22	-	-	$1,722,222.22
1983	-	-	$500,000.00	-	$500,000.00
1984	-	-	$127,777.78	$56,666.67	$184,444.44
1985	-	-	-	-	-
1986	-	-	-	-	-
1987	-	-	-	-	-
1988	-	-	-	-	-
1989	-	-	$4,444,444.44	$825,000.00	$5,269,444.44
1990	-	-	-	$2,225,000.00	$2,225,000.00
1991	-	-	-	$2,225,000.00	$2,225,000.00
1992	$20,000.00	-	$1,555,555.56	$550,000.00	$2,125,555.56
1993	$99,000.00	$1,009,364.33	$3,227,135.11	$648,888.89	$4,984,388.33
1994	-	$139,444.44	$2,392,777.78	$2,527,168.00	$5,059,390.22
1995	$92,000.00	$891,111.11	$3,469,154.44	$2,322,474.00	$6,774,739.56
1996	$40,856.32	$927,172.22	$2,093,276.78	$2,291,970.00	$5,353,275.32
1997	$317,277.78	$1,849,365.00	$6,466,736.85	$1,520,836.94	$10,154,216.57
1998	$318,719.22	$4,276,111.11	$1,465,329.01	$1,646,163.57	$7,706,322.92
1999	$260,000.00	$226,111.11	$3,405,000.00	$1,630,047.08	$5,521,158.19
2000	$1,196,672.22	$203,333.33	$5,233,351.28	$1,106,950.72	$7,740,307.55
2001	$748,274.89	-	$1,164,188.81	$1,812,666.33	$3,725,130.03
2002	$573,254.48	$1,918,178.89	$565,835.67	$3,054,564.75	$6,111,833.79
2003	$665,078.22	$12,704,410.37	$3,246,415.08	$2,143,095.86	$18,758,999.54
2004	$811,384.00	$7,374,444.44	$2,171,626.82	$864,496.96	$11,221,952.22
2005	$504,000.00	$709,387.73	$2,551,707.67	$4,370,771.77	$8,135,867.18
2006	$1,250,410.33	$150,000.00	$8,301,972.48	$5,734,088.00	$15,436,470.81
2007	$386,943.68	$1,333,333.33	$15,056,277.78	$4,270,056.65	$21,046,611.44
2008	$752,682.96	$4,816,839.49	$30,886,950.49	$3,978,868.08	$40,435,341.02
2009	$859,970.75	$2,444,444.44	$5,641,082.93	$1,878,877.92	$10,824,376.05
2010	$1,073,764.11	$5,950,289.00	$14,848,305.67	$6,048,026.50	$27,920,385.28
2011	-	$8,666,222.22	$5,161,111.11	$658,500.00	$14,485,833.33
Totals	**$9,970,288.97**	**$57,311,784.82**	**$123,976,013.55**	**$54,390,178.69**	**$245,648,266.02**
Ann. Avg., 1982-2011	$332,342.97	$1,910,392.83	$4,132,533.78	$1,813,005.96	$8,188,275.53
Ann. Avg., 2007-2011	**$614,672.30**	**$4,642,225.70**	**$14,318,745.60**	**$3,366,865.83**	**$22,942,509.42**
Median Values*	$538,627.24	$1,722,222.22	$3,246,415.08	$2,010,986.89	$6,443,286.67

*Median does not include years when no money was used from a particular program (e.g. 1982-1996 for SDSHS Deadwood Fund Grants were not included in the 1982-2011 annual average)

Further, since the historic rehabilitation investment being studied in South Dakota occurred over a lengthy time span (1982-2011), we have to adjust the main results shown in Exhibits 2.3 and 2.6 for inflation. In short, we have to convert the nominal dollar values (dollars as of the year spent shown in Exhibits 2.3 and 2.6) into "real" dollar values (adjusted for inflation—converting nominal dollars into inflation-adjusted 2011 dollars). This was done as follows.

The nominal dollar values for each year were multiplied by a ratio of price indexes. The U.S. Bureau of Economic Analysis' chain-type price indexes for Gross Domestic Product (shown in Exhibit 2.7) were used for this conversion. In order to get real 2011 dollar values, each nominal dollar amount was multiplied by the ratio of indexes for the current year (2011) and the nominal dollar year. Using historic rehabilitation spending in 1993 from Exhibit 2.6 as an example:

Residential Single Family Spending x (2011 Residential Index / 1993 Residential Index) + (Residential Multi-Family Spending + Commercial Spending + Civic/Institutional Spending) x (2011 Nonresidential Structure Index / 1993 Nonresidential Structure Index)

= $99,000 x (102.42/61.89) + ($1,009,364.33 + $3,227,135.11 + $648,888.89) x (120.66/56.10)
= $10,671,335.96

This value of $10,671,335.96 can be seen in Exhibit 2.10 under the year total 2011 real dollar value for 1993. Similar calculations were performed in order to convert all of the values in Exhibit 2.3 and Exhibit 2.6 to the values shown in Exhibit 2.8 and Exhibit 2.10.

Exhibit 2.7: Chain-Type Price Index for Gross Domestic Product

Year	Nonresidential Structure	Residential
1982	45.93	45.34
1983	44.76	46.38
1984	45.15	47.71
1989	51.85	56.68
1992	54.50	59.49
1993	56.10	61.89
1994	58.09	64.07
1995	60.60	66.40
1996	62.14	67.83
1997	64.52	69.56
1998	67.48	71.41
1999	69.56	74.15
2000	72.30	77.42
2001	76.09	80.99
2002	79.29	83.00
2003	82.17	86.95
2004	88.44	93.30
2005	100.00	100.00
2006	112.92	106.08
2007	119.78	107.61
2008	125.46	106.36
2009	122.19	102.74
2010	120.47	102.39
2011	120.66	102.42

Source: U.S. Bureau of Economic Analysis

Note: Multi-family Residential, Commercial and Civic/Institutional property types were defined as Nonresidential Structures. Single Family Residential property types were defined as Residential.

Exhibit 2.8: Rehabilitation Program Spending by Year (Real 2011 $ Values)

Year	1) SDSHS Deadwood Fund Grants	2) Outside of Deadwood Grant	3) Deadwood Historic Preservation Budget	4) Sioux Falls Historic Façade Easement Program	5) State Historic Property Tax Moratorium	6) Federal Historic Tax Credits	7) TEA Grants†	Year Total
1982	-	-	-	-	-	$4,524,348.65	-	$4,524,348.65
1983	-	-	-	-	$1,347,855.23	-	-	$1,347,855.23
1984	-	-	-	-	-	$492,913.99	-	$492,913.99
1985	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-
1989	-	-	$1,919,855.35	-	-	$10,342,655.09	-	$12,262,510.45
1990	-	-	$5,177,791.71	-	-	-	-	$5,177,791.71
1991	-	-	$5,177,791.71	-	-	-	-	$5,177,791.71
1992	-	-	$1,217,669.72	-	$2,248,377.63	$1,229,969.42	-	$4,696,016.78
1993	-	-	$1,161,433.16	-	$577,977.84	$8,931,924.97	-	$10,671,335.96
1994	-	-	$1,738,941.37	-	$446,581.17	$4,813,152.58	$3,510,294.14	$10,508,969.26
1995	-	-	$2,910,470.52	-	$2,680,545.84	$5,641,085.08	$2,215,735.73	$13,447,837.18
1996	-	-	$1,615,550.80	-	$3,050,769.85	$2,875,861.29	$2,834,869.22	$10,377,051.16
1997	$498,690.15	-	$2,520,000.56	-	$615,640.61	$15,229,062.09	-	$18,863,393.41
1998	$570,199.41	-	$2,466,254.28	-	$253,141.34	$10,377,194.95	-	$13,666,789.97
1999	$191,128.98	-	$2,538,727.34	-	$2,128,436.04	$4,529,279.28	$97,652.03	$9,485,223.67
2000	$465,920.23	-	$1,397,795.20	-	$6,032,327.60	$4,607,591.33	-	$12,503,634.36
2001	$312,571.83	-	$1,558,997.29	-	$1,819,654.71	$1,008,091.36	$967,512.74	$5,666,827.93
2002	$467,103.92	$683,183.04	$1,142,077.56	-	$3,113,197.24	$3,054,524.95	$675,659.48	$9,135,746.19
2003	$464,256.57	$667,029.39	$640,945.86	$23,494.71	$9,492,864.79	$16,064,276.74	-	$27,352,868.06
2004	$350,381.66	$401,610.62	$534,725.45	-	$3,787,136.43	$10,020,134.18	-	$15,093,988.33
2005	$280,959.28	$471,294.34	$275,708.10	$1,107,658.80	$1,508,667.74	$1,751,512.57	$4,329,006.90	$9,724,807.73
2006	$261,887.34	$489,927.47	$353,153.83	$2,158,459.09	$7,583,579.97	$5,518,691.91	-	$16,365,699.60
2007	$177,914.22	$366,140.34	$564,617.88	$3,545,860.74	$5,568,709.36	$10,477,526.02	$478,963.18	$21,179,731.75
2008	$206,506.28	$414,510.28	$640,038.50	-	$30,661,365.01	$6,966,811.56	-	$38,889,231.64
2009	$222,943.99	$429,678.11	$624,086.42	$720,859.32	$2,417,667.70	$6,281,692.86	-	$10,696,928.40
2010	$78,661.37	$433,955.34	$555,875.32	-	$9,913,651.50	$11,966,819.14	$5,014,078.53	$27,963,041.20
2011	-	$207,000.00	$451,500.00	-	$200,000.00	$13,627,333.33	-	$14,485,833.33
Totals	**$4,549,125.23**	**$4,564,328.93**	**$37,184,007.92**	**$7,556,332.65**	**$95,448,147.61**	**$160,332,453.34**	**$20,123,771.97**	**$329,758,167.64**
Ann. Avg., 1982-2011	$151,637.51	$152,144.30	$1,239,466.93	$251,877.76	$3,181,604.92	$5,344,415.11	$670,792.40	$10,991,938.92
Ann. Avg., 2007-2011	**$137,205.17**	**$370,256.81**	**$567,223.63**	**$853,344.01**	**$9,752,278.72**	**$9,864,036.58**	**$1,098,608.34**	**$22,642,953.27**
Median Value*	$296,765.55	$431,816.72	$1,217,669.72	$1,107,658.80	$2,417,667.70	$5,641,085.08	$2,215,735.73	$10,684,132.18

*Median does not include years when no money was used from a particular program (e.g. 1982-1996 for SDSHS Deadwood Fund Grants were not included in the 1982-2011 annual average)

† Transportation Enhancement Activity (TEA) grants (related to historic rehabilitation) from three major federal transportation programs: Intermodal Surface Transportation Efficiency Act (ISTEA), Transportation Equity Act for the 21st Century (TEA-21) and Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

Exhibit 2.9: South Dakota Historic Rehabilitation Program Dollar Spending Percentage by Year (Real 2011 $ Values)

Year	1) SDSHS Deadwood Fund Grants	2) Outside of Deadwood Grant	3) Deadwood Historic Preservation Budget	4) Sioux Falls Historic Façade Easement Program	5) State Historic Property Tax Moratorium	6) Federal Historic Tax Credits	7) TEA Grants	Year Total
1982	-	-	-	-	-	100.0%	-	100.0%
1983	-	-	-	-	100.0%	-	-	100.0%
1984	-	-	-	-	-	100.0%	-	100.0%
1985	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-
1987	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-
1989	-	-	15.7%	-	-	84.3%	-	100.0%
1990	-	-	100.0%	-	-	-	-	100.0%
1991	-	-	100.0%	-	-	-	-	100.0%
1992	-	-	25.9%	-	47.9%	26.2%	-	100.0%
1993	-	-	10.9%	-	5.4%	83.7%	-	100.0%
1994	-	-	16.5%	-	4.2%	45.8%	33.4%	100.0%
1995	-	-	21.6%	-	19.9%	41.9%	16.5%	100.0%
1996	-	-	15.6%	-	29.4%	27.7%	27.3%	100.0%
1997	2.6%	-	13.4%	-	3.3%	80.7%	-	100.0%
1998	4.2%	-	18.0%	-	1.9%	75.9%	-	100.0%
1999	2.0%	-	26.8%	-	22.4%	47.8%	1.0%	100.0%
2000	3.7%	-	11.2%	-	48.2%	36.9%	-	100.0%
2001	5.5%	-	27.5%	-	32.1%	17.8%	17.1%	100.0%
2002	5.1%	7.5%	12.5%	-	34.1%	33.4%	7.4%	100.0%
2003	1.7%	2.4%	2.3%	0.1%	34.7%	58.7%	-	100.0%
2004	2.3%	2.7%	3.5%	-	25.1%	66.4%	-	100.0%
2005	2.9%	4.8%	2.8%	11.4%	15.5%	18.0%	44.5%	100.0%
2006	1.6%	3.0%	2.2%	13.2%	46.3%	33.7%	-	100.0%
2007	0.8%	1.7%	2.7%	16.7%	26.3%	49.5%	2.3%	100.0%
2008	0.5%	1.1%	1.6%	-	78.8%	17.9%	-	100.0%
2009	2.1%	4.0%	5.8%	6.7%	22.6%	58.7%	-	100.0%
2010	0.3%	1.6%	2.0%	-	35.5%	42.8%	17.9%	100.0%
2011	-	1.4%	3.1%	-	1.4%	94.1%	-	100.0%
Totals	**1.4%**	**1.4%**	**11.3%**	**2.3%**	**28.9%**	**48.6%**	**6.1%**	**100.0%**

Exhibit 2.10: Rehabilitation Spending by Property Type & Year (Real 2011 $ Values)					
Year	Residential - Single Family	Residential - Multi-Family	Commercial	Civic/ Institutional	Year Total
1982	-	$4,524,348.65	-	-	$4,524,348.65
1983	-	-	$1,347,855.23	-	$1,347,855.23
1984	-	-	$341,476.56	$151,437.43	$492,913.99
1985	-	-	-	-	-
1986	-	-	-	-	-
1987	-	-	-	-	-
1988	-	-	-	-	-
1989	-	-	$10,342,655.09	$1,919,855.35	$12,262,510.45
1990	-	-	-	$5,177,791.71	$5,177,791.71
1991	-	-	-	$5,177,791.71	$5,177,791.71
1992	$34,432.68	-	$3,443,914.37	$1,217,669.72	$4,696,016.78
1993	$163,832.28	$2,170,942.97	$6,940,929.10	$1,395,631.61	$10,671,335.96
1994	-	$289,643.08	$4,970,090.66	$5,249,235.51	$10,508,969.26
1995	$141,907.23	$1,774,281.63	$6,907,395.63	$4,624,252.69	$13,447,837.18
1996	$61,691.06	$1,800,331.51	$4,064,608.56	$4,450,420.02	$10,377,051.16
1997	$467,159.14	$3,458,530.39	$12,093,559.65	$2,844,144.22	$18,863,393.41
1998	$457,123.97	$7,646,051.67	$2,620,133.35	$2,943,480.98	$13,666,789.97
1999	$359,126.10	$392,216.31	$5,906,372.92	$2,827,508.35	$9,485,223.67
2000	$1,583,094.40	$339,338.87	$8,733,833.54	$1,847,367.55	$12,503,634.36
2001	$946,268.85	-	$1,846,116.72	$2,874,442.36	$5,666,827.93
2002	$707,382.22	$2,918,999.43	$861,063.58	$4,648,300.96	$9,135,746.19
2003	$783,407.84	$18,655,399.24	$4,767,098.02	$3,146,962.96	$27,352,868.06
2004	$890,696.13	$10,061,063.62	$2,962,782.59	$1,179,445.99	$15,093,988.33
2005	$516,196.80	$855,947.24	$3,078,890.48	$5,273,773.22	$9,724,807.73
2006	$1,207,268.34	$160,281.62	$8,871,023.73	$6,127,125.91	$16,365,699.60
2007	$368,281.50	$1,343,129.07	$15,166,893.28	$4,301,427.91	$21,179,731.75
2008	$724,800.57	$4,632,551.03	$29,705,240.29	$3,826,639.75	$38,889,231.64
2009	$857,292.23	$2,413,836.38	$5,570,448.21	$1,855,351.58	$10,696,928.40
2010	$1,074,078.72	$5,959,673.53	$14,871,723.76	$6,057,565.18	$27,963,041.20
2011	-	$8,666,222.22	$5,161,111.11	$658,500.00	$14,485,833.33
Totals	**$11,344,040.07**	**$78,062,788.46**	**$160,575,216.44**	**$79,776,122.67**	**$329,758,167.64**
Ann. Avg., 1982-2011	$378,134.67	$2,602,092.95	$5,352,507.21	$2,659,204.09	$10,991,938.92
Ann. Avg., 2007-2011	**$604,890.60**	**$4,603,082.45**	**$14,095,083.33**	**$3,339,896.88**	**$22,642,953.27**
Median Values*	$611,789.51	$2,413,836.38	$5,161,111.11	$3,045,221.97	$10,684,132.18
*Median does not include years when no money was used from a particular program (e.g. 1982-1996 for SDSHS Deadwood Fund Grants were not included in the 1982-2011 annual average)					

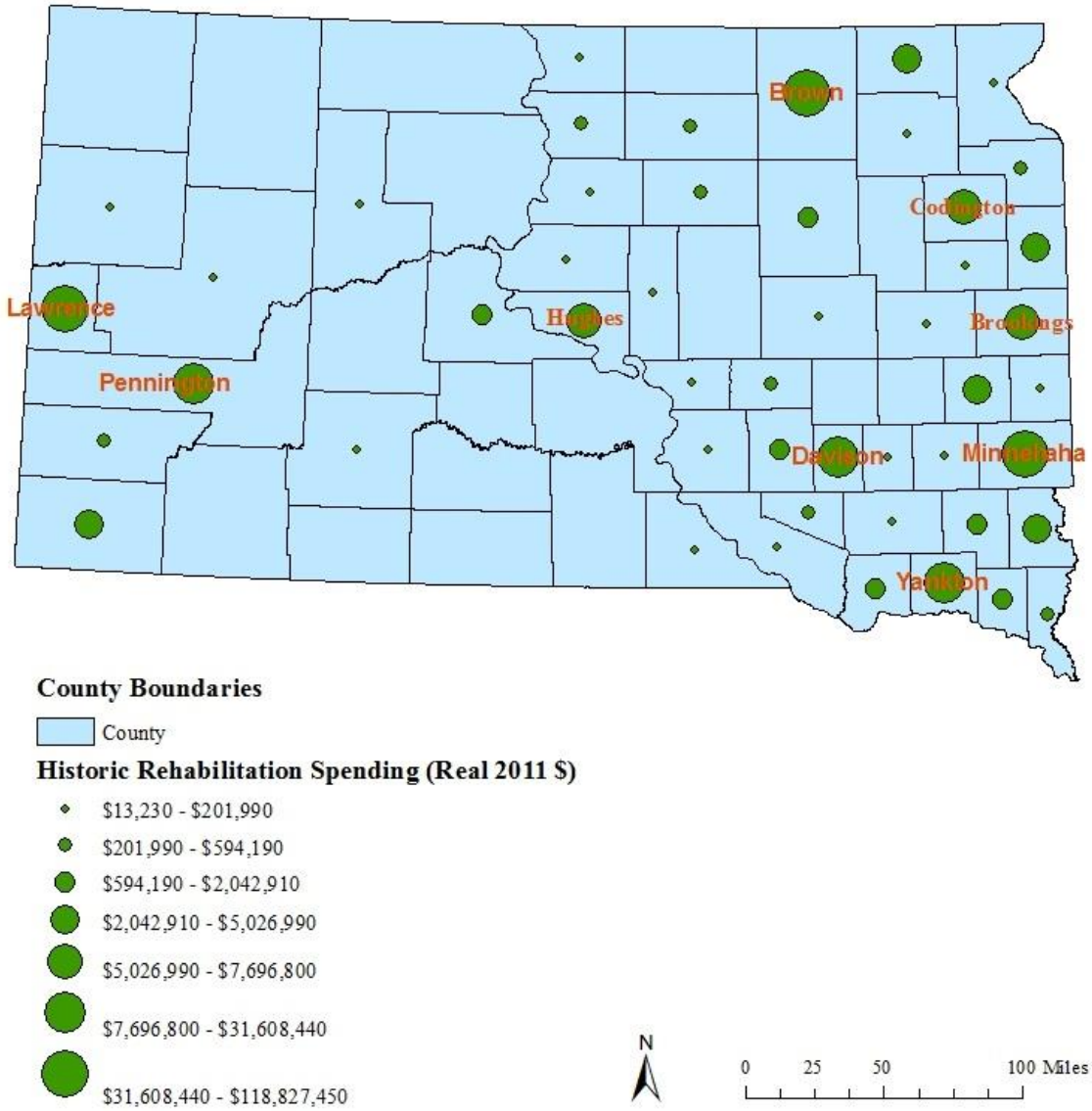
Exhibit 2.11: Rehabilitation Spending Percentage by Property Type & Year (Real 2011 $ Values)					
Year	Residential - Single Family	Residential - Multi-Family	Commercial	Civic/ Institutional	Year Total
1982	-	100.0%	-	-	100.0%
1983	-	-	100.0%	-	100.0%
1984	-	-	69.3%	30.7%	100.0%
1985	-	-	-	-	-
1986	-	-	-	-	-
1987	-	-	-	-	-
1988	-	-	-	-	-
1989	-	-	84.3%	15.7%	100.0%
1990	-	-	-	100.0%	100.0%
1991	-	-	-	100.0%	100.0%
1992	0.7%	-	73.3%	25.9%	100.0%
1993	1.5%	20.3%	65.0%	13.1%	100.0%
1994	-	2.8%	47.3%	50.0%	100.0%
1995	1.1%	13.2%	51.4%	34.4%	100.0%
1996	0.6%	17.3%	39.2%	42.9%	100.0%
1997	2.5%	18.3%	64.1%	15.1%	100.0%
1998	3.3%	55.9%	19.2%	21.5%	100.0%
1999	3.8%	4.1%	62.3%	29.8%	100.0%
2000	12.7%	2.7%	69.9%	14.8%	100.0%
2001	16.7%	-	32.6%	50.7%	100.0%
2002	7.7%	32.0%	9.4%	50.9%	100.0%
2003	2.9%	68.2%	17.4%	11.5%	100.0%
2004	5.9%	66.7%	19.6%	7.8%	100.0%
2005	5.3%	8.8%	31.7%	54.2%	100.0%
2006	7.4%	1.0%	54.2%	37.4%	100.0%
2007	1.7%	6.3%	71.6%	20.3%	100.0%
2008	1.9%	11.9%	76.4%	9.8%	100.0%
2009	8.0%	22.6%	52.1%	17.3%	100.0%
2010	3.8%	21.3%	53.2%	21.7%	100.0%
2011	-	59.8%	35.6%	4.5%	100.0%
Totals	**3.4%**	**23.7%**	**48.7%**	**24.2%**	**100.0%**

Exhibit 2.12: South Dakota Rehabilitation Spending by Program (Real 2011 $ Value)				
Historic Rehabilitation Subsidy Program	Cumulative (1982-2011) Historic Rehabilitation		Annual Average (2007-2011) Historic Rehabilitation	
I. STATE/LOCAL PROGRAMS	**$**	**%**	**$**	**%**
1) SDSHS Deadwood Fund Grants	4,549,125.23	1.4	137,205.17	0.6
2) Outside of Deadwood Grant	4,564,328.93	1.4	370,256.81	1.6
3) Deadwood Historic Preservation Budget	37,184,007.92	11.3	567,223.63	2.5
Subtotal All Deadwood	*46,297,462.08*	*14.1*	*1,074,685.61*	*4.7*
4) Sioux Falls Historic Façade Easement Program	7,556,332.65	2.3	853,344.01	3.8
5) State Historic Property Tax Moratorium	95,448,147.61	28.9	9,752,278.72	43.1
Subtotal All State/Local	*149,301,942.34*	*45.3*	*11,680,308.34*	*51.6*
II. FEDERAL PROGRAMS				
6) Federal Historic Tax Credits	160,332,453.34	48.6	9,864,036.58	43.6
7) TEA Grants	20,123,771.97	6.1	1,098,608.34	4.8
Subtotal All Federal	*180,456,225.31*	*54.7*	*10,962,644.92*	*48.4*
Total All Programs	**329,758,167.64**	**100.0**	**22,642,953.27**	**100.0**

Exhibit 2.13: South Dakota Rehabilitation Spending by Property Type (Real 2011 $ Value)				
Building Type	Cumulative (1982-2011) Historic Rehabilitation		Annual Average (2007-2011) Historic Rehabilitation	
	$	**%**	**$**	**%**
Residential Single Family	11,344,040.07	3.4	604,890.60	2.7
Residential Multi-Family	78,062,788.46	23.7	4,603,082.45	20.3
Residential Subtotal	*89,406,828.53*	*27.1*	*5,207,973.05*	*23.0*
Commercial	160,575,216.44	48.7	14,095,083.33	62.2
Civic/Institutional	79,776,122.67	24.2	3,339,896.88	14.8
Total	**329,758,167.64**	**100.0**	**22,642,953.27**	**100.0**

EXHIBIT 2.14

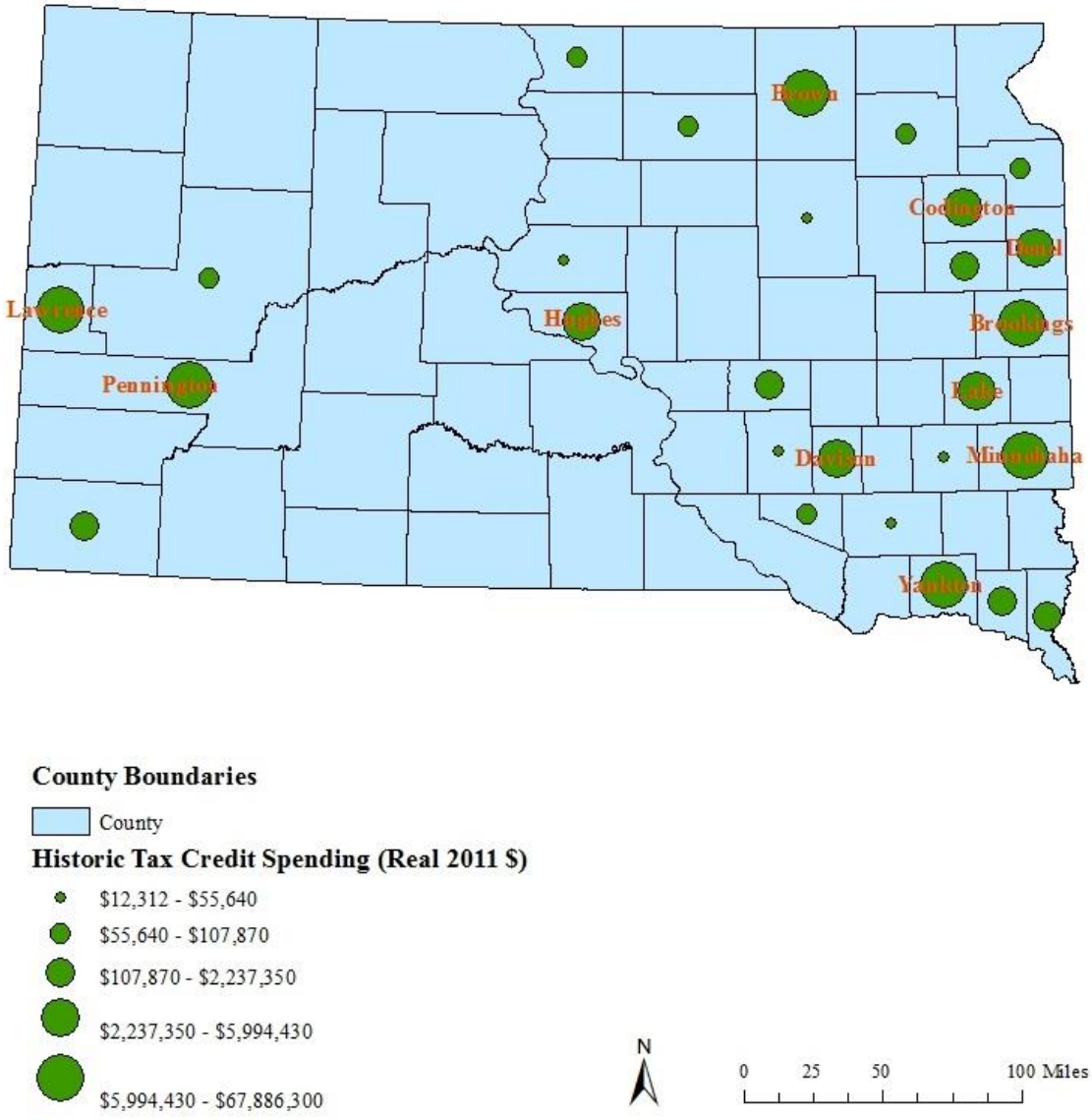
South Dakota: County Map of All Cumulative Historic Rehabilitation Spending, 1982-2011 (Total: $329,758,168)



Source: U.S. Census 2010 TIGER/Line; Historic Preservation Office of the South Dakota State Historical Society
Note: Historic rehabilitation encompasses 7 categories of renovation detailed in the historic rehabilitation section of the report

EXHIBIT 2.15

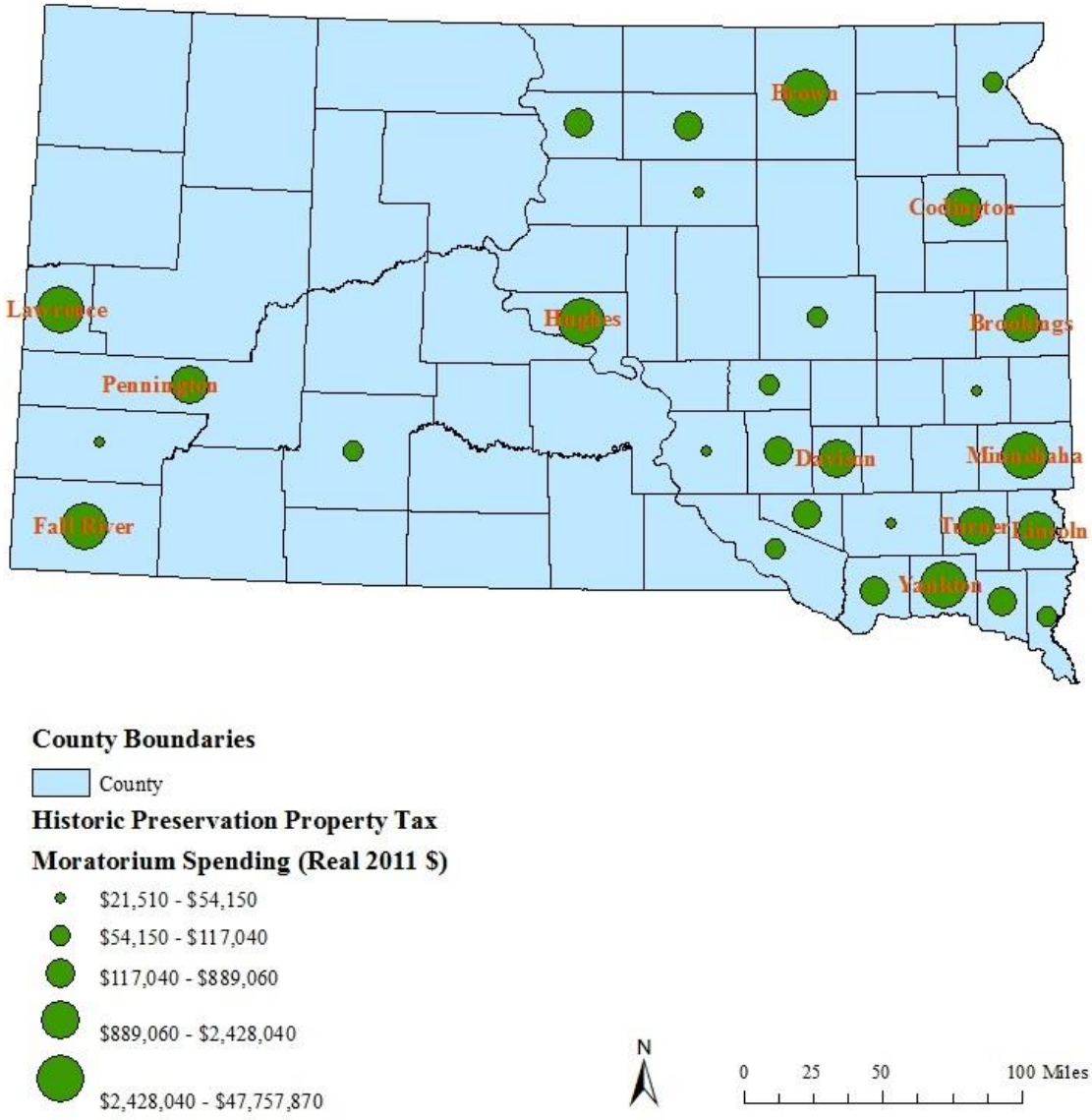
South Dakota: County Map of Cumulative Federal Historic Tax Credit Spending, 1982-2011 (Total: $160,332,453)



Source: U.S. Census 2010 TIGER/Line; Historic Preservation Office of the South Dakota State Historical Society

EXHIBIT 2.16

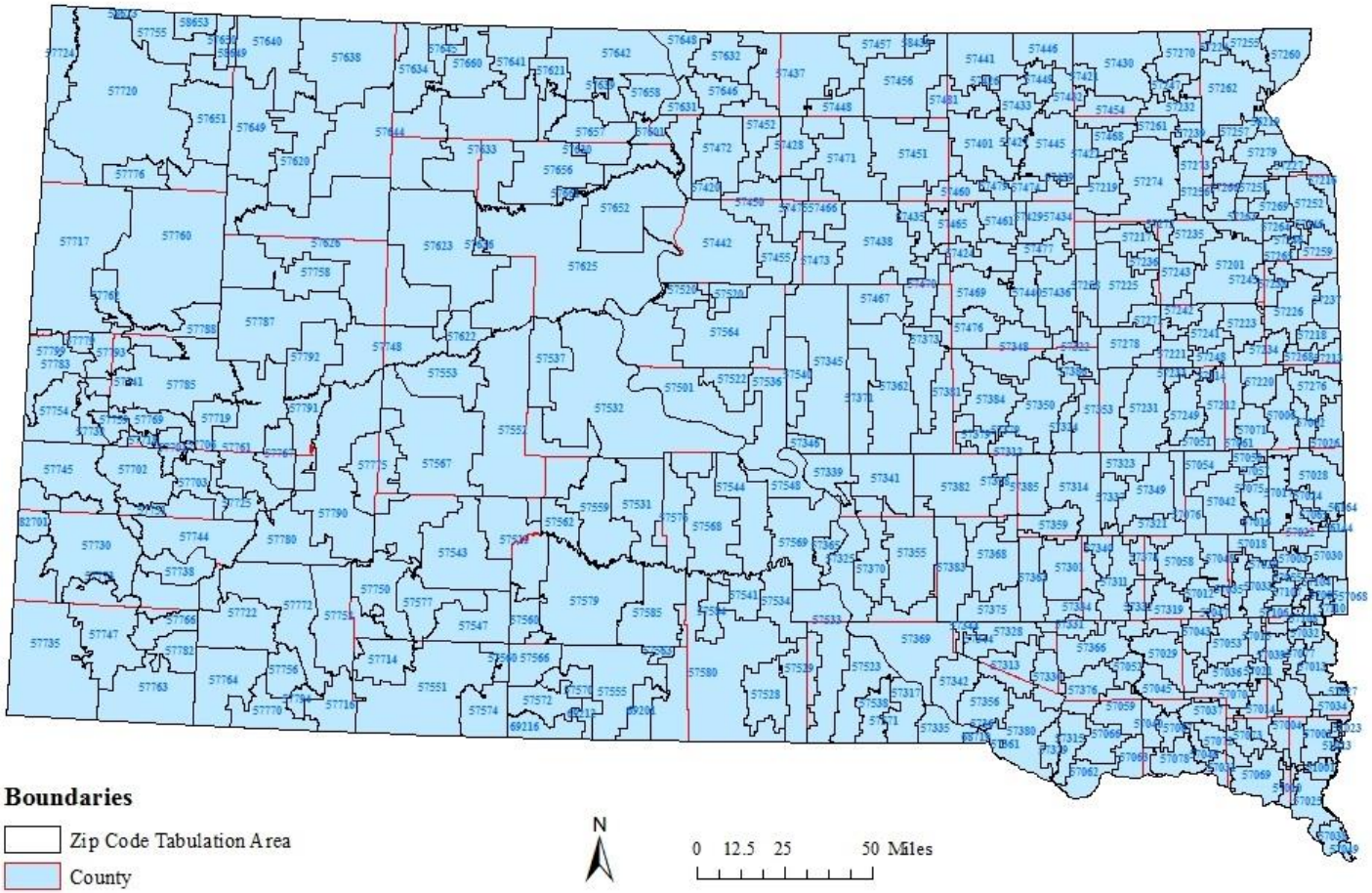
South Dakota: County Map of Cumulative Historic Preservation Property Tax Moratorium Spending, 1982-2011 (Total: $95,448,148)



Source: U.S. Census 2010 TIGER/Line; Historic Preservation Office of the South Dakota State Historical Society

Exhibit 2.17

South Dakota Counties and Zip Code Tabulation Areas



Source: U.S. Census 2010 TIGER/Line

In short, working collaboratively with the South Dakota State Historical Society, with its (now former) director, Jason Haug providing invaluable assistance, Rutgers was able to estimate over the 1982 through 2011 study period the amount of historic rehabilitation being effected in South Dakota in inflation-adjusted terms and to further refine this investment by building type. The key expenditure finding follows: *the cumulative (1982-2011) outlay of South Dakota historic rehabilitation funded by major federal and state/local subsidies for this purpose amounts to about $329.8 million ($329,758,168) in inflation-adjusted 2011 dollars* (Exhibit 2.8 lower portion of the right-most column).

What about this investment on an annual basis? As is evident from Exhibit 2.8, the annual historic rehabilitation outlay per year has grown over time. While the arithmetic average investment per year over the full 30-year span of the 1982 through 2011 study period is $11.0 million in inflation-adjusted 2011 dollars (just slightly above the annual median investment of $10.7 million for the three decade period), annual historic rehabilitation investment in recent years has been far above the 30-year annual average/median amounts just cited (about $11 million). For example, the total annual historic rehabilitation expenditure in South Dakota was $21.2 million in 2007, $38.9 million in 2008, $10.7 million in 2009, $28.0 million in 2010, and $14.5 million 2011 (all in 2011 dollar values).

So what is an appropriate figure to express the *annual* historic rehabilitation investment in South Dakota? After discussion with the South Dakota State Historical Society, we collectively decided that the most reasonable expression of the *annual* investment would be the annual average for a span of recent years, namely over 2007 through 2011. *The annual average outlay for historic rehabilitation in South Dakota over 2007 through 2011 funded by major federal and state/local subsidy programs is about $22.6 million ($22,642,953).* (See lower portion of the right-most column in Exhibit 2.8.)

PROFILE OF HISTORIC REHABILITATION IN SOUTH DAKOTA

Before quantifying via input-output analysis the economic impacts of historic rehabilitation in South Dakota, first for the annual $22.6 million outlay and then for the cumulative $330 million expenditure, it is instructive to examine the profile of this activity by *program*, *governmental level*, *building type*, *location*, and *place characteristics*. We shall report on these characteristics in summary form.

Historic Rehabilitation Investment by Program and Governmental Level

Of the seven programs funding historic rehabilitation in South Dakota, the three most significant are the federal historic tax credit ($160 million or 49% of the cumulative $330 million outlay), South Dakota Property Tax Moratorium ($95 million or 29% of the cumulative outlay), and the three combined Deadwood programs ($46 million or 14% of the cumulative outlay). (Remember, however, that our enumeration of historic rehabilitation does *not* include the significant Deadwood-funded aid for Deadwood utility infrastructure and its assistance for museums, visitor centers and other purposes.) While we just identified the "top three" programs, it is important to stress that all seven programs contribute to historic rehabilitation in the state. For further detail on the specific programmatic contribution of the annual average $23 million South Dakota historic rehabilitation investment, and for the proportional programmatic support by year over the 1982-2011 study period see Exhibits 2.9 and 2.12.

Of the seven historic rehabilitation programs studied, two are federal (historic rehabilitation tax credits and Transportation Enhancement grants) and five are state/local: three Deadwood (SDSHS Deadwood Fund Grant, Outside of Deadwood Grant, and Deadwood historic preservation outlays), the state historic property tax moratorium, and the Sioux Falls Easement. What is the balance between the federal and state/local aids for historic rehabilitation in South Dakota? In an exemplary application of creative federalism, historic rehabilitation in South Dakota is aided in an approximately equal measure by the federal and state/local governments. Of the cumulative $330 million historic rehabilitation outlay in South

Dakota over 1982 through 2011, about 55 percent was subsidized by the federal government and 45 percent by the state/local governments. Of the annual average $23 million historic rehabilitation expenditure, there is a similar 48 percent federal assistance and 52 percent state/local aid.

Historic Rehabilitation by Building Type, Location, and Place Characteristics

This section addresses "where" South Dakota historic rehabilitation funded by the major federal and state/local subsidy programs has taken place. One "where" is building type and as earlier described, we differentiate the historic rehabilitation activity by four building categories: residential single-family, residential multi-family, commercial, and civic/institutional. As is evident from Exhibit 2.13, most of the investment we have been tracking has taken place by far in commercial buildings, followed by residential multi-family buildings. Of the cumulative $330 million historic rehabilitation effected over 1982 through 2011 in South Dakota 49 percent was effected in commercial structures and 24 percent in residential multi-family buildings. Of the $23 million annual average spending in historic rehabilitation, the apportionment is 62 percent commercial and 20 percent multi-family.

Why the preponderance of investment in these two building categories as opposed to residential single-family or civic/institutional? The most likely explanation is that residential single-family and civic/institutional building are *not* "income-producing" and the federal historic tax credit—the single most significant aid for historic rehabilitation in South Dakota (and other states)—can only be used for income-producing investments. (For further detail on the South Dakota rehabilitation investment by building type by year, see Exhibit 2.11.)

Where spatially in South Dakota is the historic rehabilitation investment being effected? We start by examining this by county and then by zip codes in South Dakota.

Exhibits 2.14 through 2.16 show the *historic renovation activity by county* in South Dakota. Exhibit 2.14 shows the county distribution of the cumulative $330 million historic rehabilitation expenditure over 1982 through 2011 aided by all seven federal and state/local subsidies earlier enumerated. Exhibits 2.15 and 2.16 indicate the county distribution for the top two dollar volume subsidies, respectively: the federal historic tax credit ($160 million cumulative historic rehabilitation aided) and the South Dakota Property Tax Moratorium ($95 million cumulative historic rehabilitation aided).

Exhibits 2.15 and 2.16 show that while historic rehabilitation has been effected in many counties in South Dakota, major levels of such renovation have occurred in such counties as Brookings, Brown, Codington, Davison, Hughes, Lawrence, Minnehaha, Pennington, and Yankton. These counties contain the largest cities in South Dakota, such as Brookings, Aberdeen, Watertown, Mitchell, Pierre, Spearfish, Sioux Falls, Rapid City, and Yankton. The spatial trends of historic rehabilitation spending are similar for all historic rehabilitation spending, historic tax credit spending, and historic preservation property tax moratorium spending.

We can secure a "finer grid" of spatial location of the South Dakota historic rehabilitation activity by considering this investment by *zip codes* in the state. Exhibit 2.17 shows the location of all zip codes in South Dakota. Exhibit 2.18 then displays the cumulative $330 million historic rehabilitation investment in South Dakota over 1982 through 2011 by individual zip code. The top 5 zip codes are 57732 ($97 million), 57104 ($62 million), 57401 ($35 million), 57078 ($21 million) and 57754 ($14 million). (See Exhibit 2.17 for the location of these zip codes.) Not surprisingly, these same 5 zip codes also figure prominently with respect to the zip code distribution of the federal historic tax credit (Exhibit 2.19) and the state property tax moratorium (Exhibit 2.20).

To secure another dimension of the spatial and place characteristics of the South Dakota historic rehabilitation spending, we examine *census data regarding zip codes in this state*. Exhibit 2.21 also

indicates the socioeconomic and housing characteristics of the places (zip codes—lines 2.a, 2.b and 2.c) where the $330 million in cumulative 1982-2011 South Dakota historic rehabilitation funded by major federal and state/local subsidy programs occurred. For context, Exhibit 2.21 also indicates these same characteristics for *all* zip codes in South Dakota (line 1), not just those where rehabilitation was effected. Exhibit 2.21 indicates that the zip codes where the historic rehabilitation has been effected in South Dakota have socioeconomic and housing characteristics that mirror the state average. The only exception is population density, where understandably we find that historic rehabilitation is generally effected in South Dakota zip codes with a relatively higher population density.

Exhibit 2.18: All Cumulative Historic Rehabilitation Spending ($329.8 million) from 1982-2011 by Zip Code (Real 2011 $ Values)

57732	$97,236,939.06	57375	$239,670.06	57430	$45,525.75
57104	$62,397,677.91	57252	$234,636.02	57004	$44,453.97
57401	$34,640,260.37	57382	$227,622.57	57370	$42,481.90
57078	$20,563,345.61	57383	$220,588.70	57791	$40,929.44
57754	$13,841,726.04	57313	$211,024.98	57779	$40,293.88
57105	$11,573,853.48	57601	$201,990.76	57342	$39,530.58
57701	$9,427,446.47	57706	$193,099.55	57442	$35,609.08
57783	$8,761,940.23	57039	$149,331.68	57018	$35,238.97
57301	$7,699,477.38	57001	$139,059.80	57460	$32,362.41
57006	$5,860,811.99	57066	$135,109.33	57330	$30,529.47
57501	$5,749,986.94	57262	$125,763.51	57759	$29,368.38
57103	$5,036,913.58	57002	$111,143.67	57031	$29,301.13
57201	$4,627,427.03	57242	$107,874.69	57722	$29,250.58
57247	$4,136,578.23	57428	$105,520.37	57450	$28,309.53
57709	$4,039,303.95	57350	$104,797.88	57335	$28,118.88
57237	$3,895,022.27	57030	$104,134.19	57235	$27,314.69
57747	$3,893,066.29	57744	$99,452.78	57564	$25,889.93
57042	$3,052,247.90	57648	$97,087.22	57231	$25,450.59
57702	$2,956,699.50	57072	$96,181.11	57769	$25,183.68
57102	$2,382,963.72	57216	$89,029.08	57249	$23,166.72
57022	$1,896,203.73	57717	$86,252.08	57053	$23,060.18
57013	$1,893,584.65	57071	$82,454.28	57369	$22,993.43
57069	$1,068,002.03	57785	$81,578.84	57477	$22,501.48
57026	$970,872.22	57751	$80,458.93	57538	$21,392.40
57014	$866,000.48	57274	$80,440.00	57533	$18,835.33
57469	$816,350.87	57028	$79,934.23	57261	$16,980.74
57745	$771,693.47	57762	$78,366.08	57245	$14,848.74
57059	$617,396.86	57345	$75,687.12	57117	$14,733.87
57532	$570,148.10	51001	$73,619.90	57223	$13,603.57
57730	$529,940.73	57567	$69,977.28	57311	$13,428.16
57793	$518,006.77	57760	$67,929.12	57341	$13,239.27
57368	$498,901.14	57543	$66,712.14	57052	$12,312.02
57106	$494,168.30	57045	$59,648.80	57264	$10,959.30
57197	$451,953.83	57049	$57,946.76	57703	$4,047.22
57243	$357,400.29	57220	$51,557.90	57626	$1,683.05
57438	$263,861.51	57623	$50,441.89		
57451	$260,395.20	57058	$49,273.53		

Source: South Dakota historic rehabilitation project database

Exhibit 2.19: Cumulative Federal Historic Tax Credit Spending ($160 million) from 1982-2011 by Zip Code (Real 2011 $ Values)

57104	$49,097,866.44	57042	$2,237,352.77	57274	$80,440.00
57732	$23,737,141.98	57102	$2,086,720.16	57451	$73,383.42
57401	$16,797,240.86	57783	$1,916,619.26	57072	$61,691.06
57078	$9,442,712.04	57026	$970,872.22	57793	$55,963.71
57105	$8,642,858.84	57022	$911,172.35	57313	$55,643.18
57701	$7,149,885.63	57747	$747,192.33	57469	$53,937.35
57006	$4,887,485.50	57069	$309,558.92	57106	$53,642.56
57754	$4,655,123.47	57243	$207,790.87	57375	$48,947.30
57301	$4,052,909.08	57001	$139,059.80	57018	$35,238.97
57709	$4,039,303.95	57382	$118,305.03	57004	$32,850.76
57103	$4,026,989.38	57002	$111,143.67	57460	$32,362.41
57237	$3,895,022.27	57242	$107,874.69	57564	$25,889.93
57501	$3,142,126.32	57648	$97,087.22	57220	$24,934.90
57201	$3,070,119.32	57216	$89,029.08	57058	$19,273.53
57702	$2,897,799.96	57785	$81,578.84	57052	$12,312.02

Source: South Dakota historic rehabilitation project database

Exhibit 2.20: Cumulative Historic Preservation Property Tax Moratorium Spending ($95.4 million) from 1982-2011 by Zip Code (Real 2011 $ Values)

57732	$34,898,846.19	57059	$596,068.73	57030	$77,954.86
57401	$13,261,447.47	57106	$440,525.74	51001	$73,619.90
57078	$7,356,389.80	57793	$346,567.83	57567	$69,977.28
57754	$6,754,745.70	57102	$296,243.56	57350	$66,573.00
57104	$6,431,471.05	57383	$220,588.70	57049	$57,946.76
57783	$5,757,700.91	57706	$193,099.55	57042	$53,954.48
57747	$2,694,813.08	57375	$190,722.76	57045	$52,916.56
57501	$2,428,044.78	57451	$187,011.78	57370	$42,481.90
57301	$2,311,771.67	57243	$149,609.42	57791	$40,929.44
57105	$2,297,976.99	57039	$149,331.68	57342	$31,156.83
57201	$1,413,677.79	57313	$145,867.58	57220	$26,623.00
57013	$1,389,963.74	57601	$117,040.20	57053	$23,060.18
57701	$1,111,369.69	57262	$116,504.67	57369	$22,993.43
57014	$866,000.48	57428	$105,520.37	57730	$22,200.55
57006	$848,533.01	57066	$102,233.37	57438	$21,513.33
57022	$790,244.38	57382	$98,797.43	57031	$14,229.25
57069	$598,832.47	57071	$82,454.28		

Source: South Dakota historic rehabilitation project database

Exhibit 2.21: Selected Census Data for Overall State of South Dakota and Areas with Any Historic Rehabilitation Spending from 1982-2011
Zip Codes and 2000/2010 Census Data

	POPULATION CHARACTERISTICS						
	POPULATION DENSITY (PER SQUARE MILES)*	% URBAN	% WHITE*	% MINORITIES (NON-WHITE & HISPANIC)*	MEDIAN HOUSEHOLD INCOME	% POVERTY	% UNEMPLOYED
1 Total South Dakota							
Average of all zip codes in South Dakota	10.7	52.0%	85.8%	14.2%	$35,709	12.8%	3.0%
2 Historic Rehabilitation Spending Locations							
2.a Average of all zip codes with any historic rehabilitation spending	20.81	68.7%	88.9%	11.1%	$36,144	10.5%	2.8%
2.b Average of all zip codes with historic rehabilitation spending over $100,000	40.22	77.9%	88.3%	11.7%	$36,407	10.3%	2.9%
2.c Average of top 10 zip codes with historic rehabilitation spending	133.19	87.9%	86.4%	13.6%	$33,717	11.9%	3.4%

	HOUSING CHARACTERISTICS			
	% RENTER OCCUPIED HOUSING*	MEDIAN HOUSING VALUE (ALL OWNER-OCCUPIED)	PAY MORE THAN 30% OF INCOME FOR OWNER-OCCUPIED HOUSING	PAY MORE THAN 30% OF INCOME FOR RENTAL HOUSING
3 Total South Dakota				
Average of all zip codes in South Dakota	32.0%	$73,195	15.1%	29.2%
4 Historic Rehabilitation Spending Locations				
4.a Average of all zip codes with any historic rehabilitation spending	35.0%	$78,910	14.9%	30.7%
4.b Average of all zip codes with historic rehabilitation spending over $100,000	37.4%	$81,695	14.7%	31.6%
4.c Average of top 10 zip codes with historic rehabilitation spending	43.4%	$78,354	15.1%	32.6%

Source: South Dakota historic rehabilitation project database and Rutgers University analysis of South Dakota Census (2000 and 2010) data by zip code tabulation area (ZCTA)
*Demarks analysis where Census 2010 data used, all other categories used Census 2000 data.
Note: Data for zip codes that are only partially in South Dakota, zip codes with insufficient data, and zip codes that are solely comprised of water features were not included in analysis. All averages are weighted (by population, households, or land area). The top 10 zip codes are locations with over $5.86 million in historic rehabilitation spending.

Having summarized the distribution of historic rehabilitation in South Dakota by program, governmental level, building type, and place characteristics, we now turn to the major focus of this chapter, namely entering the investment in South Dakota historic rehabilitation ($23 million annual and $330 million cumulative) into an input-output model in order to quantify the direct and multiplier effects from outlay investment.

TRANSLATING THE ANNUAL HISTORIC REHABILITATION INVESTMENT AND ECONOMIC IMPACTS

This section discusses how the *total economic impact* of the $22.6 million of rehabilitation effected in historic properties annually is derived. First, the typical purchases for each type of property on which historic rehabilitation is taking place—single-family, multi-family, and nonresidential—are detailed by industry. The lists of typical labor, material, and service purchases for each property type are then standardized. These estimated economic "recipes" for historic renovation are then multiplied by the annual amount of such activity for each type of property. The resulting vectors of historic rehabilitation volume are then applied to input-output models that calculate total economic impacts (direct, indirect, and induced) for the state of South Dakota and the nation.

"Recipes" for Historic Rehabilitation

Direct effects, or direct requirements, the first category of total economic impact, are readily identified once a project has been bid and once its costs have been calculated and summed. In theory, the best way to estimate a project's direct requirements would be to use bid sheets that apply cost elements (i.e., labor and materials) to items specified by the project's architects and engineers. Bid sheets would provide sufficient detail on project requirements to identify the industry that supplies the components, as well as the type of labor needed for the work. The quality of the estimates of a project's direct requirements, in turn, determines the quality of the estimates of other categories of economic impacts. Thus, estimates demand exceptional thoroughness and care. In ideal circumstances, the thoroughness extends to identifying where the direct requirements come from, as well as a detailed specification of the supplying industry.

In prior studies, Rutgers obtained detailed cost information on renovations effected on a variety of historic properties by contacting developers/sponsors active in historic preservation, obtaining files on historic rehabilitation projects certified for federal preservation tax credits, and obtaining files on projects that had received public funding.

In all instances, the information obtained approached the detail of a bid sheet. Based on these sources, Rutgers received information on almost 60 historic properties requiring just shy of $100 million in recent rehabilitation. The detailed cost estimates for these projects were summed by property type—residential and nonresidential. Using information from the detailed cost estimates as well as the prior experience of the Regional Science Research Corporation in similar studies (University of Rhode Island 1993), the cost estimates by property type were converted into purchases of goods and services, including labor, by industry. This lengthy, sometimes subjective, conversion process enabled the specification required to get accurate results by industry from the preservation economic impact model. The result is an "economic recipe" of the direct requirements for historic rehabilitation by property type.

Estimating Total Economic Impacts

Total economic impacts encompass both *direct* and *multiplier* effects. The latter incorporate *indirect* and *induced* impacts. The character of the direct impacts of historic preservation is derived from the recipes noted above. The process for estimating a given project's indirect and induced economic impacts is more

roundabout. By definition, a project's first round of indirect impact includes the purchases of any supplies and/or services that are required to produce the direct effects. Subsequent purchases of supplies and services generate other rounds of indirect impacts. The induced impacts are the purchases that arise, in turn, from the increase in aggregate labor income of households. Aggregate labor income is defined as the sum of wages, salaries, and proprietors' income earned by workers. Both the indirect and induced economic impacts demonstrate how the demand for direct requirements reverberates through an economy.

Exhibit 2.22 details the economic impacts of the rehabilitation of historic properties. The *direct impact* component consists of purchases made specifically for the construction project. Direct impacts on the local economy are composed only of purchases from local organizations.

The *indirect impact* component consists of spending on goods and services by industries that produce the items purchased by the contractors who are preserving the property. Among his many business relationships, for example, a contractor might purchase windows from "Jerry's Home Improvement Inc." (JHI), which makes custom windows. In order to produce windows, JHI must hire craftsmen as well as contract with firms that supply glass, adhesives, paints and coatings, glazing, and wood products. JHI also hopes to make a profit for its owners or shareholders. In order to meet JHI's needs, its suppliers must also hire workers and obtain materials and specialized services. The same process is repeated for their suppliers, and so on. Thus, an extensive network of relationships is established based upon round after round after round of business transactions that emanate from a single preservation project. It is this network of transactions that describes the set of indirect impacts. Of course, a firm's net indirect contribution to the preservation activity largely depends on (1) the total value of its transactions in the network and (2) the proximity of its business relationship(s) to the preservation contractor within the project's business network. Similar to direct impacts, local indirect impacts are composed only of indirect business transactions that occur in the local economy.

Finally, *induced impacts* are a measure of household spending. They are a tally of the expenses made by the households of the construction workers on a preservation project, as well as the households of employees of the supplying industries.

EXHIBIT 2.22
Examples of Direct and Multiplier Effects
(Indirect and Induced Impacts) of Historic Preservation

MULTIPLIER EFFECTS		
DIRECT IMPACTS	**INDIRECT IMPACTS**	**INDUCED IMPACTS**
Purchases for: • Architectural design • Site preparation • Construction labor • Building materials • Machinery & tools • Finance & insurance • Inspection fees	Purchases of: • Lumber & wood products • Machine components • Stone, clay, glass, & gravel • Fabricated metals • Paper products • Retail & wholesale services • Trucking & warehousing	Household spending on: • Food, clothing, day care • Retail services, public transit, utilities, car(s), oil & gasoline, property & income taxes, medical services, and insurance

One means of estimating indirect and induced impacts would be to conduct a survey of the business transactions of the primary contractor. The business questionnaire for this survey would ask for the names and addresses of the contractor's suppliers; what and how much they supply; the names and addresses of the contractor's employees; and the annual payroll.

A related questionnaire would cover household spending of the employees of the surveyed firms. It would request a characterization of each employee's household budget by detailed line items, including names and addresses of the firms from which each line item is purchased.

Both questionnaires subsequently could be used to measure indirect and induced impacts of the primary contractor's activity. The business questionnaire would be sent to the business addresses identified by the primary contractor; the household questionnaire, in turn, would be sent to the homes of the employees of those businesses that responded to the survey. This "snowball-type" sampling would continue until time or money was exhausted. In order to keep each organization's or household's contribution to the project in proper perspective, its total spending would be weighted by the size of its transaction with its customers who were included in the survey activity. The sum of the weighted transaction values obtained through the surveys would be the total economic impact of the project.

This survey-based approach to estimating indirect and induced impacts consumes a great deal of money and time, however. In addition, response rates by firms and households on surveys regarding financial matters are notoriously low. Hence, in the rare cases where survey work has been conducted to measure economic impacts, the results have tended to be not statistically representative of the targeted network of organizations and households. Hence, relatively less expensive economic models based on Census data are often used to measure economic impacts.

The economic model that has proven to estimate the indirect and induced economic effects of events most accurately is the input-output model. Its advantage stems from its level of industry detail and its depiction of inter-industry relations. As shown in Appendix A, a single calculation—known as the Leontief inverse—simulates the many rounds of business and household surveys. Input-output tables are constructed from nationwide Census surveys of businesses and households. The most difficult part of regional impact analysis is modifying a national input-output model so that it can be used to estimate impacts at a subnational level. Regionalization of the model typically is undertaken by the model producer and requires a large volume of data on the economy being modeled. This study employs regional input-output models to estimate the extent of the indirect and induced economic effects of a direct investment in historic preservation activities. The economic effects of historic rehabilitation are studied in this chapter; the effects of heritage tourism and historic museums are studied in later chapters.

THE PRESERVATION ECONOMIC IMPACT MODEL

The regional input-output model used by this study to derive the total economic impacts is a regionalized version of the Preservation Economic Impact Model produced by Rutgers for the National Park Service. The PEI model (PEIM) 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. (See Appendix A for more details on the relative higher quality of the PEIM.)

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 full-time; 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 such levies where present as 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). (Note: South Dakota does not have a personal income tax.)

  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.

TOTAL ANNUAL IMPACTS OF SOUTH DAKOTA HISTORIC REHABILITATION ($23 MILLION)

This chapter previously estimated that $22.6 million in historic rehabilitation is effected annually as of 2007-2011 in South Dakota. Of this, $5.2 million is in residential historic properties (single- and multi-family) and $17.4 million in nonresidential historic properties. What is the total economic benefit nationally of this activity? What share of these benefits accrues to South Dakota?

To answer these questions, the study team applied the direct requirements of $22.6 million in historic rehabilitation construction activity to economic models of South Dakota and the whole of the United States. This yielded total economic impacts for the country as a whole (national effects) and for the state of South Dakota (in-state effects). For both the nation and state, the significant economic indicators were jobs created, resident income generated, resident wealth generated (gross domestic or state product), and taxes generated by level of government.

Besides the above five measures, Rutgers estimated an additional gauge of activity termed *in-state wealth.* This measure consists of in-state generation of value added (or gross state product), less the amount that "leaks" out of the state's economy in the form of taxes paid to the federal government. Since taxes paid to the state and local governments remain in state, they cannot be said to "leak" and, thus, are considered part of the accumulated in-state wealth. PEIM expresses resulting jobs, income, and wealth impacts in various levels of industry detail. The most convenient application breaks the industry-level results at the one-digit standard industrial code (SIC) or division level. This level has eleven industry divisions:

1. Agriculture
2. Agricultural, Fishing, and Forestry Services
3. Mining
4. Construction
5. Manufacturing
6. Transportation, Communications, and Public Utilities (TCPU)
7. Wholesale Trade
8. Retail Trade
9. Finance, Insurance, and Real Estate (FIRE)
10. Services
11. Government

PEIM provides results in two other industry breakdowns that detail subcategories under each of these eleven groups. These breakdowns use the two-digit SIC (86-industry) specification and the full industry specification of the input-output model (about 517 industries). The model results, however, are only as good as the data that go into them. Thus, when the direct requirements are estimated, and the industry-level purchases are also estimated (as is the case in this study), care should be taken in interpreting model results, especially when they contain extreme categorical detail. Hence, the main body of this report focuses on the one-digit SIC level results, but data on the two-digit SIC results are made available as Exhibits. The purpose of providing such detail is to enable a better idea of the quality of jobs that are likely to be created and of the types of industries that are most likely to be affected by historic rehabilitation activities. The total economic impacts of the $22.6 million in historic rehabilitation spending are summarized below in Exhibit 2.23 and detailed in Exhibits 2.25 through 2.30:

EXHIBIT 2.23
Total Economic Impacts of Annual South Dakota
Historic Building Rehabilitation ($22.6 million, Annual Average 2007-2011)

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	330	123	453
Income ($millions)	10.9	4.9	15.8
Output ($millions)	23.5	18.4	41.9
GDP/GSP ($millions)	13.6	7.1	20.7
Total taxes ($millions)	3.9	.7	4.6
Federal ($millions)	*3.2*	*0.2*	*3.4*
State/Local ($millions)	*0.7*	*0.5*	*1.2*
In-State wealth ($millions)	10.4	---	---

Nationwide Impacts

Exhibit 2.23 (and Exhibit 2.25 in greater detail) shows the national level impacts of the historic rehabilitation in South Dakota. The national total economic effects (direct and indirect, the latter encompassing indirect and induced effects) are 453 jobs, $41.9 million output, $15.8 million income, and $20.7 million GSP. The construction, manufacturing, services, retail trade, and finance, insurance, & real estate industries exhibit the largest employment, income, and GDP and other gains. Direct effects account for most of the gains, though indirect and induced effects additionally contribute 58 to 85 percent as much as these direct effects to the national output (85 percent), employment (66 percent), income (58 percent), and GDP totals (75 percent). The Federal tax rolls are augmented by $3.4 million every year as a result of rehabilitation-related activities. Construction exhibits the largest gains with 180 additional jobs, $5.9 million in household income, and $7.5 million in GDP.

Employment attributions by *industry type*, at the national level, demonstrate the range across which benefits accrue (Exhibit 2.26). The construction industry is the largest employer with general building contractors adding 129 jobs. Heavy construction contractors constitute the second largest change with 34 jobs. Other industries adding substantial numbers of jobs are engineering and management services (27), eating & drinking places (21), fabricated metal producers (19), and special trade contractors (18).

We also can quantify the national-level impacts from the $23 million in annual South Dakota rehabilitation investment by *occupation* (Exhibit 2.27). The major occupations nationally associated with the $23 million expenditure are precision production, craft, and repair; and operators, fabricators, and laborers – not surprisingly, occupations associated with construction.

State-Level Impacts

At the state level, the $22.6 million historic rehabilitation expenditure yields 330 jobs, $23.5 million in output, $10.9 million in income, and $13.6 million in GSP (Exhibit 2.23 and Exhibit 2.28 in greater detail). Direct effects from the South Dakota historic rehabilitation predominate with respect to the state-level jobs (235), output ($16.3 million), income ($8.4 million), and GSP ($9.8 million). Indirect and induced effects add to these tallies in state-level jobs (95), output ($7.2 million), income ($2.5 million), and GSP ($3.8 million). The multiplier from the direct historic rehabilitation investment to total economic effects in South Dakota—derived by dividing total effects by direct effects—are therefore 1.40 with respect to jobs (330 jobs/235 jobs), 1.44 concerning output ($23.5 million/$16.3 million), 1.30 concerning income ($10.9 million/$8.4 million) and 1.39 concerning GSP ($13.6 million/$9.8 million).

Impacts of rehabilitation manifest most acutely in construction, services, manufacturing, retail trade, and finance, insurance, & real estate, as displayed in Exhibit 2.28 below. The bulk of output, employment, income, and GSP accrue to construction, though in slightly varied proportions. The majority of impacts result from direct effects yielding a multiplier ranging from 1.3 to 1.44. State tax rolls grow by $0.25 million dollars, and local tax rolls by $0.47 million dollars.

Specific in-state job attributions by industry type, at the state level, found in Exhibit 2.29, demonstrate the similar range across which benefits accrue at the national level. The construction industry is the largest resulting employer with general building contractors adding 128 jobs (39 percent). Heavy construction contractors represent the second largest change with 33 jobs (10 percent). Other industries adding substantial numbers of jobs are engineering and management services (23), special trade contractors (17), and eating & drinking places (15).

The distribution of nationwide impacts across industries is similar to that for South Dakota. As might be expected, however, the state experiences more of an impact in such industries as construction, retail trade,

and real estate. Some consumer-oriented goods-producing industries loom larger in the national mix of affected sectors. In particular, historic rehabilitation activities contribute relatively more to GDP in such industries as food and kindred products, printing and publishing, and transportation equipment (automobile) manufacturing than they do to GSP. The contribution to GDP is also relatively larger for air transportation services; electricity, gas, and sanitary services; non–real estate finance industries; and business services. Of these, only the business services sector is a producer-oriented industry. The influence on this industry is difficult to interpret, however, since it typically is largely composed of temporary help services, which are ultimately used by all other industries in the economy.

What about the in-state occupational impact of the $23 million annual rehabilitation investment? As is evident from Exhibit 2.30, the in-state occupations most benefiting are precision production, craft and repair; and operators, fabricators and laborers—both construction-activity-related and similar to the occupational impact observed earlier for the national impact of the $23 million annual historic rehabilitation spending in South Dakota.

TOTAL CUMULATIVE IMPACTS OF SOUTH DAKOTA HISTORIC REHABILITATION ($330 MILLION)

This chapter earlier estimated a cumulative 1982 through 2011 historic rehabilitation investment in South Dakota funded by major federal and state/local subsidies at $330 million in inflation-adjusted 2011 dollars. To quantify the economic impacts of this cumulative investment, we enter the $330 million spending into the Rutgers-crafted PEIM, with the results shown below and described in this section.

EXHIBIT 2.24
Cumulative Economic Impact of South Dakota Historic Rehabilitation ($330 million), 1982-2011

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	4,810	1,790	6,600
Income ($millions)	159.3	71.5	230.7
Output ($millions)	343.2	267.1	610.3
GDP/GSP ($millions)	198.4	103.4	301.8
Total taxes ($millions)	56.9	9.8	66.7
Federal ($millions)	*46.5*	*3.2*	*49.7*
State/Local ($millions)	*10.4*	*6.6*	*17.0*
In-State wealth ($millions)	151.9	---	---

Nationwide Impacts

Exhibit 2.24 (and Exhibit 2.31 in greater detail) illustrates the national level impacts of the cumulative historic rehabilitation in South Dakota. The national total economic effects (direct and indirect, the latter encompassing indirect and induced effects) are 6,600 jobs, $610.3 million in output, $230.7 million in income, and $301.8 in million GSP. The construction, manufacturing, and services industries exhibit the largest employment, income, and GDP and other gains. The Federal tax rolls are augmented by $49.7 million every year as a result of rehabilitation-related activities.

Employment attributions by industry type, at the national level, demonstrate the range across which benefits accrue. The construction industry is the largest employer with general building contractors adding 1,908 jobs. Within the construction industry significant sectors securing employment benefits include general building contractors (1,908 jobs) and heavy construction contractors (453 jobs) (see Exhibit 2.32 for details).

We also can quantify the national-level impacts from the $330 million in annual South Dakota rehabilitation investment by *occupation* (Exhibit 2.33). The major occupations nationally associated with the $330 million expenditure are precision production, craft, and repair; and operators, fabricators, and laborers—not surprisingly, occupations associated with construction.

State-Level Impacts

At the state level, the $330 million historic rehabilitation expenditure yields 4,810 jobs, $343.2 million in output, $159.3 million in income, and $198.4 million in GSP (Exhibit 2.24 and Exhibit 2.34 for greater detail). Direct effects from the South Dakota historic rehabilitation predominate with respect to the state-level jobs (3,432), output ($238.0 million), income ($122.4 million), and GSP ($143.0 million). Indirect and induced effects add to these tallies in state-level jobs (1,378), output ($105.2 million), income ($36.9 million), and GSP ($55.4 million). The multiplier from the direct historic rehabilitation investment to total economic effects in South Dakota—derived by dividing total effects by direct effects—are therefore 1.402 with respect to jobs (4,810 jobs/3,432 jobs), 1.442 concerning output ($343.2 million/$238.0 million), 1.302 concerning income ($159.3 million/$122.4 million) and 1.387 concerning GSP ($198.4 million/$143.0 million).

Impacts of rehabilitation are most noticeable in construction, manufacturing and services (Exhibit 2.34). The bulk of output, employment, income, and GSP accrue to construction, though in slightly varied proportions. The majority of impacts result from direct effects yielding a multiplier ranging from 1.3 to 1.44. State tax rolls grow by $3.6 million dollars, and local tax rolls by $6.8 million dollars.

At the industry level (Exhibit 2.35), the construction industry is by far the largest employer with general building contractors adding 1,893 jobs (39 percent). Heavy construction contractors represent the second largest change with 448 jobs (9 percent). Other industries adding substantial numbers of jobs are engineering and management services (341), special trade contractors (254), and eating & drinking places (217).

What about the in-state occupational impact of the $330 million annual rehabilitation investment? As is evident from Exhibit 2.36, the in-state occupations most benefiting are precision production, craft and repair; and operators, fabricators and laborers—both construction-activity-related and similar to the occupational impact observed earlier for the national impact of the $330 million annual historic rehabilitation spending in South Dakota.

EXHIBIT 2.25
Total National Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	291.7	1	21.5	29.3
2. Agri. Serv., Forestry, & Fish	240.3	2	86.1	216.2
3. Mining	798.2	5	223.1	478.6
4. Construction	10,017.9	180	5,897.5	7,538.1
5. Manufacturing	15,392.7	86	3,663.2	4,741.8
6. Transport. & Public Utilities	2,212.3	16	575.3	1,097.1
7. Wholesale	1,781.8	17	724.6	880.0
8. Retail Trade	2,057.9	47	757.2	1,339.9
9. Finance, Ins., & Real Estate	2,838.2	20	1,057.0	1,839.9
10. Services	6,131.0	78	2,788.7	2,463.2
11. Government	178.5	2	54.1	84.9
Total Effects (Private and Public)	41,940.5	453	15,848.3	20,708.9
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	22,642.6	273	10,054.6	11,842.0
2. Indirect and Induced Effects	19,297.9	181	5,793.7	8,866.9
3. Total Effects	41,940.5	453	15,848.3	20,708.9
4. Multipliers (3/1)	1.852	1.663	1.576	1.749
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				13,439.4
2. Taxes				2,575.0
a. Local				470.1
b. State				429.9
c. Federal				1,675.1
General				470.5
Social Security				1,204.6
3. Profits, dividends, rents, and other				4,694.5
4. Total Gross State Product (1+2+3)				20,708.9
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		13,439.4	11,235.3	
2. Taxes		2,575.0	1,997.5	4,572.6
a. Local		470.1	265.9	736.0
b. State		429.9	0.0	429.9
c. Federal		1,675.1	1,731.7	3,406.7
General		470.5	1,731.7	2,202.1
Social Security		1,204.6	0.0	1,204.6
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				20.0
Income				699,923
State/Local Taxes				51,488
Gross State Product				914,586
INITIAL EXPENDITURE IN DOLLARS				22,642,953

EXHIBIT 2.26: National Industrial Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

SECTOR/INDUSTRY	Output	Employment	Income	Gross State Prod.
Agriculture	**291.7**	**1**	**21.5**	**29.3**
Dairy Farm Products	52.0	0	3.1	2.6
Eggs	0.2	0	0.0	0.0
Meat Animals	95.5	0	4.3	5.0
Misc. Livestock	2.4	0	0.2	0.2
Wool	0.8	0	0.1	0.1
Cotton	29.8	0	2.9	4.1
Tobacco	0.4	0	0.0	0.1
Grains & Misc. Crops	10.8	0	0.3	1.7
Feed Crops	31.7	0	0.7	4.6
Fruits & Nuts	40.9	0	6.9	5.7
Vegetables	2.4	0	0.3	0.4
Greenhouse/Nursery Products	11.7	0	2.2	2.8
Sugar Beets & Cane	2.9	0	0.1	0.6
Flaxseed, Peanuts, Soybean	10.3	0	0.5	1.5
Agri. Serv., Forestry, & Fish	**240.3**	**2**	**86.1**	**216.2**
Agri. Services (07)	145.2	2	77.4	130.7
Forestry (08)	93.7	0	8.3	84.3
Fishing, Hunting, Trapping (09)	1.4	0	0.4	1.3
Mining	**798.2**	**5**	**223.1**	**478.6**
Coal Mining (12)	35.9	0	11.2	32.3
Oil & Gas Extraction (13)	238.4	0	32.0	93.3
Nonmetal Min.-Ex. Fuels (14)	513.4	4	177.3	345.4
Metal Mining (10)	10.5	0	2.7	7.6
Construction	**10,017.9**	**180**	**5,897.5**	**7,538.1**
General Bldg. Contractors (15)	7,187.0	129	4,118.3	5,314.4
Heavy Const. Contractors (16)	1,763.4	34	1,187.1	1,459.2
Special Trade Contractors (17)	1,067.5	18	592.1	764.5
Manufacturing	**15,392.7**	**86**	**3,663.2**	**4,741.8**
Food & Kindred Prod. (20)	694.6	2	93.5	170.6
Tobacco Manufactures (21)	42.7	0	4.0	29.1
Textile Mill Prod. (22)	1,104.3	6	192.9	9.4
Apparel & Other Prod. (23)	233.8	2	66.7	70.5
Limber & Wood Prod. (24)	2,209.6	14	506.4	638.7
Furniture & Fixtures (25)	94.7	1	29.3	52.7
Paper & Allied Prod. (26)	215.8	1	47.8	84.1
Chemicals & Allied Prod. (28)	1,578.6	5	320.1	473.3
Petroleum & Coal Prod. (29)	1,399.5	4	221.2	316.4
Rubber & Misc. Plastics (30)	891.1	6	242.7	308.3
Leather & Leather Prod. (31)	42.5	0	11.3	17.9
Stone, Clay, & Glass (32)	1,805.4	12	558.3	756.3
Primary Metal Prod. (33)	565.1	2	118.7	165.5
Fabricated Metal Prod. (34)	2,303.4	19	692.0	724.7
Machinery, Except Elec. (35)	498.9	4	161.6	172.6
Electric & Elec. Equip. (36)	716.8	3	172.3	309.9
Transportation Equipment (37)	485.0	2	74.6	212.7
Instruments & Rel. Prod. (38)	115.8	1	35.3	69.4
Misc. Manufacturing Inds. (39)	168.8	1	43.7	66.5
Printing & Publishing (27)	226.2	2	70.9	93.2

EXHIBIT 2.26: National Industrial Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

Transport. & Public Utilities	**2,212.3**	**16**	**575.3**	**1,097.1**
Railroad Transportation (40)	128.7	1	53.4	100.8
Local Pass. Transit (41)	53.4	1	23.1	28.5
Trucking & Warehousing (42)	620.1	8	252.5	320.2
Water Transportation (44)	86.0	1	23.6	22.5
Transportation by Air (45)	88.5	1	30.8	46.0
Pipe Lines-Ex. Nat. Gas (46)	11.9	0	1.3	4.1
Transportation Services (47)	36.8	0	13.7	22.9
Communication (48)	437.9	2	89.6	207.3
Elec., Gas, & Sanitary Serv. (49)	748.9	1	87.4	344.8
Wholesale	**1,781.8**	**17**	**724.6**	**880.0**
Wholesale-Nondurable Goods (51)	694.5	7	282.4	343.0
Wholesale-Durable Goods (50)	1,087.3	9	442.1	537.0
Retail Trade	**2,057.9**	**47**	**757.2**	**1,339.9**
Bldg. Mat.-Garden Supply (52)	120.7	2	52.4	86.7
General Merch. Stores (53)	240.9	5	86.9	173.0
Food Stores (54)	205.9	5	80.3	147.9
Auto. Dealers-Serv. Stat. (55)	336.7	4	89.0	241.8
Apparel & Access. Stores (56)	111.5	4	52.4	80.1
Furniture & Home Furnish. (57)	56.3	1	26.3	40.4
Eating & Drinking Places (58)	688.1	21	233.9	356.2
Miscellaneous Retail (59)	297.8	6	136.1	213.8
Finance, Ins., & Real Estate	**2,838.2**	**20**	**1,057.0**	**1,839.9**
Banking (60)	361.7	2	95.5	281.6
Nondep. Credit Institutions (61)	667.6	8	349.7	438.7
Security, Comm. Brokers (62)	98.2	1	48.2	59.7
Insurance Carriers (63)	584.2	5	235.1	385.5
Ins. Agents, Brokers (64)	162.7	2	62.7	71.2
Real Estate (65)	561.1	2	54.9	455.7
Holding and Invest. Off. (67)	402.8	1	211.0	147.5
Services	**6,131.0**	**78**	**2,788.7**	**2,463.2**
Hotels & Other Lodging (70)	154.7	4	50.8	86.5
Personal Services (72)	221.2	4	78.9	88.7
Business Services (73)	802.8	13	314.3	335.8
Auto Repair, Serv., Garages (75)	213.5	2	56.6	85.4
Misc. Repair Services (76)	143.4	1	55.1	44.3
Motion Pictures (78)	125.8	1	33.1	37.5
Amusement & Recreation (79)	89.1	3	34.2	78.1
Health Services (80)	220.2	3	119.7	123.0
Legal Services (81)	708.6	8	327.7	359.0
Educational Services (82)	96.3	2	49.2	41.3
Social Services (83)	54.1	1	26.6	29.5
Museums & Gardens (84, 86)	229.3	5	119.8	204.8
Engineer. & Manage. Serv. (87)	2,875.4	27	1,440.5	890.0
Private Households (88)	3.1	0	3.1	3.1
Miscellaneous Services (89)	193.6	2	79.0	56.1
Government	**178.5**	**2**	**54.1**	**84.9**
Total	**41,940.5**	**453**	**15,848.3**	**20,708.9**

EXHIBIT 2.27: National Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

TOTAL NUMBER OF JOBS	**453**
Executive, administrative, and managerial occupations	**54**
Managerial and administrative occupations	39
Management support occupations	14
Professional specialty occupations	**27**
Engineers	9
Architects and surveyors	3
Life scientists	0
Computer, mathematical, and operations research occupations	3
Physical scientists	1
Religious workers	0
Social scientists	0
Social and recreation workers	0
Lawyers and judicial workers	3
Teachers, librarians, and counselors	2
Health diagnosing occupations	0
Health assessment and treating occupations	1
Writers, artists, and entertainers	3
All other professional workers	1
Technicians and related support occupations	**13**
Health technicians and technologists	2
Engineering and science technicians and technologists	9
Technicians, except health and engineering and science	3
Marketing and sales occupations	**31**
Cashiers	6
Counter and rental clerks	1
Insurance sales agents	1
Marketing and sales worker supervisors	4
Models, demonstrators, and product promoters	0
Parts salespersons	1
Real estate agents and brokers	2
Retail salespersons	8
Sales engineers	0
Securities, commodities, and financial services sales agents	0
Travel agents	0
All other sales and related workers	8
Administrative support occupations, including clerical	**65**
Adjusters, investigators, and collectors	3
Communications equipment operators	0
Computer operators	0
Information clerks	4
Mail clerks and messengers	1
Postal clerks and mail carriers	1
Material recording, scheduling, dispatching, and distributing occupations	10
Records processing occupations	12
Secretaries, stenographers, and typists	13
Other clerical and administrative support workers	20

EXHIBIT 2.27: National Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

Service occupations	**30**
Cleaning and building service occupations, except private household	5
Food preparation and service occupations	20
Health service occupations	1
Personal service occupations	1
Private household workers	0
Protective service occupations	2
All other protective service workers	0
Agriculture, forestry, fishing, and related occupations	**9**
Farm operators and managers	0
Farm workers	1
Fishers and fishing vessel operators	0
Forestry, conservation, and logging occupations	1
Landscaping, grounds-keeping, nursery, greenhouse, and lawn service occupations	6
Supervisors, farming, forestry, and agricultural related occupations	0
Veterinary assistants and nonfarm animal caretakers	0
All other agricultural, forestry, fishing, and related workers	1
Precision production, craft, and repair occupations	**120**
Blue-collar worker supervisors	18
Construction trades	70
Extractive and related workers, including blasters	1
Mechanics, installers, and repairers	16
Machinery mechanics, installers, and repairers	7
Vehicle and mobile equipment mechanics and repairers	3
Other mechanics, installers, and repairers	5
Production occupations, precision	**10**
Assemblers, precision	1
Food workers, precision	0
Inspectors, testers, and graders, precision	2
Metal workers, precision	2
Printing workers, precision	0
Textile, apparel, and furnishings workers, precision	1
Woodworkers, precision	2
Other precision workers	1
Plant and system occupations	**0**
Chemical plant and system operators	0
Electric power generating plant operators, distributors, and dispatchers	0
Gas and petroleum plant and system occupations	0
Stationary engineers	0
Water and liquid waste treatment plant and system operators	0
Operators, fabricators, and laborers	**94**
Machine setters, set-up operators, operators, and tenders	22
Hand workers, including assemblers and fabricators	13
Transportation and material moving machine and vehicle operators	18
Helpers, laborers, and material movers, hand	40

EXHIBIT 2.28
Total In-State Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	14.5	0	1.5	2.5
2. Agri. Serv., Forestry, & Fish	140.5	2	69.4	126.4
3. Mining	139.1	1	48.2	92.6
4. Construction	9,742.8	178	5,817.0	7,409.9
5. Manufacturing	4,313.3	30	1,177.2	1,400.7
6. Transport. & Public Utilities	1,002.9	7	251.6	501.1
7. Wholesale	761.4	7	309.6	376.0
8. Retail Trade	1,736.1	39	642.3	1,147.6
9. Finance, Ins., & Real Estate	1,212.9	11	510.0	809.6
10. Services	4,428.5	54	2,091.8	1,720.9
11. Government	22.4	0	7.1	12.1
Total Effects (Private and Public)	23,514.2	330	10,925.8	13,599.6
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	16,296.1	235	8,393.5	9,799.5
2. Indirect and Induced Effects	7,218.1	95	2,532.3	3,800.1
3. Total Effects	23,514.2	330	10,925.8	13,599.6
4. Multipliers (3/1)	1.443	1.402	1.302	1.388
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				9,103.1
2. Taxes				1,961.6
a. Local				210.0
b. State				246.1
c. Federal				1,505.4
General				334.0
Social Security				1,171.4
3. Profits, dividends, rents, and other				2,535.0
4. Total Gross State Product (1+2+3)				13,599.6
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		9,103.1	10,925.8	
2. Taxes		1,961.6	1,942.5	3,904.1
a. Local		210.0	258.5	468.5
b. State		246.1	0.0	246.1
c. Federal		1,505.4	1,684.0	3,189.4
General		334.0	1,684.0	2,018.0
Social Security		1,171.4	0.0	1,171.4
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				14.6
Income				482,524
State/Local Taxes				31,563
Gross State Product				600,611
INITIAL EXPENDITURE IN DOLLARS				22,642,953

EXHIBIT 2.29: In-State Industrial Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

SECTOR/INDUSTRY	Output	Employment	Income	Gross State Prod.
Agriculture	**14.5**	**0**	**1.5**	**2.5**
Dairy Farm Products	0.0	0	0.0	0.0
Eggs	0.0	0	0.0	0.0
Meat Animals	2.4	0	0.1	0.1
Misc. Livestock	0.1	0	0.0	0.0
Wool	0.0	0	0.0	0.0
Cotton	0.0	0	0.0	0.0
Tobacco	0.0	0	0.0	0.0
Grains & Misc. Crops	2.6	0	0.1	0.4
Feed Crops	2.0	0	0.0	0.3
Fruits & Nuts	0.0	0	0.0	0.0
Vegetables	0.1	0	0.0	0.0
Greenhouse/Nursery Products	6.8	0	1.3	1.6
Sugar Beets & Cane	0.0	0	0.0	0.0
Flaxseed, Peanuts, Soybean	0.6	0	0.0	0.1
Agri. Serv., Forestry, & Fish	**140.5**	**2**	**69.4**	**126.4**
Agri. Services (07)	127.1	2	68.2	114.4
Forestry (08)	13.0	0	1.2	11.7
Fishing, Hunting, Trapping (09)	0.3	0	0.1	0.3
Mining	**139.1**	**1**	**48.2**	**92.6**
Coal Mining (12)	0.1	0	0.0	0.1
Oil & Gas Extraction (13)	5.3	0	0.7	2.1
Nonmetal Min.-Ex. Fuels (14)	133.5	1	47.4	90.4
Metal Mining (10)	0.2	0	0.1	0.1
Construction	**9,742.8**	**178**	**5,817.0**	**7,409.9**
General Bldg. Contractors (15)	7,111.7	128	4,084.5	5,267.2
Heavy Const. Contractors (16)	1,738.2	33	1,175.2	1,443.7
Special Trade Contractors (17)	892.9	17	557.3	699.0
Manufacturing	**4,313.3**	**30**	**1,177.2**	**1,400.7**
Food & Kindred Prod. (20)	214.9	1	28.7	42.5
Tobacco Manufactures (21)	0.0	0	0.0	0.0
Textile Mill Prod. (22)	7.4	0	1.6	0.1
Apparel & Other Prod. (23)	16.6	0	4.6	5.2
Limber & Wood Prod. (24)	1,099.1	7	263.3	311.5
Furniture & Fixtures (25)	24.1	0	8.5	14.5
Paper & Allied Prod. (26)	5.7	0	1.6	2.2
Chemicals & Allied Prod. (28)	9.3	0	3.2	3.3
Petroleum & Coal Prod. (29)	0.0	0	0.0	0.0
Rubber & Misc. Plastics (30)	55.4	0	16.0	19.6
Leather & Leather Prod. (31)	0.7	0	0.2	0.3
Stone, Clay, & Glass (32)	805.5	6	245.3	325.9
Primary Metal Prod. (33)	65.0	0	10.4	17.0
Fabricated Metal Prod. (34)	1,600.3	13	469.4	499.2
Machinery, Except Elec. (35)	260.5	2	81.4	90.1
Electric & Elec. Equip. (36)	30.6	0	9.6	15.2
Transportation Equipment (37)	21.0	0	3.9	9.6
Instruments & Rel. Prod. (38)	23.2	0	5.8	14.5
Misc. Manufacturing Inds. (39)	25.2	0	7.7	9.5
Printing & Publishing (27)	48.7	1	16.2	20.7

EXHIBIT 2.29: In-State Industrial Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

Transport. & Public Utilities	**1,002.9**	**7**	**251.6**	**501.1**
Railroad Transportation (40)	34.4	0	14.3	27.0
Local Pass. Transit (41)	34.9	1	15.1	18.6
Trucking & Warehousing (42)	232.7	3	105.7	125.3
Water Transportation (44)	1.3	0	0.5	0.4
Transportation by Air (45)	37.2	0	12.9	19.4
Pipe Lines-Ex. Nat. Gas (46)	1.2	0	0.1	0.4
Transportation Services (47)	6.4	0	2.4	4.4
Communication (48)	263.6	1	52.5	124.8
Elec., Gas, & Sanitary Serv. (49)	391.2	1	48.1	180.9
Wholesale	**761.4**	**7**	**309.6**	**376.0**
Wholesale-Nondurable Goods (51)	418.5	4	170.2	206.7
Wholesale-Durable Goods (50)	342.8	3	139.4	169.3
Retail Trade	**1,736.1**	**39**	**642.3**	**1,147.6**
Bldg. Mat.-Garden Supply (52)	110.1	2	47.8	79.1
General Merch. Stores (53)	219.8	4	79.2	157.8
Food Stores (54)	187.2	5	73.0	134.4
Auto. Dealers-Serv. Stat. (55)	304.4	3	80.4	218.6
Apparel & Access. Stores (56)	97.6	3	45.9	70.1
Furniture & Home Furnish. (57)	50.8	1	23.7	36.5
Eating & Drinking Places (58)	494.3	15	168.0	255.9
Miscellaneous Retail (59)	271.8	6	124.2	195.2
Finance, Ins., & Real Estate	**1,212.9**	**11**	**510.0**	**809.6**
Banking (60)	239.3	1	63.2	186.3
Nondep. Credit Institutions (61)	596.0	7	312.2	391.6
Security, Comm. Brokers (62)	42.4	0	20.8	25.8
Insurance Carriers (63)	159.0	1	64.0	104.9
Ins. Agents, Brokers (64)	109.0	1	42.0	47.7
Real Estate (65)	64.2	0	6.3	52.2
Holding and Invest. Off. (67)	3.0	0	1.6	1.1
Services	**4,428.5**	**54**	**2,091.8**	**1,720.9**
Hotels & Other Lodging (70)	35.7	1	12.2	20.6
Personal Services (72)	142.1	3	49.8	55.7
Business Services (73)	396.9	7	153.3	166.3
Auto Repair, Serv., Garages (75)	105.6	1	29.8	42.8
Misc. Repair Services (76)	28.1	0	10.9	8.6
Motion Pictures (78)	38.0	1	9.1	12.3
Amusement & Recreation (79)	42.9	2	17.9	36.6
Health Services (80)	199.8	3	109.0	111.9
Legal Services (81)	598.8	7	277.0	303.4
Educational Services (82)	77.9	2	40.6	33.4
Social Services (83)	46.2	1	22.3	25.1
Museums & Gardens (84, 86)	109.5	2	56.5	97.3
Engineer. & Manage. Serv. (87)	2,507.4	23	1,261.1	776.0
Private Households (88)	2.9	0	2.9	2.9
Miscellaneous Services (89)	96.7	1	39.5	28.0
Government	**22.4**	**0**	**7.1**	**12.1**
Total	**23,514.2**	**330**	**10,925.8**	**13,599.6**

EXHIBIT 2.30: In-State Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

TOTAL NUMBER OF JOBS	**330**
Executive, administrative, and managerial occupations	**41**
Managerial and administrative occupations	31
Management support occupations	10
Professional specialty occupations	**20**
Engineers	7
Architects and surveyors	3
Life scientists	0
Computer, mathematical, and operations research occupations	2
Physical scientists	0
Religious workers	0
Social scientists	0
Social and recreation workers	0
Lawyers and judicial workers	2
Teachers, librarians, and counselors	2
Health diagnosing occupations	0
Health assessment and treating occupations	1
Writers, artists, and entertainers	2
All other professional workers	1
Technicians and related support occupations	**10**
Health technicians and technologists	1
Engineering and science technicians and technologists	7
Technicians, except health and engineering and science	2
Marketing and sales occupations	**22**
Cashiers	5
Counter and rental clerks	1
Insurance sales agents	0
Marketing and sales worker supervisors	3
Models, demonstrators, and product promoters	0
Parts salespersons	0
Real estate agents and brokers	2
Retail salespersons	6
Sales engineers	0
Securities, commodities, and financial services sales agents	0
Travel agents	0
All other sales and related workers	5
Administrative support occupations, including clerical	**45**
Adjusters, investigators, and collectors	2
Communications equipment operators	0
Computer operators	0
Information clerks	2
Mail clerks and messengers	0
Postal clerks and mail carriers	1
Material recording, scheduling, dispatching, and distributing occupations	6
Records processing occupations	9
Secretaries, stenographers, and typists	10
Other clerical and administrative support workers	14

EXHIBIT 2.30: In-State Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation ($22.6 million, Annual Average 2007-2011)

Service occupations	**20**
Cleaning and building service occupations, except private household	3
Food preparation and service occupations	14
Health service occupations	1
Personal service occupations	1
Private household workers	0
Protective service occupations	1
All other protective service workers	0
Agriculture, forestry, fishing, and related occupations	**7**
Farm operators and managers	0
Farm workers	0
Fishers and fishing vessel operators	0
Forestry, conservation, and logging occupations	0
Landscaping, grounds-keeping, nursery, greenhouse, and lawn service occupations	6
Supervisors, farming, forestry, and agricultural related occupations	0
Veterinary assistants and nonfarm animal caretakers	0
All other agricultural, forestry, fishing, and related workers	0
Precision production, craft, and repair occupations	**103**
Blue-collar worker supervisors	14
Construction trades	67
Extractive and related workers, including blasters	0
Mechanics, installers, and repairers	11
Machinery mechanics, installers, and repairers	4
Vehicle and mobile equipment mechanics and repairers	2
Other mechanics, installers, and repairers	4
Production occupations, precision	**5**
Assemblers, precision	0
Food workers, precision	0
Inspectors, testers, and graders, precision	1
Metal workers, precision	1
Printing workers, precision	0
Textile, apparel, and furnishings workers, precision	0
Woodworkers, precision	1
Other precision workers	0
Plant and system occupations	**0**
Chemical plant and system operators	0
Electric power generating plant operators, distributors, and dispatchers	0
Gas and petroleum plant and system occupations	0
Stationary engineers	0
Water and liquid waste treatment plant and system operators	0
Operators, fabricators, and laborers	**57**
Machine setters, set-up operators, operators, and tenders	7
Hand workers, including assemblers and fabricators	6
Transportation and material moving machine and vehicle operators	11
Helpers, laborers, and material movers, hand	33

EXHIBIT 2.31
Total National Economic & Tax Impacts of
Cumulative South Dakota Historic Preservation Activity:
Historic Rehabilitation ($330 million, 1982-2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	4,234.6	12	312.6	424.8
2. Agri. Serv., Forestry, & Fish	3,652.2	32	1,331.9	3,286.9
3. Mining	11,903.6	75	3,340.4	7,151.3
4. Construction	146,160.9	2,630	85,866.7	109,823.6
5. Manufacturing	223,094.2	1,241	53,113.1	68,893.5
6. Transport. & Public Utilities	32,267.6	229	8,396.7	16,012.3
7. Wholesale	26,029.4	242	10,584.9	12,855.5
8. Retail Trade	29,999.7	686	11,039.6	19,534.3
9. Finance, Ins., & Real Estate	41,321.8	296	15,395.4	26,782.6
10. Services	89,008.0	1,129	40,490.6	35,772.2
11. Government	2,595.2	29	787.1	1,233.8
Total Effects (Private and Public)	610,267.1	6,600	230,659.1	301,770.9
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	329,752.5	3,972	146,430.3	172,759.2
2. Indirect and Induced Effects	280,514.6	2,628	84,228.9	129,011.6
3. Total Effects	610,267.1	6,600	230,659.1	301,770.9
4. Multipliers (3/1)	1.851	1.662	1.575	1.747
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				195,938.2
2. Taxes				37,550.3
a. Local				6,858.9
b. State				6,270.2
c. Federal				24,421.1
General				6,864.4
Social Security				17,556.7
3. Profits, dividends, rents, and other				68,282.4
4. Total Gross State Product (1+2+3)				301,770.9
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		195,938.2	163,751.4	
2. Taxes		37,550.3	29,113.7	66,664.0
a. Local		6,858.9	3,874.9	10,733.8
b. State		6,270.2	0.0	6,270.2
c. Federal		24,421.1	25,238.9	49,660.0
General		6,864.4	25,238.9	32,103.2
Social Security		17,556.7	0.0	17,556.7
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				20.0
Income				699,480
State/Local Taxes				51,565
Gross State Product				915,128
INITIAL EXPENDITURE IN DOLLARS				329,758,168

EXHIBIT 2.32: National Industrial Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

SECTOR/INDUSTRY	Output	Employment	Income	Gross State Prod.
Agriculture	**4,234.6**	**12**	**312.6**	**424.8**
Dairy Farm Products	757.3	2	45.2	37.3
Eggs	2.9	0	0.1	0.2
Meat Animals	1,391.3	2	63.1	73.1
Misc. Livestock	35.1	0	3.0	3.3
Wool	10.9	0	0.9	1.0
Cotton	415.1	1	41.1	57.2
Tobacco	5.6	0	0.3	0.8
Grains & Misc. Crops	157.2	0	3.9	24.6
Feed Crops	462.2	0	10.0	67.0
Fruits & Nuts	596.3	4	100.1	82.8
Vegetables	34.5	0	3.6	5.3
Greenhouse/Nursery Products	173.6	1	32.3	41.3
Sugar Beets & Cane	41.9	0	1.0	8.4
Flaxseed, Peanuts, Soybean	150.6	0	7.9	22.5
Agri. Serv., Forestry, & Fish	**3,652.2**	**32**	**1,331.9**	**3,286.9**
Agri. Services (07)	2,258.7	28	1,205.0	2,032.8
Forestry (08)	1,373.0	4	121.6	1,235.7
Fishing, Hunting, Trapping (09)	20.5	0	5.4	18.5
Mining	**11,903.6**	**75**	**3,340.4**	**7,151.3**
Coal Mining (12)	523.6	2	162.7	471.2
Oil & Gas Extraction (13)	3,494.0	6	468.4	1,367.7
Nonmetal Min.-Ex. Fuels (14)	7,734.1	66	2,670.1	5,202.6
Metal Mining (10)	151.9	1	39.1	109.7
Construction	**146,160.9**	**2,630**	**85,866.7**	**109,823.6**
General Bldg. Contractors (15)	106,599.9	1,908	61,097.3	78,837.4
Heavy Const. Contractors (16)	23,811.7	453	16,002.0	19,676.8
Special Trade Contractors (17)	15,749.3	269	8,767.4	11,309.4
Manufacturing	**223,094.2**	**1,241**	**53,113.1**	**68,893.5**
Food & Kindred Prod. (20)	10,124.1	35	1,362.8	2,486.1
Tobacco Manufactures (21)	622.7	1	58.0	423.8
Textile Mill Prod. (22)	15,336.0	77	2,686.6	130.4
Apparel & Other Prod. (23)	3,382.1	28	964.1	1,018.6
Limber & Wood Prod. (24)	32,375.7	205	7,429.3	9,345.5
Furniture & Fixtures (25)	1,369.2	13	421.7	760.8
Paper & Allied Prod. (26)	3,129.5	12	693.2	1,219.9
Chemicals & Allied Prod. (28)	23,047.6	77	4,670.5	6,918.0
Petroleum & Coal Prod. (29)	20,332.9	52	3,203.1	4,593.1
Rubber & Misc. Plastics (30)	12,578.4	83	3,429.2	4,354.4
Leather & Leather Prod. (31)	619.4	5	164.2	260.2
Stone, Clay, & Glass (32)	26,233.5	180	8,122.0	10,970.6
Primary Metal Prod. (33)	8,249.5	28	1,732.9	2,416.6
Fabricated Metal Prod. (34)	33,521.4	270	10,065.4	10,539.2
Machinery, Except Elec. (35)	7,164.8	52	2,319.9	2,478.3
Electric & Elec. Equip. (36)	10,417.8	43	2,502.4	4,502.2
Transportation Equipment (37)	7,065.2	25	1,086.0	3,098.7
Instruments & Rel. Prod. (38)	1,718.0	9	523.2	1,030.0
Misc. Manufacturing Inds. (39)	2,513.8	13	646.7	990.3
Printing & Publishing (27)	3,292.5	33	1,032.1	1,356.7

EXHIBIT 2.32: National Industrial Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

Transport. & Public Utilities	**32,267.6**	**229**	**8,396.7**	**16,012.3**
Railroad Transportation (40)	1,919.3	18	795.8	1,504.2
Local Pass. Transit (41)	778.0	20	335.8	414.4
Trucking & Warehousing (42)	9,037.2	114	3,677.4	4,665.6
Water Transportation (44)	1,257.5	15	344.8	329.2
Transportation by Air (45)	1,285.9	15	447.5	668.7
Pipe Lines-Ex. Nat. Gas (46)	174.4	0	18.9	60.0
Transportation Services (47)	535.9	5	200.1	333.2
Communication (48)	6,374.8	23	1,303.5	3,017.3
Elec., Gas, & Sanitary Serv. (49)	10,904.5	19	1,272.9	5,019.6
Wholesale	**26,029.4**	**242**	**10,584.9**	**12,855.5**
Wholesale-Nondurable Goods (51)	10,246.5	109	4,166.7	5,060.6
Wholesale-Durable Goods (50)	15,782.9	133	6,418.2	7,794.9
Retail Trade	**29,999.7**	**686**	**11,039.6**	**19,534.3**
Bldg. Mat.-Garden Supply (52)	1,760.4	28	764.6	1,264.1
General Merch. Stores (53)	3,514.5	67	1,267.3	2,523.7
Food Stores (54)	3,004.0	77	1,171.1	2,157.2
Auto. Dealers-Serv. Stat. (55)	4,908.6	56	1,297.5	3,524.8
Apparel & Access. Stores (56)	1,625.7	55	763.5	1,167.4
Furniture & Home Furnish. (57)	820.2	13	383.1	589.0
Eating & Drinking Places (58)	10,023.0	301	3,407.1	5,189.3
Miscellaneous Retail (59)	4,343.4	88	1,985.3	3,118.9
Finance, Ins., & Real Estate	**41,321.8**	**296**	**15,395.4**	**26,782.6**
Banking (60)	5,255.5	31	1,387.1	4,090.9
Nondep. Credit Institutions (61)	9,730.1	116	5,096.6	6,393.9
Security, Comm. Brokers (62)	1,429.5	7	702.6	869.1
Insurance Carriers (63)	8,507.7	71	3,423.4	5,614.5
Ins. Agents, Brokers (64)	2,371.1	23	913.0	1,037.5
Real Estate (65)	8,157.7	32	797.8	6,626.4
Holding and Invest. Off. (67)	5,870.2	16	3,074.8	2,150.2
Services	**89,008.0**	**1,129**	**40,490.6**	**35,772.2**
Hotels & Other Lodging (70)	2,249.2	54	738.3	1,257.2
Personal Services (72)	3,220.0	59	1,148.5	1,291.0
Business Services (73)	11,642.3	188	4,561.6	4,869.4
Auto Repair, Serv., Garages (75)	3,084.8	34	818.0	1,234.6
Misc. Repair Services (76)	2,066.5	17	794.0	638.5
Motion Pictures (78)	1,832.6	16	482.0	546.1
Amusement & Recreation (79)	1,298.3	45	498.6	1,137.7
Health Services (80)	3,209.2	50	1,745.0	1,792.0
Legal Services (81)	10,290.7	118	4,759.3	5,214.2
Educational Services (82)	1,402.7	35	716.5	601.6
Social Services (83)	787.3	19	386.6	429.9
Museums & Gardens (84, 86)	3,341.2	69	1,746.5	2,984.6
Engineer. & Manage. Serv. (87)	41,724.6	389	20,902.1	12,914.9
Private Households (88)	45.4	4	45.4	45.4
Miscellaneous Services (89)	2,813.0	31	1,148.2	815.1
Government	**2,595.2**	**29**	**787.1**	**1,233.8**
Total	**610,267.1**	**6,600**	**230,659.1**	**301,770.9**

EXHIBIT 2.33: National Occupational Employment Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

TOTAL NUMBER OF JOBS	**6,600**
Executive, administrative, and managerial occupations	**782**
Managerial and administrative occupations	576
Management support occupations	206
Professional specialty occupations	**390**
Engineers	129
Architects and surveyors	41
Life scientists	2
Computer, mathematical, and operations research occupations	42
Physical scientists	11
Religious workers	7
Social scientists	3
Social and recreation workers	7
Lawyers and judicial workers	40
Teachers, librarians, and counselors	31
Health diagnosing occupations	3
Health assessment and treating occupations	14
Writers, artists, and entertainers	42
All other professional workers	17
Technicians and related support occupations	**193**
Health technicians and technologists	22
Engineering and science technicians and technologists	134
Technicians, except health and engineering and science	37
Marketing and sales occupations	**453**
Cashiers	92
Counter and rental clerks	21
Insurance sales agents	10
Marketing and sales worker supervisors	54
Models, demonstrators, and product promoters	2
Parts salespersons	7
Real estate agents and brokers	26
Retail salespersons	110
Sales engineers	4
Securities, commodities, and financial services sales agents	5
Travel agents	1
All other sales and related workers	121
Administrative support occupations, including clerical	**952**
Adjusters, investigators, and collectors	42
Communications equipment operators	7
Computer operators	5
Information clerks	54
Mail clerks and messengers	8
Postal clerks and mail carriers	20
Material recording, scheduling, dispatching, and distributing occupations	146
Records processing occupations	180
Secretaries, stenographers, and typists	193
Other clerical and administrative support workers	297

EXHIBIT 2.33: National Occupational Employment Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

Service occupations	**442**
Cleaning and building service occupations, except private household	79
Food preparation and service occupations	290
Health service occupations	20
Personal service occupations	18
Private household workers	3
Protective service occupations	30
All other protective service workers	2
Agriculture, forestry, fishing, and related occupations	**133**
Farm operators and managers	2
Farm workers	14
Fishers and fishing vessel operators	0
Forestry, conservation, and logging occupations	10
Landscaping, grounds-keeping, nursery, greenhouse, and lawn service occupations	92
Supervisors, farming, forestry, and agricultural related occupations	2
Veterinary assistants and nonfarm animal caretakers	4
All other agricultural, forestry, fishing, and related workers	8
Precision production, craft, and repair occupations	**1,746**
Blue-collar worker supervisors	262
Construction trades	1,019
Extractive and related workers, including blasters	13
Mechanics, installers, and repairers	234
Machinery mechanics, installers, and repairers	107
Vehicle and mobile equipment mechanics and repairers	46
Other mechanics, installers, and repairers	65
Production occupations, precision	**140**
Assemblers, precision	12
Food workers, precision	7
Inspectors, testers, and graders, precision	35
Metal workers, precision	31
Printing workers, precision	3
Textile, apparel, and furnishings workers, precision	9
Woodworkers, precision	30
Other precision workers	13
Plant and system occupations	**6**
Chemical plant and system operators	3
Electric power generating plant operators, distributors, and dispatchers	1
Gas and petroleum plant and system occupations	2
Stationary engineers	0
Water and liquid waste treatment plant and system operators	0
Operators, fabricators, and laborers	**1,361**
Machine setters, set-up operators, operators, and tenders	323
Hand workers, including assemblers and fabricators	188
Transportation and material moving machine and vehicle operators	261
Helpers, laborers, and material movers, hand	589

EXHIBIT 2.34
Total In-State Economic & Tax Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	213.0	1	22.5	37.7
2. Agri. Serv., Forestry, & Fish	2,190.3	25	1,085.4	1,971.2
3. Mining	2,086.4	16	724.5	1,390.3
4. Construction	142,166.5	2,595	84,696.0	107,960.8
5. Manufacturing	63,107.2	442	17,210.5	20,488.7
6. Transport. & Public Utilities	14,640.7	100	3,675.0	7,319.1
7. Wholesale	11,213.9	108	4,560.2	5,538.4
8. Retail Trade	25,318.7	565	9,367.7	16,737.4
9. Finance, Ins., & Real Estate	17,669.8	166	7,431.2	11,793.1
10. Services	64,309.0	789	30,378.9	25,000.2
11. Government	326.3	3	103.0	176.3
Total Effects (Private and Public)	343,241.7	4,810	159,254.8	198,413.2
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	238,012.2	3,432	122,351.1	143,015.4
2. Indirect and Induced Effects	105,229.5	1,378	36,903.7	55,397.8
3. Total Effects	343,241.7	4,810	159,254.8	198,413.2
4. Multipliers (3/1)	1.442	1.402	1.302	1.387
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				132,875.6
2. Taxes				28,626.0
a. Local				3,075.7
b. State				3,598.1
c. Federal				21,952.2
General				4,877.6
Social Security				17,074.6
3. Profits, dividends, rents, and other				36,911.5
4. Total Gross State Product (1+2+3)				198,413.2
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		132,875.6	159,254.8	
2. Taxes		28,626.0	28,314.3	56,940.3
a. Local		3,075.7	3,768.5	6,844.2
b. State		3,598.1	0.0	3,598.1
c. Federal		21,952.2	24,545.8	46,498.1
General		4,877.6	24,545.8	29,423.4
Social Security		17,074.6	0.0	17,074.6
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				14.6
Income				482,944
State/Local Taxes				31,666
Gross State Product				601,693
INITIAL EXPENDITURE IN DOLLARS				329,758,168

EXHIBIT 2.35: In-State Industrial Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

SECTOR/INDUSTRY	Output	Employment	Income	Gross State Prod.
Agriculture	**213.0**	**1**	**22.5**	**37.7**
Dairy Farm Products	0.0	0	0.0	0.0
Eggs	0.0	0	0.0	0.0
Meat Animals	34.6	0	1.6	1.8
Misc. Livestock	1.0	0	0.1	0.1
Wool	0.0	0	0.0	0.0
Cotton	0.0	0	0.0	0.0
Tobacco	0.0	0	0.0	0.0
Grains & Misc. Crops	38.4	0	1.0	6.0
Feed Crops	29.0	0	0.6	4.4
Fruits & Nuts	0.0	0	0.0	0.0
Vegetables	0.9	0	0.0	0.1
Greenhouse/Nursery Products	100.6	1	18.7	23.9
Sugar Beets & Cane	0.0	0	0.0	0.0
Flaxseed, Peanuts, Soybean	8.6	0	0.5	1.3
Agri. Serv., Forestry, & Fish	**2,190.3**	**25**	**1,085.4**	**1,971.2**
Agri. Services (07)	1,990.0	24	1,067.0	1,791.0
Forestry (08)	196.0	1	17.4	176.4
Fishing, Hunting, Trapping (09)	4.3	0	1.1	3.9
Mining	**2,086.4**	**16**	**724.5**	**1,390.3**
Coal Mining (12)	1.2	0	0.4	1.1
Oil & Gas Extraction (13)	77.8	0	10.4	30.5
Nonmetal Min.-Ex. Fuels (14)	2,004.1	16	712.8	1,357.7
Metal Mining (10)	3.2	0	0.8	1.1
Construction	**142,166.5**	**2,595**	**84,696.0**	**107,960.8**
General Bldg. Contractors (15)	105,504.4	1,893	60,605.5	78,150.4
Heavy Const. Contractors (16)	23,444.8	448	15,828.7	19,451.6
Special Trade Contractors (17)	13,217.3	254	8,261.7	10,358.8
Manufacturing	**63,107.2**	**442**	**17,210.5**	**20,488.7**
Food & Kindred Prod. (20)	3,132.3	11	417.8	618.9
Tobacco Manufactures (21)	0.0	0	0.0	0.0
Textile Mill Prod. (22)	93.8	0	20.8	1.0
Apparel & Other Prod. (23)	238.8	2	65.4	73.7
Limber & Wood Prod. (24)	16,323.9	107	3,915.3	4,631.2
Furniture & Fixtures (25)	336.4	3	117.3	201.0
Paper & Allied Prod. (26)	83.7	1	22.7	32.3
Chemicals & Allied Prod. (28)	138.8	1	49.4	49.6
Petroleum & Coal Prod. (29)	0.0	0	0.0	0.0
Rubber & Misc. Plastics (30)	794.9	6	229.9	281.3
Leather & Leather Prod. (31)	10.6	0	2.7	4.6
Stone, Clay, & Glass (32)	11,832.2	82	3,602.4	4,786.9
Primary Metal Prod. (33)	953.6	3	152.3	250.0
Fabricated Metal Prod. (34)	23,279.3	183	6,822.8	7,257.1
Machinery, Except Elec. (35)	3,723.9	27	1,163.6	1,287.8
Electric & Elec. Equip. (36)	444.4	2	139.2	220.7
Transportation Equipment (37)	305.4	1	56.9	140.3
Instruments & Rel. Prod. (38)	343.4	2	85.9	214.1
Misc. Manufacturing Inds. (39)	361.1	3	109.6	136.4
Printing & Publishing (27)	710.6	8	236.6	301.5

EXHIBIT 2.35: In-State Industrial Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

Transport. & Public Utilities	**14,640.7**	**100**	**3,675.0**	**7,319.1**
Railroad Transportation (40)	517.2	5	214.4	405.3
Local Pass. Transit (41)	508.4	13	219.4	270.8
Trucking & Warehousing (42)	3,396.3	50	1,541.8	1,827.2
Water Transportation (44)	19.2	1	7.1	6.1
Transportation by Air (45)	541.2	6	188.4	281.5
Pipe Lines-Ex. Nat. Gas (46)	17.2	0	1.9	5.9
Transportation Services (47)	93.2	1	35.3	64.4
Communication (48)	3,842.9	14	765.2	1,819.9
Elec., Gas, & Sanitary Serv. (49)	5,705.1	11	701.6	2,638.1
Wholesale	**11,213.9**	**108**	**4,560.2**	**5,538.4**
Wholesale-Nondurable Goods (51)	6,231.7	66	2,534.1	3,077.7
Wholesale-Durable Goods (50)	4,982.3	42	2,026.0	2,460.7
Retail Trade	**25,318.7**	**565**	**9,367.7**	**16,737.4**
Bldg. Mat.-Garden Supply (52)	1,605.8	26	697.5	1,153.1
General Merch. Stores (53)	3,207.4	62	1,156.5	2,303.2
Food Stores (54)	2,732.1	70	1,065.1	1,961.9
Auto. Dealers-Serv. Stat. (55)	4,438.9	50	1,172.3	3,187.5
Apparel & Access. Stores (56)	1,423.5	48	668.6	1,022.2
Furniture & Home Furnish. (57)	740.7	12	346.0	531.9
Eating & Drinking Places (58)	7,205.9	217	2,449.5	3,730.8
Miscellaneous Retail (59)	3,964.4	80	1,812.2	2,846.8
Finance, Ins., & Real Estate	**17,669.8**	**166**	**7,431.2**	**11,793.1**
Banking (60)	3,481.1	21	918.8	2,709.7
Nondep. Credit Institutions (61)	8,687.2	103	4,550.3	5,708.6
Security, Comm. Brokers (62)	618.0	3	303.8	375.7
Insurance Carriers (63)	2,316.4	19	932.1	1,528.7
Ins. Agents, Brokers (64)	1,588.2	15	611.6	695.0
Real Estate (65)	934.6	4	91.4	759.2
Holding and Invest. Off. (67)	44.3	0	23.2	16.2
Services	**64,309.0**	**789**	**30,378.9**	**25,000.2**
Hotels & Other Lodging (70)	519.9	13	177.9	299.8
Personal Services (72)	2,071.3	40	726.5	811.4
Business Services (73)	5,764.3	98	2,228.2	2,414.9
Auto Repair, Serv., Garages (75)	1,525.1	19	429.6	618.0
Misc. Repair Services (76)	404.8	3	157.5	124.6
Motion Pictures (78)	554.0	8	132.5	180.0
Amusement & Recreation (79)	624.7	23	260.9	534.0
Health Services (80)	2,911.9	46	1,589.4	1,631.0
Legal Services (81)	8,697.9	100	4,022.6	4,407.1
Educational Services (82)	1,135.1	28	591.6	486.5
Social Services (83)	673.7	17	325.0	365.8
Museums & Gardens (84, 86)	1,596.4	36	823.1	1,418.9
Engineer. & Manage. Serv. (87)	36,384.8	341	18,299.6	11,260.0
Private Households (88)	41.6	3	41.6	41.6
Miscellaneous Services (89)	1,403.5	15	572.9	406.7
Government	**326.3**	**3**	**103.0**	**176.3**
Total	**343,241.7**	**4,810**	**159,254.8**	**198,413.2**

EXHIBIT 2.36: In-State Occupational Employment Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

TOTAL NUMBER OF JOBS	**4,810**
Executive, administrative, and managerial occupations	**594**
Managerial and administrative occupations	448
Management support occupations	147
Professional specialty occupations	**284**
Engineers	103
Architects and surveyors	37
Life scientists	1
Computer, mathematical, and operations research occupations	24
Physical scientists	6
Religious workers	3
Social scientists	2
Social and recreation workers	4
Lawyers and judicial workers	32
Teachers, librarians, and counselors	23
Health diagnosing occupations	3
Health assessment and treating occupations	11
Writers, artists, and entertainers	25
All other professional workers	9
Technicians and related support occupations	**147**
Health technicians and technologists	17
Engineering and science technicians and technologists	106
Technicians, except health and engineering and science	25
Marketing and sales occupations	**328**
Cashiers	76
Counter and rental clerks	12
Insurance sales agents	5
Marketing and sales worker supervisors	38
Models, demonstrators, and product promoters	1
Parts salespersons	4
Real estate agents and brokers	24
Retail salespersons	94
Sales engineers	2
Securities, commodities, and financial services sales agents	4
Travel agents	0
All other sales and related workers	68
Administrative support occupations, including clerical	**662**
Adjusters, investigators, and collectors	25
Communications equipment operators	4
Computer operators	3
Information clerks	35
Mail clerks and messengers	5
Postal clerks and mail carriers	12
Material recording, scheduling, dispatching, and distributing occupations	87
Records processing occupations	130
Secretaries, stenographers, and typists	150
Other clerical and administrative support workers	209

EXHIBIT 2.36: In-State Occupational Employment Impacts of Cumulative South Dakota Historic Preservation Activity: Historic Rehabilitation ($330 million, 1982-2011)

Service occupations	**293**
Cleaning and building service occupations, except private household	43
Food preparation and service occupations	203
Health service occupations	17
Personal service occupations	11
Private household workers	3
Protective service occupations	15
All other protective service workers	1
Agriculture, forestry, fishing, and related occupations	**102**
Farm operators and managers	0
Farm workers	5
Fishers and fishing vessel operators	0
Forestry, conservation, and logging occupations	3
Landscaping, grounds-keeping, nursery, greenhouse, and lawn service occupations	85
Supervisors, farming, forestry, and agricultural related occupations	1
Veterinary assistants and nonfarm animal caretakers	3
All other agricultural, forestry, fishing, and related workers	4
Precision production, craft, and repair occupations	**1,496**
Blue-collar worker supervisors	207
Construction trades	983
Extractive and related workers, including blasters	6
Mechanics, installers, and repairers	154
Machinery mechanics, installers, and repairers	64
Vehicle and mobile equipment mechanics and repairers	31
Other mechanics, installers, and repairers	52
Production occupations, precision	**71**
Assemblers, precision	7
Food workers, precision	4
Inspectors, testers, and graders, precision	13
Metal workers, precision	15
Printing workers, precision	1
Textile, apparel, and furnishings workers, precision	3
Woodworkers, precision	21
Other precision workers	6
Plant and system occupations	**1**
Chemical plant and system operators	0
Electric power generating plant operators, distributors, and dispatchers	0
Gas and petroleum plant and system occupations	0
Stationary engineers	0
Water and liquid waste treatment plant and system operators	0
Operators, fabricators, and laborers	**833**
Machine setters, set-up operators, operators, and tenders	105
Hand workers, including assemblers and fabricators	94
Transportation and material moving machine and vehicle operators	154
Helpers, laborers, and material movers, hand	479

CHAPTER 3 – SOUTH DAKOTA HERITAGE TOURISM

INTRODUCTION AND SUMMARY

By all accounts, travel is a huge industry, with total 2011 U.S. direct spending of about $813 billion. The U.S. travel industry is one of the nation's fastest-growing business segments and accounts for approximately 6 percent of the nation's gross domestic product.

This chapter analyzes heritage tourism in the nation and in South Dakota. First, an overview of the U.S. travel market sets out a perspective on the market's size, features, trends, and impacts. Next, heritage tourism's growth factors, benefits, and impacts are briefly surveyed at the national level. Finally, the South Dakota travel market is compiled on the features and economic impacts of South Dakota heritage tourism are reviewed in detail.

Below are the major findings of this chapter:

National Travel and Heritage Tourism

- There are numerous trends in the travel market fostering heritage tourism, including an increase in travel for pleasure, as opposed to business, and a growing tendency toward shorter duration and shorter distance trips. Baby boomers—large in number and with growing discretionary income—also have a proclivity toward heritage tourism.

- In 2002, over 14 percent of all travelers (persons who traveled at least 50 miles from home) participated in historic travel nationwide—that is, they specifically set out to visit an historic site, historic community, or history museum (Travel Industry Association [TIA], 2003). More generally, about 40 percent of families traveling on vacation stopped at historic sites (Schiller 1996), and museums and cultural events rank among Americans' favorite tourist attractions (McDowell 1997).

- There also has been a steady increase in the level of heritage-related travel. The TIA study reports that the number of historic/cultural person-trips grew by roughly 13 percent from 1996 to 2002, or about 2 percent annually.

- Numerous reports show heritage tourism's significant contribution to the economy. In Virginia, for instance, historic preservation visitors were found to stay longer, visit twice as many places, and spend on average more than two and one-half times more money in that state than other (non-heritage) visitors.

South Dakota Travel and Heritage Tourism

- In 2011, direct domestic travel expenditures in South Dakota amounted to approximately $1 billion. Clearly, travel and tourism are significant to South Dakota's well-being and as an industry, South Dakota tourism is one of the state's top revenue producers.

- Of total traveler spending in South Dakota, leisure travelers (97.7 percent of outlays) are more significant than business travelers (2.3 percent of outlays). Spending by non-South Dakota residents (95 percent of outlays) is more important than spending by South Dakota residents (5 percent of outlays).

- Heritage tourism is an important component of the South Dakota travel industry. For the purposes of the current investigation, we define heritage travelers as those who indicated the following trip activities on intercept surveys conducted in this state: "Museum/Historic Places," "Native American Heritage" and "Old West History."

- Of the total 15.6 million "person-stays" of tourists in South Dakota, heritage travelers as defined above comprise about 3.4 million "person-stays" or 22 percent.

- Compared to non-heritage travelers to South Dakota, heritage travelers to this state have the following characteristics:

Heritage Traveler Characteristics	Heritage versus Non-Heritage Travelers
• Stay longer in South Dakota	• 5.26 versus 3.23 average trip length in days
• Spend more	• $67.32 $/person-day versus $50.56 $/person-day
• Have a larger travel party size	• 3.36 versus 3.06
• Are more likely to come from "afar" (more distant regions in the United States, e.g., New England and the middle Atlantic states, and Europe and Asia)	• 5% from Middle Atlantic States [NJ, NY and PA] versus 2%
• Are less likely to have been to SD before current trip	• 64% versus 75%
• Are more likely to have South Dakota as their primary destination	• 65% versus 50%
• Are more likely to have the following SD cities as their primary destination: Rapid City Custer Deadwood	 • 28% versus 22% • 8% versus 4% • 7% versus 4%
• More likely to visit the SD tourism website	• 28% versus 18%
• More likely to use certain forms of transportation in SD trip airplane rental car	 • 5% versus 2% • 6% versus 2%
• More likely to enjoy certain types of trip activities Visiting National/State parks Local Attraction/Events Scenic Drives	 • 80% versus 35% • 73% versus 31% • 85% versus 51%

- At a minimum, South Dakota heritage travel amounts to an estimated $237 million in 2011, or about 22.4 percent of the total approximate $1 billion domestic travel expenditures in South Dakota.

EXHIBIT 3.1
Estimated Total South Dakota Domestic Travel Expenditures and Heritage Travel Outlays

Year	*Domestic South Dakota Travel Expenditures ($ millions)*	*Estimated Heritage Travel (minimum)*	
		%	*$ millions*
2011 (estimated)	±$1,059	22.4%	$237

- The total national economic impacts from the $237 million in annual 2011 South Dakota heritage travel include 5,821 jobs generating $373.6 million in output, $180.6 million in GDP, and $111 million in income at the national level. At the state of South Dakota level, the $237 million in South Dakota heritage travel translates annually to 4,970 jobs, an additional $243 million in South Dakota output, $124 million in-state GSP, and $79 million in income. The in-state wealth (GSP minus federal taxes) deriving from heritage tourism amounts to just over $100 million with $14.7 million realized in state and local South Dakota taxes.

EXHIBIT 3.2
Total Economic Impacts of Annual South Dakota Heritage Tourism Spending ($237 million), 2011

	In-State	*Out-of-State*	*Total (U.S.)*
Jobs (person years)	4,970	851	5,821
Income ($millions)	79.3	31.4	110.7
Output ($millions)	243.3	130.3	373.6
GDP/GSP ($millions)	124.4	56.2	180.6
Total taxes ($millions)	39.1	6.9	46.0
Federal ($millions)	24.4	2.0	26.4
State/Local ($millions)	14.7	4.9	19.6
In-state wealth ($millions)	100.0	---	---

- With regard to heritage tourism, it is no surprise that the vast majority of annual employment and GSP gains within the state are located in the retail trade (2,833 jobs, $56.4 million in GSP) and services (1,715 jobs, $43.0 million in GSP) sectors, since these would include the businesses that tourists would most likely interact with—gift shops, gas stations, restaurants, lodging, etc. However, due to the indirect and induced effects, significant impacts reverberate throughout the state's economy, most prominently in the finance, insurance, and real estate (FIRE) sector (97 jobs, $8.0 million GSP) and the transportation and public utilities sector (132 jobs, $6.7 million GSP). Wholesale trade firms see 100 jobs created that contribute just over $4.8 million to the state's pre-tax wealth or gross state product, and the manufacturing group adds 74 jobs with $4.2 million in GSP.

- As just detailed, heritage tourism in South Dakota generates considerable economic benefit in terms of jobs, wealth created, income earned, etc. A further contribution is that the above economic activity is often disproportionately derived from residents traveling from out-of-state. Thus, the economic benefit from South Dakota heritage travel is disproportionately importing new dollars of economic activity to South Dakota—an optimal strategy of economic pump priming. Additionally, heritage travel in South Dakota is contextually most important to the economic vitality of the host communities containing the historic resources that are visited.

NATIONAL OVERALL AND HERITAGE TRAVEL OVERVIEW

As noted, the travel industry in the United States is huge with total 2011 spending of about $813 billion. The economic impact from such spending is quite significant. In 2012, the U.S. Travel Association projected the total economic effects (direct and secondary, the latter encompassing indirect and induced effects) of 2011 travel spending in the U.S., which in that year totaled $1.9 trillion. The results are shown in Exhibit 3.3. Total impacts from the $813 billion in 2011 direct travel spending include almost $1.9 trillion in output (expenditures), and over 14 million jobs.

EXHIBIT 3.3
Measures of Impact of Travelers on the U.S. Economy in 2011

Impact Measure	*Direct Impact*	*Indirect/Induced Impact*	*Total Impact*	*Multiplier*
Expenditures (Billions)	$813	$1,100	$1,900	2.34
Employment (Millions)	7.5	6.9	14.4	1.92

Source: U.S. Travel Answer Sheet, U.S. Travel Association, June 2012

What is the profile of total United States travel?

The domestic portion of total travel in 2005 included more than 1.9 billion trips to destinations 100 miles or more from home. Domestic travel in the United States is composed of pleasure trips (69 percent) and business trips (31 percent); leisure travel (75 percent), business travel (25 percent) and combined leisure and business travel (25 percent). The major stimulus for travel growth is expected to come from the increasing numbers of pleasure leisure trips. More and more, consumers seem to prefer long-weekend getaways to lengthier vacations in more distant spots. Perhaps this reflects the rise in numbers of two-income households with more money but less free time (Standard and Poors 1996). Overall travel data also suggest an increasing trend toward shorter-duration trips—more day trips and one-night visits—and shorter-distance trips.

Heritage tourism comports well with these trends in pleasure trips, and historic sites play a crucial role in fostering pleasure travel. As travel expert Arthur Frommer (1993, 92) explains: "People travel in massive numbers to commune with the past.... [Y]ou cannot deny that seeing the cultural achievements of the past, as enshrined in period buildings, is one of the major motivators for travel."

Precise data on heritage tourism's share of the overall travel market are not available, but various surveys report that historic site visits are increasingly included on pleasure travel itineraries. Growing heritage tourism is also linked to factors ranging from family finances to family leisure pursuit. Economist Tim Schiller (1996, 14) writes:

> Historic sites are growing in popularity as destinations for pleasure trips…Several factors account for this increased interest. First, such trips tend to be less expensive than other types of vacations or pleasure travel. Second, family travel has increased, and often, historic sites are something of interest to all family members. Third, vacationers, especially family groups, are more concerned about adding educational opportunities to their vacation plans.

The $16 billions of dollars spent on the restoration of American historic sites since 1976 has produced a critical mass of saved resources in many communities ("Saving Places" 1996). As the number of preserved historic sites and neighborhoods mounts, new tourism "product" becomes available for both domestic and international visitors, and the tourism-preservation cycle continues.

Evidence of heritage tourism's economic contribution (or its potential contribution) can be found throughout the country:

1. Almost 100 regional heritage areas are in varying phases of development across the United States. These efforts recent broad-based collaboration to protect a regional landscape, preserve historic resources, enhance recreation, or stimulate economic development and regional strength through tourism.
2. In Virginia the impact of travel to historic sites was found to be crucial to the state's economy. Historic preservation visitors stay longer, visit twice as many places, and spend, on average, over two-and-one-half times as much money in Virginia than do other visitors. The economic impact of Colonial Williamsburg alone on Virginia's economy is claimed to be more than $0.5 billion a year (Preservation Alliance of Virginia 1996).
3. Civil War battle visitation has been found by numerous studies to be vast in scale and to have important economic benefits (Johnson and Sullivan 1992; Kennedy and Porter 1994; Lane 1982).

National data on heritage tourism volume and spending are sketchy. One of the most commonly cited studies is the *Historic/Cultural Traveler* analysis constructed by TIA (2004). That report, examining both historic tourism and cultural tourism as of 2002, found that this tourism segment was large, growing and an important spur to travel.

In 2002, heritage travel[7] was occasioned by 84.7 million of all U.S. adults (211.6 million) and 57.9 percent of all U.S. adult travelers[8] (146.4 million). Heritage travel in that year involved 143.5 million person trips[9]—about one seventh (14.1 percent) of all 2002 person trip volume (1,021.3 million). The more aggregate historic/cultural travel market size (inclusion of a historic *and/or* cultural activity on a trip) was yet larger—involving 118.1 million U.S. adults (55.8 percent of all U.S. adults, 80.7 percent of all U.S. adult travelers) and 216.8 million person trips (21.2 percent of all person trip volume). (See Exhibit 3.4 for more details.)

Historic/cultural travel activity has grown over time (from 192.4 million trips in 1996 to 216.8 million trips in 2002)—an increase of 13 percent or more than twice the 1996-2006 growth (5.6 percent) in all United States domestic travel (TIA 2004, 10). (Separate historic trip volume is not available from TIA.)

EXHIBIT 3.4:
Historical/Cultural Travel Market Size (2002) in the United States

	Number of U.S. Adults	*%*	*Number of Adult Travelers**	*%*	*2002 Person-trip Volume***	*%*
Total	211.6 million	100.0	146.4 million	100.0	1,021.3 million	100.0
Included an historic and/or cultural activity on a trip	118.1 million	55.8	118.1 million	80.7	216.8 million	21.2
Included a cultural activity on a trip	109.8 million	51.9	109.8 million	75.0	97.7 million	9.6
Included an historic activity on a trip	84.7 million	40.0	84.7 million	57.9	143.5 million	14.1

*Adults who have taken at least one trip of at least 50 miles, one-way, away from home, in the past year, not including trips taken in regular commuting to and from work or school, or trips taken as a flight attendant or vehicle operator.
**Counts multiple trips and multiple people per trip. See methodology in Appendix A.
Sources: Travel Industry Association of America, TravelScope, Historic/Cultural Traveler Survey

[7] Defined by TIA (2004, 8) as, "persons who traveled 50 miles or further from home who included at least one historic site, community, town, museum, military site, or memorial cemetery."
[8] Defined by TIA (2004, 8) as "Adults who have taken at least one trip of at least 50 miles one-way away from home, in the last year, not involving trips taken in regular commuting to and from work or school or trips taken as a flight attendant or vehicle operator."
[9] Defined by TIA (2004, 3) as "one person trip includes one person on one trip 50 miles or more, one-way away from home or including an overnight stay."

Among all 146.4 million adults who traveled in 2002, 59.5 million (40 percent) visited a designated historic site, such as a building, landmark, house, or monument (TIA, 5). Other popular historic travel involved visiting a designated historic community or town (41.1 million adult travelers), a military museum (36.3 million adult travelers), or a historic military site, such as a battlefield (30.4 million adult travelers). Of passing note is the tremendous draw of ethnicity, a reflection of the growing diversification of the United States that was traced earlier. Of all 146.4 million adult travelers in 2002, almost 50 million visited an ethnic area or ethnic culture exhibit. Combining historic and ethnic themes would thus pack a powerful travel lure.

While historic/cultural travelers often combine activities such as visiting friends/relatives or an ethnic site while also engaged in historic/cultural activities, the historic/cultural lure is very strong in its own right. About 40 percent of historic/cultural travelers extended extra time to their trip due to a historic/cultural event according to TIA. Visiting a historic site was frequently the primary motivation for taking a particular trip. Nationwide, 33 percent of historic travelers indicated that visiting a historic site, historic community, or history museum was *the* motivation for taking a trip.

Rutgers University has separately examined state-level tourism data in Arkansas, Florida, Massachusetts, Missouri, Ohio, Nebraska, New Jersey and Texas over the past decade. Rutgers has found that heritage tourism comprises millions of annual trips (e.g., 3.3 million, 4.3 million and 40.7 million in Arkansas, Massachusetts and Texas respectively). What is the importance of these trips relative to total state travel? Rutgers found that heritage tourism comprised from a high of 17 percent of total statewide tourism trips (in Massachusetts) to a low of 5 percent (in New Jersey). The median was about 5 to 10 percent. The latter approximates on an order of magnitude basis the TIA finding that 14 percent of U.S. person trips involved heritage travel. (Note, however that there is no industry consensus in how to define the "historic" or "heritage" traveler, that TIA and Rutgers were viewing different data bases and as such differed in how they flagged a "historic" or "heritage" traveler.)

One of the states examined by Rutgers was Florida and for illustrative purposes we shall summarize its salient travel characteristics. In 2000, Florida had some 72 million visitors, the lion's share (80 percent) coming from the United States. When domestic visitors to Florida were asked what were their primary activities, the top three responses were not surprisingly "beaches" (32.4 percent), "shopping" (32.4 percent) and "theme/amusement parks" (26.5 percent). About one-tenth (9.1 percent), however, listed "historic places/museums" as their primary Florida travel activity.

Heritage travel is particularly important in some Florida communities as is attested to by the following examples in St. Augustine, Key West, and Tampa Bay City.

St. Augustine epitomizes heritage tourism in Florida. The city's 14,000 residents and 14.4 square miles host 3.5 million tourists annually. The tourists relive the history of the nation's oldest continuously occupied city, strolling along St. George Street, peering from atop the Fortress of Castillo de San Marcos, or driving across the Bridge of the Lions.

Heritage tourism is the industry of St. Augustine. "The whole city is funded on tourism, and the tourism base is historic preservation" (Birchim 2002). The Economic Development Council of St. Augustine and St. Johns County Chamber of Commerce estimates that tourism county-wide brought in $490 million in 2000.

Old Town in Key West is a 190 block area that contains 2,580 structures. Heritage tourism has been a mainstay for Key West and Pensacola. Key West's Old Town and Hemingway House and Pensacola's Seville Historic District have attracted tourists for decades.

In Tampa, a resurgent Ybor City Historic District is drawing a new breed of heritage tourists. The community is a mix of thirty percent commercial buildings and seventy percent residential property. It is now a fashionable entertainment district, rediscovering its potential as a tourist attraction in the wake of massive destruction after the failed promises of urban renewal.

Heritage tourism is important in many other places in the United States. There was an annual average of 50 million person trips to Memphis, Tennessee during the period 1996-2001 and of that total 0.8 million, or about one-quarter, were heritage travelers. Some of the larger and more visible Memphis heritage tourism sites include the Beale Street Entertainment District (4.2 million annual visitors), Graceland (0.6 million annual visitors), and the Mud Island River Park (174,000 annual visitors), all on the National Register of Historic Places.

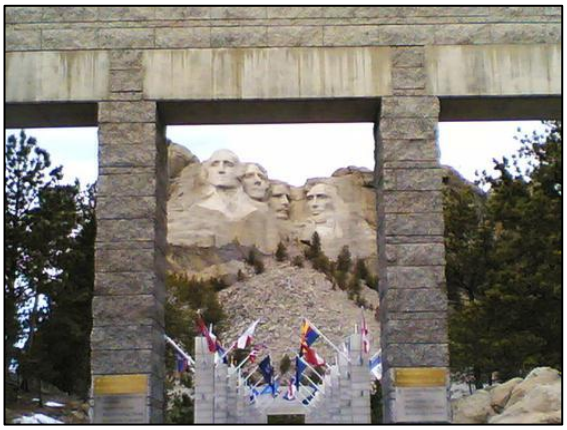
HISTORIC ATTRACTIONS IN SOUTH DAKOTA

Tourism is South Dakota's second largest industry, with an abundance of both natural and manmade historic sites. Below is a selected sampling of the many historic tourist attractions in South Dakota.

Mount Rushmore

Each year, the iconic tribute to America's presidents brings in over three million visitors. The massive proportions of Mount Rushmore cannot be underestimated; each presidential face stands 60 feet tall, and the entire sculpture takes up 1,278.45 acres of granite rock. Such a monumental structure does not come without a vivid backstory. Construction on Mount Rushmore began with federal funding in 1927 after discussions that a large-scale national monument could serve to draw tourists to the area. The original plan was to sculpt the presidents from head to waist, but after over a decade of work—much of which involved dangerous and expensive dynamite blasting—funds ran out and the federal government ordered that Mount Rushmore be completed as is in 1941. It has been managed by the National Park Service since 1933 and it sponsors information sessions about the site and its history. In addition, they illuminate the mountain during a nightly ceremony between Memorial Day and Labor Day. Although walking tours are not given on the sculpture itself, tours are available of the Sculptor's Studio, as well as the trail area surrounding the mountain.

Mount Rushmore. *Flickr Creative Commons. 2008. THERMACGIRL.*



Mount Rushmore. *Flickr Creative Commons. 2006. netmonkey.*

The Mitchell Corn Palace

One of South Dakota's most popular tourist attractions (with about 500,000 annual visitors[10]), and certainly one of its most unique, is also among its oldest. Since 1892, the Corn Palace has been attracting visitors from far and wide to see Mitchell's grand scale testament to its rich agricultural assets. The corn palace that stands today is actually not the original building; it was rebuilt in 1905 and again in 1919 as a bigger structure to keep up with the Corn Palace's growing success as a destination for both local residents and distant tourists. Today, the Corn Palace is used for a variety of local and regional events. It hosts festivals, rodeos, expositions, proms, and is a respectable basketball arena that is home to the Mitchell High School Kernals and the Dakota Wesleyan University Tigers. Besides serving as a community gathering place, the Corn Palace also is a unique site to see for anyone. The "agricultural showcase of the world" is made with 13 types of corn that are nailed to the building cob by cob to create colorful murals that can be found on both the outside and inside of the Corn Palace. The exterior murals are changed on an annual basis and reflect a chosen theme for that year. Visitors to the Corn Palace receive guided tours and during the summer months have the opportunity to watch new corn murals being made outside the structure.

Corn Palace Corner. *Flickr Creative Commons. 2010. cariliv. 85.*

Corn Palace. *Flickr Creative Commons. 2009. Geoffrey Plauche. 5-16-09.*

Deadwood, South Dakota

The entire city of Deadwood, South Dakota (founded in 1876) is a popular historic tourist destination to experience the frontier heritage of South Dakota's Black Hills region and notorious past as one of South Dakota's wildest saloon towns. The city, which sprung out of the great Black Hills gold rush of the late 1800s, has hosted the likes of famed western figures Wild Bill Hickok, Seth Bullock, and Calamity Jane. Deadwood has been a designated National Historic Landmark since 1961, but it wasn't until 1989 when it became the third area in the United States to legalize gambling (after Las Vegas and Atlantic City) that Deadwood's tourism industry truly took off. The small city has over 80 gaming halls, which reflects the wild, high-stakes character of Deadwood's past. Recently, the betting limit was raised from $100 to $1,000, which is sure to attract more professional gamblers. Besides the entertainment, visitors can also enjoy the preserved and restored building facades that feature Victorian era frontier architecture. Because the whole city is included in the NRHP designation, Deadwood is among the largest historic restoration projects in the United States. Events are held throughout the year and are intended for both residents and tourists alike, including Wild Bill Days, and the Deadwood Jam.

[10] Mitchel Corn Palace, http://www.cornpalace.org

Deadwood, South Dakota. *Flickr Creative Commons. 2010. Craig Bennet*.

Cowboy Actors in Deadwood, South Dakota. *Flickr Creative Commons. 2010. Craig Bennet.*

Crazy Horse Memorial

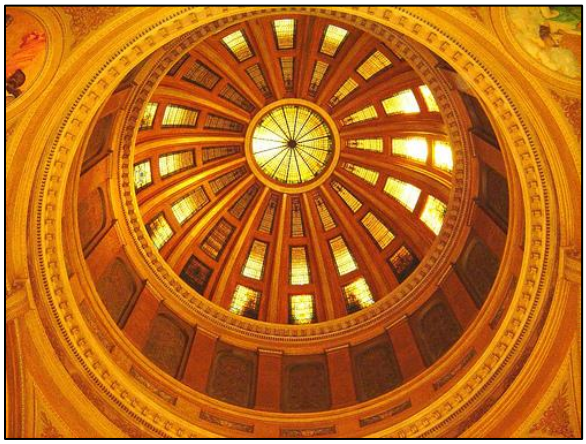
Whereas Mount Rushmore is an icon of the United States' greatest leaders, the Crazy Horse Memorial, located 17 miles from Mount Rushmore, is intended to celebrate Native American leadership. Both Rushmore and Crazy Horse do, however, share mammoth proportions—in fact, when completed, Crazy Horse will be even larger than Mount Rushmore. The sculptor has estimated that the finished memorial will stand 563 feet tall and 641 feet wide; the head alone stands 87 feet tall. The idea for the Crazy Horse memorial came from several Native American chiefs, who shared their vision with sculptor Korczak Ziolkowski (who assisted with the Mount Rushmore project) in 1929. Work for Crazy Horse began in 1948 on a site in the Black Hills deemed sacred by the Lakota. Unlike Mount Rushmore, Crazy Horse has not received federal funding, and much work remains to be done. Thus far, only the head has been completed, which was dedicated in 1998. Visitors can see the progress made thus far, learn about the origins of Crazy Horse at the monument's orientation and communications center, and visit the Indian Museum of North America. Events are held throughout the year, such as on-site hikes, rodeos, and Native American festivals.

Crazy Horse Monument with Model. *Flickr Creative Commons. 2010. Matthew Paulson.*

Crazy Horse Monument. *Flickr Creative Commons. 2010. Matthew Paulson.*

South Dakota State Capitol Building

The State Capitol building in the city of Pierre is over 100 years old, having been constructed between 1905 and 1910. The cost of construction was nearly $1,000,000[11], which equates to over $23,000,000 by today's standards. The South Dakota Capitol building is designed with grand proportions and ornate details, and is like many of its other stately counterparts found throughout the nation. Like the nation's capital building in Washington, D.C., the South Dakota Capitol has a large central rotunda, but there are also some features that are unique to South Dakota's Capitol. The four-story neoclassical building features a large copper dome and Corinthian style columns, and sits upon a granite foundation made from locally quarried stone. Artwork can be found throughout the building, including statues of historic South Dakota figures, 18 paintings by the muralist William Peaco, whose work also appears in several courthouses and capital buildings of Midwestern states, and murals by Edward Simmons, an accomplished American Impressionist painter. The building recently celebrated its centennial, and was presented with extensive restorations which took 22 years to complete. The building is open to the public, and both guided and self-guided tours are available throughout the year.



South Dakota Capitol Dome. *Flickr Creative Commons. 2005. Alex Calderon. DSC03084.*

South Dakota State Capitol. *Flickr Creative Commons. 2005. Alex Calderon.*

Wounded Knee Site

The Wounded Knee Site (considered by some a battlefield and others a massacre site) marks the site where the last major encounter between Native Americans and U.S. soldiers took place in 1890. The incident (widely accepted as a massacre), which is said to have started out of fear from a misfired rifle shot, claimed the lives of 31 U.S. soldiers and 146 Native American prisoners, and is remembered as a tragic chapter in American History. The 870 acre site on the Lakota Pine Ridge Indian Reservation became a National Historic Landmark in 1965. A grave site marks where the victims were buried and a monument shows the names of those killed. Though the site is intentionally sparse to leave it respectfully undisturbed, there is an on-site Visitors Center and museum that interprets the battle for visitors.

[11] "South Dakota State Capitol: The History." http://www.state.sd.us

Wounded Knee Graveyard. *Flickr Creative Commons. 2009. Jimmy Emerson.*

Wounded Knee Mass Grave Stone. *Flickr Creative Commons. 2009. Jimmy Emerson.*

SOUTH DAKOTA HERITAGE AND TOTAL TRAVEL

In 2011, direct domestic travel expenditure in South Dakota amounted to approximately $1 billion and we estimate that about $237 million of this total comprised heritage travel. The discussion below describes the data and methodology used for quantifying the above-noted South Dakota tourism and heritage travel outlays.

To estimate direct tourism spending for the economic impact analysis, several data sources were used. Individual survey response data from the South Dakota Department of Tourism's (SD Tourism) "2011 Information Center Intercept Report" was used to estimate the amount of time travelers spent in South Dakota during trips. Respondents who indicated one day of travel in South Dakota were assumed to be taking daytrips. Respondents who indicated more than one day of travel in South Dakota were allocated as overnight visitors and their concordant estimate of person-nights was applied to estimate their spending amounts.

Total tourism visitor expenditures were estimated in Michael Madden's "Statistical Update: Economic and Fiscal Impacts Associated With the Vacation Travel Industry in South Dakota, November 2009 Through October 2010" to be $1,059,201,417 (Exhibit 3.5). This is close to the $1.24 billion estimate provided in the IHS Global Insight "2010 Tourism Satellite Account" report. Madden's estimate was used as a base for total tourism spending, although IHS Global Insight's reported 15.64 million total person-stays in South Dakota in 2010 was used as the base for person-stays in our analysis.

Responses from SD Tourism's intercept survey question on number of days spent in South Dakota were used to determine that the average trip length per travel party was 4.47 days. Based on responses to a question about the travel party size of each respondent, it was found that an average of 3.25 people were in each travel party (Exhibit 3.5).

Out of 1,720 respondents from the intercept survey, 191 indicated they spent one day in South Dakota on their travels. This amounts to 621 person-days. Remaining respondents indicated that they spent more than a day in South Dakota on their travels. In total they stayed 23,392 person-nights, based on the number of travel days and the travel party size of each respondent. It has been estimated that the annual 15.64 million person-stays split as 404,601 person-daytrips and 15,235,399 person-nights in South Dakota (Exhibit 3.5).

Respondents of the SD Tourism intercept survey were also asked how much money they spent per day in South Dakota. Response options were grouped into ranges of spending (e.g. $50-$99, $100-$149, etc.). Median values were used to estimate actual spending data from these responses. For the response option of "Over $600" a value of $650 was assumed. Total trip spending by respondent was estimated by multiplying the number of days or nights respondents stayed in South Dakota by the spending amount per day indicated. By assuming these spending values for day-trip respondents and overnight trip respondents, we derived a ratio of spending between the two groups. We then applied this ratio to the estimate for total tourism spending in the Madden report. By using this approach, we estimate total daytrip spending in South Dakota to be $21,236,457.72 and total overnight trip spending to be $1,037,964,959.28 (Exhibit 3.5).

For daytrip spending per person-day, total day-trip spending per total person-days revealed an estimate of $52.49/person-day. Night-stay spending was broken down into three categories: camping, commercial lodging and friend or family stays. Camping respondents were assumed to be any respondent that indicated "RV/Camper" as their response to a question on their primary travel mode. Friend or family stay respondents were assumed to be any respondent that indicated "Friends/Family" as a response to the question "What in particular prompted you to choose South Dakota for your vacation this year?" The remaining respondents were assumed to make up the commercial lodging stay spending. The spending habits of each respondent were separated out into these three categories and added up. As a percentage of total overnight spending, camping spending made up 18.45%, or $191,462,344.35, friend or family stay spending made up 29.40%, or $305,171,759.15 and the remainder of commercial lodging spending made up 52.15%, or $541,330,855.78 (Exhibit 3.5).

Spending per person-night for each of these three categories was determined using the intercept survey. Total camping person-nights were found based on camping respondents' responses to travel party size and number of days spent in South Dakota. This value was used to come up with the percentage of person-nights that were camping. Similar methodology was used to come up with friend/family person-nights, and the remaining percentage was assumed to be commercial lodging person-nights. Using category spending values and dividing them by their portion of person-nights based on the above percentages reveals an estimate of $58.99/person-night for campers, $60.05/person-night for friend/family travelers, and $78.37/person-night for commercial lodging travelers (Exhibit 3.5).

The above tourism data was also aggregated and broken down into the following categories: nonresident tourism, resident tourism, all heritage tourism, nonresident heritage tourism, and resident heritage tourism (Exhibits 3.5, 3.6 and 3.7). Nonresident tourism and resident tourism spending and person stays were estimated based on the proportion of respondent spending and person stays from the intercept survey. Similar methodologies were used on the five subsets of respondents. Heritage tourists were assumed to be respondents that chose "Museums/Historic Places," "Native American Heritage," or "Old West History" as activities that they enjoy participating in during a vacation. The choice of "Visiting National & State Parks" was not used in defining heritage tourism due to the fact that 78.26% of the respondents that chose it also chose at least one of the three heritage options as seen in Exhibits 3.8a-d. Due to this high correlation, it was assumed that the respondents that did not choose one of the three heritage options but did choose "Visiting National & State Parks" were visiting parks that do not have historic significance. Because respondents were allowed to check as many activities as applicable, it was assumed that their heritage spending and person-stays were proportional to the set of activities each respondent selected (e.g. if a respondent selected "Old West History," "Hiking," and "Fishing," then 1/3 of their spending and person-stays were counted towards heritage totals). In addition, it was assumed that only 20 percent of spending was allocated toward heritage tourism spending for heritage respondents indicating "Business" as the reason for their vacation. Based on these assumptions, 21.57% of all tourism person-stays are heritage tourism person-stays and 22.4% of all tourism spending is heritage tourism spending.

As shown in Exhibit 3.5, the proportion of spending to person-stays is slightly higher for heritage than non-heritage tourism. Heritage travelers also have a greater average trip length.

Exhibit 3.5: Heritage & Non-Heritage Tourism Spending in South Dakota			
	All Tourism	**Heritage Tourism**	**Non-Heritage Tourism**
Total Person Stays	15,640,000	3,372,935	12,267,065
Percentage of all person stays	100.00%	21.57%	78.43%
Total Spending	$1,059,201,417.00	$237,252,046.45	$821,949,370.55
Percentage of all spending	100.00%	22.40%	77.60%
Average Trip Length in SD (days)	4.47	5.26	3.23
Average Travel Party Size	3.25	3.36	3.06
Day-Trips			
Person-Days	404,601	46,460	358,141
Day-Trip Spending	$21,236,457.72	$3,127,484.99	$18,108,972.73
$/Person-Day	$52.49	$67.32	$50.56
Night Stays			
Person-Nights	15,235,399	3,326,475	11,908,925
Night Stay Spending	$1,037,964,959.28	$234,124,561.46	$803,840,397.83
Camping			
Spending	$191,462,344.35	$40,831,081.21	$150,631,263.14
Portion of Night Stay Spending	18.45%	17.44%	18.74%
Portion of Night Stays	21.31%	19.34%	21.86%
$/Person-Night	$58.99	$63.48	$57.87
Commercial Lodging			
Spending	$541,330,855.78	$132,589,818.16	$408,741,037.62
Portion of Night Stay Spending	52.15%	56.63%	50.85%
Portion of Night Stays	45.34%	52.47%	43.35%
$/Person-Night	$78.37	$75.97	$79.18
Friends/Family			
Spending	$305,171,759.15	$60,703,662.09	$244,468,097.07
Portion of Night Stay Spending	29.40%	25.93%	30.41%
Portion of Night Stays	33.36%	28.20%	34.80%
$/Person-Night	$60.05	$64.72	$58.99

Source: Total person-stays taken from IHS Global Insight "2010 Tourism Satellite Account" report. Total spending taken from Michael Madden's "Statistical Update: Economic and Fiscal Impacts Associated With the Vacation Travel Industry in South Dakota, November 2009 Through October 2010." All other data derived from these totals and the South Dakota Department of Tourism's "2011 Information Center Intercept Report."

As shown in Exhibit 3.6, non-South Dakotan resident person-stays and spending are many times greater than that of South Dakota residents (non-South Dakotans make up 94.38% of person-stays and 95.39% of spending). As would be expected, they also make longer trips and spend more per person night on camping and commercial lodging.

Exhibit 3.6: Tourism Spending in South Dakota			
	All Tourism	**Non-SD Resident Tourism**	**SD Resident Tourism**
Total Person Stays	15,640,000	14,761,085	878,915
Percentage of all person stays	100.00%	94.38%	5.62%
Total Spending	$1,059,201,417.00	$1,010,344,233.45	$48,857,183.55
Percentage of all spending	100.00%	95.39%	4.61%
Average Trip Length in SD (days)	4.47	4.55	3.34
Average Travel Party Size	3.25	3.24	3.38
Day-Trips			
Person-Days	404,601	384,403	20,197
Day-Trip Spending	$21,236,457.72	$19,292,223.86	$1,944,233.86
$/Person-Day	$52.49	$50.19	$96.26
Night Stays			
Person-Nights	15,235,399	14,376,682	858,718
Night Stay Spending	$1,037,964,959.28	$991,052,009.59	$46,912,949.69
Camping			
Spending	$191,462,344.35	$185,287,396.50	$6,174,947.85
Portion of Night Stay Spending	18.45%	18.70%	13.16%
Portion of Night Stays	21.31%	20.88%	28.45%
$/Person-Night	$58.99	$61.73	$25.27
Commercial Lodging			
Spending	$541,330,855.78	$521,367,126.39	$19,963,729.39
Portion of Night Stay Spending	52.15%	52.61%	42.55%
Portion of Night Stays	45.34%	45.83%	37.18%
$/Person-Night	$78.37	$79.14	$62.53
Friends/Family			
Spending	$305,171,759.15	$284,397,486.69	$20,774,272.46
Portion of Night Stay Spending	29.40%	28.70%	44.28%
Portion of Night Stays	33.36%	33.30%	34.37%
$/Person-Night	$60.05	$59.41	$70.39

Source: Total person-stays taken from IHS Global Insight "2010 Tourism Satellite Account" report. Total spending taken from Michael Madden's "Statistical Update: Economic and Fiscal Impacts Associated With the Vacation Travel Industry in South Dakota, November 2009 Through October 2010." All other data derived from these totals and the South Dakota Department of Tourism's "2011 Information Center Intercept Report."

When it comes to heritage tourism in particular, non-South Dakota residents make up the majority of person-stays and spending. South Dakota heritage travelers tend to spend more per person-night than do non-South Dakota heritage travelers (Exhibit 3.7).

Exhibit 3.7: Heritage Tourism Spending in South Dakota			
	All Heritage Tourism	**Non-SD Resident Heritage Tourism**	**SD Resident Heritage Tourism**
Total Person Stays	3,372,935	3,276,335	96,600
Percentage of all person stays	21.57%	20.95%	0.62%
Total Spending	$237,252,046.45	$228,714,510.54	$8,537,535.91
Percentage of all spending	22.40%	21.59%	0.81%
Average Trip Length in SD (days)	5.26	5.29	4.69
Average Travel Party Size	3.36	3.38	3.02
Day-Trips			
Person-Days	46,460	44,397	2,063
Day-Trip Spending	$3,127,484.99	$2,978,089.65	$149,395.34
$/Person-Day	$67.32	$67.08	$72.41
Night Stays			
Person-Nights	3,326,475	3,231,938	94,537
Night Stay Spending	$234,124,561.46	$225,736,420.88	$8,388,140.57
Camping			
Spending	$40,831,081.21	$39,779,036.79	$1,052,044.42
Portion of Night Stay Spending	17.44%	17.62%	12.54%
Portion of Night Stays	19.34%	19.60%	10.45%
$/Person-Night	$63.48	$62.81	$106.47
Commercial Lodging			
Spending	$132,589,818.16	$129,389,787.91	$3,200,030.25
Portion of Night Stay Spending	56.63%	57.32%	38.15%
Portion of Night Stays	52.47%	52.88%	38.33%
$/Person-Night	$75.97	$75.71	$88.32
Friends/Family			
Spending	$60,703,662.09	$56,567,596.19	$4,136,065.90
Portion of Night Stay Spending	25.93%	25.06%	49.31%
Portion of Night Stays	28.20%	27.52%	51.22%
$/Person-Night	$64.72	$63.59	$85.42

Source: Total person-stays taken from IHS Global Insight "2010 Tourism Satellite Account" report. Total spending taken from Michael Madden's "Statistical Update: Economic and Fiscal Impacts Associated With the Vacation Travel Industry in South Dakota, November 2009 Through October 2010." All other data derived from these totals and the South Dakota Department of Tourism's "2011 Information Center Intercept Report."

Exhibit 3.8a: Totals of Heritage & Park Activity Respondents			
	Heritage	Non-Heritage	Totals
Parks	839	233	1072
Non-Parks	212	436	648
Totals	1051	669	1720

Exhibit 3.8b: Percentage of Total Respondents			
	Heritage	Non-Heritage	Totals
Parks	48.78%	13.55%	62.33%
Non-Parks	12.33%	25.35%	37.67%
Totals	61.10%	38.90%	100.00%

Exhibit 3.8c: Relative Percentages of Heritage/Non-Heritage Respondents		
	Heritage	Non-Heritage
Parks	79.83%	34.83%
Non-Parks	20.17%	65.17%
Totals	100.00%	100.00%

Exhibit 3.8d: Relative Percentages of Park/Non-Park Respondents			
	Heritage	Non-Heritage	Totals
Parks	78.26%	21.74%	100.00%
Non-Parks	32.72%	67.28%	100.00%

Source: South Dakota Department of Tourism's "2011 Information Center Intercept Report"

Travel spending in South Dakota has increased over time. Travel expenditures in this state increased from $1,057 million in 1998 to $2,126 million in 2009.[12] Of total traveler spending in South Dakota, leisure travel (97.7 percent of outlays) is more significant than business travel (2.3 percent of outlays) and spending by non-South Dakota residents (95.4 percent of outlays) far exceeds that of spending by South Dakota residents (4.6 percent of outlays).

Not surprisingly, overnight travelers to South Dakota spend more than day-trip travelers. In 2011, day-trip travelers to the state spent about $53 per trip while overnight hotel travelers expended $350 per trip.

Heritage travel is an important component of the travel industry in South Dakota. Of all those surveyed (the full 1,720), visiting historic sites was cited as one of the top four activities enjoyed on leisure trips. Scenic drives was the most frequently cited activity (72 percent), followed by visiting national and state parks (62 percent), visiting local attractions/events (57 percent) and museums/historic sites (51 percent).

What is the profile of the heritage traveler to South Dakota? Information gathered from responses to the South Dakota Department of Tourism's "2011 Information Center Intercept Report" gave characteristics of travelers to South Dakota and we present these below.

We begin by presenting the top traveler origins by state (Exhibit 3.9a), the traveler origins by region of the United States (Exhibit 3.9c) and travel origins from what are termed "In-target" (states comprising the

[12] US Census

primary market for South Dakota Tourism (Exhibit 3.9d)). In all instances, we present the data for all responses to the intercept survey and then show the responses separately for the heritage versus non-heritage travel subgroups as earlier defined.

While there were many similarities in where both heritage and non-heritage travelers are coming from, we observe some differences. For example, a higher share of heritage travelers come from afar, such as more distant regions of the United States (e.g., New England and the Middle Atlantic regions) as well as Europe and Asia (see Exhibit 3.9c).

Exhibit 3.9: Intercept Survey (2011) Response Frequency Tables

Exhibit 3.9a: Top Origins of All Respondents

Origin	Frequency	Percentage
Minnesota	217	12.62%
Iowa	139	8.08%
South Dakota	117	6.80%
Wisconsin	98	5.70%
Illinois	90	5.23%
Nebraska	76	4.42%
Michigan	68	3.95%
North Dakota	67	3.90%
Washington	58	3.37%
California	54	3.14%
Ohio	50	2.91%
Canada	48	2.79%
Missouri	46	2.67%
Florida	41	2.38%
Pennsylvania	39	2.27%
Colorado	37	2.15%
Indiana	37	2.15%
Other/No Response	438	25.47%

Exhibit 3.9b: Top Origins of Heritage & Non-Heritage Respondents

	Heritage		**Non-Heritage**	
Origin	Frequency	Percentage	Frequency	Percentage
Minnesota	113	10.75%	104	15.55%
Iowa	79	7.52%	60	8.97%
Wisconsin	76	7.23%	68	10.16%
Illinois	60	5.71%	22	3.29%
South Dakota	49	4.66%	30	4.48%
Ohio	45	4.28%	42	6.28%
Michigan	44	4.19%	24	3.59%
California	40	3.81%	42	6.28%
Washington	35	3.33%	23	3.44%
Nebraska	34	3.24%	14	2.09%
Pennsylvania	32	3.04%	5	0.75%

Florida	30	2.85%	18	2.69%
Canada	30	2.85%	19	2.84%
Indiana	28	2.66%	11	1.64%
Missouri	27	2.57%	7	1.05%
North Dakota	25	2.38%	20	2.99%
Arizona	22	2.09%	9	1.35%
Other/No Response	282	26.83%	151	22.57%

Exhibit 3.9c: Respondent Origin

Region	Division	All		Heritage		Non-Heritage	
		Freq	%	Freq	%	Freq	%
1	New England (CT, ME, MA, NH, RI, VT)	24	1.40%	18	1.71%	6	0.90%
	Middle Atlantic (NJ, NY, PA)	69	4.01%	56	5.33%	13	1.94%
2	East North Central (IL, IN, MI, OH, WI)	343	19.94%	253	24.07%	90	13.45%
	West North Central (IA, KS, MN, MO, NE, ND, SD)	692	40.23%	346	32.92%	346	51.72%
3	South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)	123	7.15%	88	8.37%	35	5.23%
	East South Central (AL, KY, MS, TN)	47	2.73%	29	2.76%	18	2.69%
	West South Central (AR, LA, OK, TX)	57	3.31%	39	3.71%	18	2.69%
4	Mountain (AZ, CO, ID, MT, NM, NV, UT, WY)	165	9.59%	90	8.56%	75	11.21%
	Pacific (AK, CA, HI, OR, WA)	134	7.79%	91	8.66%	43	6.43%
	Canada	48	2.79%	30	2.85%	18	2.69%
	Europe/Australia	8	0.47%	8	0.76%	0	0.00%
	No Response	10	0.58%	3	0.29%	7	1.05%
	Total	1720	100%	1051	100%	669	100%

Exhibit 3.9d: "In-Target" Respondent origin

Origin	All		Heritage		Non-Heritage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Colorado	37	4.47%	17	3.91%	20	5.10%
Iowa	139	16.81%	79	18.16%	60	15.31%
Minnesota	217	26.24%	113	25.98%	104	26.53%
Nebraska	76	9.19%	34	7.82%	42	10.71%
North Dakota	67	8.10%	25	5.75%	42	10.71%
South Dakota	117	14.15%	49	11.26%	68	17.35%
Wisconsin	98	11.85%	76	17.47%	22	5.61%
Wyoming	28	3.39%	12	2.76%	16	4.08%
Canada	48	5.80%	30	6.90%	18	4.59%
Total	827	100.00%	435	100.00%	392	100.00%

Heritage travelers to South Dakota are more likely to have South Dakota as their primary destination for the trip (Exhibit 3.9e) and are more likely to have certain cities in South Dakota as their top primary

destinations (e.g., Rapid City, Custer and Deadwood). Heritage travelers not having South Dakota as their primary destination are more likely to have Yellowstone National Park as their primary vacation destination.

Exhibit 3.9e: Is South Dakota a primary destination on this trip?

	All		Heritage		Non-Heritage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	1021	59.36%	688	65.46%	333	49.78%
No	673	39.13%	349	33.21%	324	48.43%
No Response	26	1.51%	14	1.33%	12	1.79%
Total	1720	100.00%	1051	100.00%	669	100.00%

Top Primary Destination Cities

	All		Heritage		Non-Heritage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Rapid City	268	26.25%	194	28.20%	74	22.22%
Custer	68	6.66%	55	7.99%	13	3.90%
Deadwood	59	5.78%	46	6.69%	13	3.90%
Sioux Falls	54	5.29%	16	2.33%	38	11.41%
Spearfish	37	3.62%	23	3.34%	14	4.20%
Aberdeen	17	1.67%	6	0.87%	11	3.30%
Watertown	17	1.67%	10	1.45%	7	2.10%
Yankton	16	1.57%	6	0.87%	10	3.00%
Lead	13	1.27%	11	1.60%	2	0.60%
Pierre	11	1.08%	7	1.02%	4	1.20%
Sturgis	11	1.08%	8	1.16%	3	0.90%
Other/No Response	450	44.07%	306	44.48%	144	43.24%

If No, What is your primary vacation destination?

	All		Heritage		Non-Heritage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Glacier National Park	9	1.34%	5	1.43%	4	1.23%
Yellowstone National Park	68	10.10%	47	13.47%	21	6.48%
Other	555	82.47%	274	78.51%	281	86.73%
No Response	41	6.09%	23	6.59%	18	5.56%
Total	673	100.00%	349	100.00%	324	100.00%

Non-heritage tourists have greater than average entire vacation (South Dakota and elsewhere) trip lengths of 1, 2, 3, 5, and 6 days, while heritage tourists have greater than average trip lengths of 7-10 days, and 13, 14, and 15-29 days. Heritage tourists on average spend more days in South Dakota—they have greater than average trips with 4, 5, 6, 7, and 8+ days. As noted in Exhibit 3.5, heritage travelers have a longer average trip length in South Dakota (5.26 days versus 3.23 days).

Exhibit 3.9f: How many days total will you be spending on your ENTIRE VACATION?									
	All			**Heritage**			**Non-Heritage**		
	Freq.	%	Cum. %	Freq.	%	Cum. %	Freq.	%	Cum. %
1 Day	29	1.69%	1.69%	7	0.67%	0.67%	22	3.29%	3.29%
2 Days	51	2.97%	4.65%	15	1.43%	2.09%	36	5.38%	8.67%
3 Days	70	4.07%	8.72%	22	2.09%	4.19%	48	7.17%	15.84%
4 Days	115	6.69%	15.41%	74	7.04%	11.23%	41	6.13%	21.97%
5 Days	158	9.19%	24.59%	83	7.90%	19.12%	75	11.21%	33.18%
6 Days	96	5.58%	30.17%	57	5.42%	24.55%	39	5.83%	39.01%
7 Days	176	10.23%	40.41%	117	11.13%	35.68%	59	8.82%	47.83%
8 Days	91	5.29%	45.70%	59	5.61%	41.29%	32	4.78%	52.62%
9 Days	65	3.78%	49.48%	46	4.38%	45.67%	19	2.84%	55.46%
10 Days	164	9.53%	59.01%	111	10.56%	56.23%	53	7.92%	63.38%
11 Days	32	1.86%	60.87%	18	1.71%	57.94%	14	2.09%	65.47%
12 Days	66	3.84%	64.71%	38	3.62%	61.56%	28	4.19%	69.66%
13 Days	16	0.93%	65.64%	11	1.05%	62.61%	5	0.75%	70.40%
14 Days	135	7.85%	73.49%	88	8.37%	70.98%	47	7.03%	77.43%
15-29 Days	218	12.67%	86.16%	150	14.27%	85.25%	68	10.16%	87.59%
30+ Days	182	10.58%	96.74%	131	12.46%	97.72%	51	7.62%	95.22%
No Resp.	56	3.26%	100.00%	24	2.28%	100.00%	32	4.78%	100.00%
Total	1720	100.00%		1051	100.00%		669	100.00%	

How many days of your vacation will you be spending IN SOUTH DAKOTA?									
	All			**Heritage**			**Non-Heritage**		
	Freq.	%	Cum. %	Freq.	%	Cum. %	Freq.	%	Cum. %
1 Day	191	11.10%	11.10%	54	5.14%	5.14%	137	20.48%	20.48%
2 Days	337	19.59%	30.70%	179	17.03%	22.17%	158	23.62%	44.10%
3 Days	250	14.53%	45.23%	152	14.46%	36.63%	98	14.65%	58.74%
4 Days	222	12.91%	58.14%	166	15.79%	52.43%	56	8.37%	67.12%
5 Days	222	12.91%	71.05%	160	15.22%	67.65%	62	9.27%	76.38%
6 Days	106	6.16%	77.21%	79	7.52%	75.17%	27	4.04%	80.42%
7 Days	111	6.45%	83.66%	83	7.90%	83.06%	28	4.19%	84.60%
8+ Days	190	11.05%	94.71%	154	14.65%	97.72%	36	5.38%	89.99%
No Resp.	91	5.29%	100.00%	24	2.28%	100.00%	67	10.01%	100.00%
Total	1720	100.00%		1051	100.00%		669	100.00%	

Heritage travelers are more likely to note Mount Rushmore/Badlands/Crazy Horse, vacation affordability, hospitality, scenery, "wanted to return," and specific attraction or event as the reason for their visit (Exhibit 3.9g). Heritage travelers are also more likely than average to stop for information regarding attractions and activities, events and festivals, lodging and dining, local culture and history, etc.

Exhibit 3.9g: What in particular prompted you to choose South Dakota for your vacation this year?(choose all that apply)

	All		Heritage		Non-Heritage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Mount Rushmore, Badlands, or Crazy Horse	693	40.29%	598	56.90%	95	14.20%
Affordability	237	13.78%	180	17.13%	57	8.52%
Business	39	2.27%	16	1.52%	23	3.44%
Close to Home	208	12.09%	133	12.65%	75	11.21%
Friends/Family	460	26.74%	261	24.83%	199	29.75%
Hospitality	199	11.57%	154	14.65%	45	6.73%
Scenery	696	40.47%	523	49.76%	173	25.86%
Wanted to Return	372	21.63%	276	26.26%	96	14.35%
Specific Attraction or Event	301	17.50%	231	21.98%	70	10.46%
Other	661	38.43%	435	41.39%	226	33.78%
No Response	109	6.34%	34	3.24%	75	11.21%
Total Respondents	1720		1051		669	

Which of the following describes the reason(s) for your stop at the Information Center? (choose all that apply)

	All		Heritage		Non-Heritage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Attraction & Activity Information	609	35.41%	484	46.05%	125	18.68%
Event & Festival Information	88	5.12%	75	7.14%	13	1.94%
Lodging & Dining Information	152	8.84%	115	10.94%	37	5.53%
Local Culture & History Information	267	15.52%	235	22.36%	32	4.78%
Road & Weather Information	193	11.22%	131	12.46%	62	9.27%
To Get Directions & Maps	642	37.33%	468	44.53%	174	26.01%
Travel Break (stretch, walk pets, etc.)	1201	69.83%	757	72.03%	444	66.37%
Use restrooms	1376	80.00%	834	79.35%	542	81.02%
Other	74	4.30%	49	4.66%	25	3.74%
No Response	19	1.10%	6	0.57%	13	1.94%
Total Respondents	1720		1051		669	

Heritage travelers are also more likely than non-heritage travelers to visit the South Dakota tourism website and use an official South Dakota Vacation Guide. They are also more likely to book trips online.

Exhibit 3.9h: Have you ever visited the South Dakota state tourism website, www.TravelSD.com?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	416	24.19%	294	27.97%	122	18.24%
No	1276	74.19%	743	70.69%	533	79.67%
No Response	28	1.63%	14	1.33%	14	2.09%
Total	1720	100.00%	1051	100.00%	669	100.00%
While traveling in South Dakota, are you using an official South Dakota Vacation Guide?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	710	41.28%	546	51.95%	164	24.51%
No	983	57.15%	494	47.00%	489	73.09%
No Response	27	1.57%	11	1.05%	16	2.39%
Total	1720	100.00%	1051	100.00%	669	100.00%
Did you book any part of this trip online?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	645	37.50%	439	41.77%	206	30.79%
No	1056	61.40%	608	57.85%	448	66.97%
No Response	19	1.10%	4	0.38%	15	2.24%
Total	1720	100.00%	1051	100.00%	669	100.00%
Have you booked a previous trip online?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	824	47.91%	537	51.09%	287	42.90%
No	763	44.36%	445	42.34%	318	47.53%
No Response	133	7.73%	69	6.57%	64	9.57%
Total	1720	100.00%	1051	100.00%	669	100.00%

Heritage travelers are more likely to finalize lodging and activity plans during their trip. This might mean that they are more flexible travelers, and more likely to be influenced to visit new or unplanned places during their trip. We also observe that South Dakota heritage travelers are somewhat less likely to have previously visited the state (64% versus 75%). Thus, heritage attractions may have a greater ability to attract "new travel customers" to come to South Dakota (Exhibit 3.9i).

Exhibit 3.9i: When were all your LODGING plans finalized?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
ALL BEFORE trip	697	40.52%	389	37.01%	308	46.04%
MOST BEFORE trip	152	8.84%	100	9.51%	52	7.77%
Some BEFORE & Some DURING	345	20.06%	231	21.98%	114	17.04%
ALL DURING trip	448	26.05%	300	28.54%	148	22.12%
No Response	78	4.53%	31	2.95%	47	7.03%
Total	1720	100.00%	1051	100.00%	669	100.00%
When were all your ACTIVITY plans finalized?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
ALL BEFORE trip	347	20.17%	155	14.75%	192	28.70%
MOST BEFORE trip	266	15.47%	176	16.75%	90	13.45%
Some BEFORE & Some DURING	664	38.60%	457	43.48%	207	30.94%
ALL DURING trip	360	20.93%	233	22.17%	127	18.98%
No Response	83	4.83%	30	2.85%	53	7.92%
Total	1720	100.00%	1051	100.00%	669	100.00%
Have you been to South Dakota prior to this trip?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	1180	68.60%	676	64.32%	504	75.34%
No	417	24.24%	325	30.92%	92	13.75%
SD resident	106	6.16%	40	3.81%	66	9.87%
No Response	17	0.99%	10	0.95%	7	1.05%
Total	1720	100.00%	1051	100.00%	669	100.00%
If yes, how long ago was your last visit?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Less than 1 year	178	15.08%	67	9.91%	111	22.02%
Between 1 & 2 years	221	18.73%	118	17.46%	103	20.44%
Between 2 & 3 years	120	10.17%	68	10.06%	52	10.32%
Between 3 & 5 years	124	10.51%	72	10.65%	52	10.32%
Over 5 years	342	28.98%	230	34.02%	112	22.22%
No Response	195	16.53%	121	17.90%	74	14.68%
Total	1180	100.00%	676	100.00%	504	100.00%

As noted in Exhibit 3.9j, heritage travelers are more likely than non-heritage travelers to have larger travel parties (they have a higher-than-average amount of parties comprising 3, 4 and 5+ people). The average travel party size is larger for heritage (3.36 persons) than non-heritage travelers (3.06) (Exhibit 3.5). We also observe that heritage traveler parties tend to contain fewer younger adults (5 percent of the adults in

the heritage travel party are 18-24 years old against 10 percent for non-heritage traveler parties) (Exhibit 3.9j). Heritage travel parties, however, are somewhat more likely to contain children under 18; about 33 percent contain one or more children as against 26 percent for non-heritage groups. All travel parties to South Dakota, both heritage and non-heritage, have gender parity; they are roughly equally divided between males and females (Exhibit 3.9j).

Exhibit 3.9j: Including yourself, how many people are in your travel party?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1	128	7.44%	59	5.61%	69	10.31%
2	836	48.60%	501	47.67%	335	50.07%
3	236	13.72%	150	14.27%	86	12.86%
4	253	14.71%	162	15.41%	91	13.60%
5+	248	14.42%	171	16.27%	77	11.51%
No Response	19	1.10%	8	0.76%	11	1.64%
Total	1720	100.00%	1051	100.00%	669	100.00%
How many children (under 18) are in your travel party?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
0	1160	67.44%	680	64.70%	480	71.75%
1	186	10.81%	119	11.32%	67	10.01%
2	204	11.86%	137	13.04%	67	10.01%
3+	135	7.85%	96	9.13%	39	5.83%
No Response	35	2.03%	19	1.81%	16	2.39%
Total	1720	100.00%	1051	100.00%	669	100.00%
What are the genders of the ADULTS in your party?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Males	2021	45.92%	1237	46.24%	784	45.42%
Females	2353	53.47%	1430	53.46%	923	53.48%
No Response	27	0.61%	8	0.30%	19	1.10%
Total	4401	100.00%	2675	100.00%	1726	100.00%
What are the ages of the ADULTS in your party?						
	All		**Heritage**		**Non-Heritage**	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
18-24	305	6.93%	131	4.90%	174	10.08%
25-34	312	7.09%	189	7.07%	123	7.13%
35-54	1253	28.47%	819	30.62%	434	25.14%
55-64	1238	28.13%	767	28.67%	471	27.29%
65+	1266	28.77%	761	28.45%	505	29.26%
No Response	27	0.61%	8	0.30%	19	1.10%
Total	4401	100.00%	2675	100.00%	1726	100.00%

We earlier observed (Exhibit 3.5) that heritage travelers tend to spend somewhat more than their non-heritage counterparts. For instance, when it comes to day trips, the heritage travelers spend $67 per person, per day as against an average of $51 for the non-heritage traveler. Also, heritage travelers spend about $70 per person-night and while non-heritage travelers spend about $67.50 per person-night. We also observe some evidence of higher heritage spending in Exhibit 3.9k. While about 12 percent of non-heritage travel parties spend under $50 daily, that modest spending is occasioned by only 2 percent of heritage travel parties. Further to this trend, heritage tourists have a greater than average likelihood to spend between $150 and $599 per day (Exhibit 3.9k).

Exhibit 3.9k: Approximately, how much are you spending per day for your entire travel party? (including fuel, accommodations, meals, attractions, extras)

	All		Heritage		Non-Heritage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Under $50	100	5.81%	22	2.09%	78	11.66%
$50-$99	262	15.23%	118	11.23%	144	21.52%
$100-$149	380	22.09%	238	22.65%	142	21.23%
$150-$199	301	17.50%	208	19.79%	93	13.90%
$200-$249	247	14.36%	178	16.94%	69	10.31%
$250-$299	125	7.27%	95	9.04%	30	4.48%
$300-$399	110	6.40%	80	7.61%	30	4.48%
$400-$499	51	2.97%	40	3.81%	11	1.64%
$500-$599	31	1.80%	21	2.00%	10	1.49%
Over $600	48	2.79%	28	2.66%	20	2.99%
No Response	65	3.78%	23	2.19%	42	6.28%
Total	1720	100.00%	1051	100.00%	669	100.00%

Heritage travel parties are somewhat *less likely* to travel to South Dakota in a private vehicle compared to non-heritage travelers (77 percent versus 81 percent). Conversely, heritage travel parties are more likely to use other forms of transportation, such as an airplane (5 percent versus 2 percent) and a rental car (6 percent versus 2 percent).

Exhibit 3.9l: How did your party primarily travel to South Dakota? (choose all that apply)

	All		Heritage		Non-Heritage	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Private Vehicle	1353	78.66%	809	76.97%	544	81.32%
Fly	63	3.66%	49	4.66%	14	2.09%
RV/Camper	224	13.02%	158	15.03%	66	9.87%
Semi/OTR	24	1.40%	7	0.67%	17	2.54%
Motorcycle	41	2.38%	28	2.66%	13	1.94%
Tour Bus	8	0.47%	5	0.48%	3	0.45%
Rental Car	79	4.59%	63	5.99%	16	2.39%
Other	8	0.47%	4	0.38%	4	0.60%
No Response	19	1.10%	7	0.67%	12	1.79%
Total Respondents	1720		1051		669	

With respect to vacation-enjoyed activities, heritage travelers (by our definition of the same) identify the following: "museum/historic places," "Native American Heritage," and "Old West History." In addition to the three definitional activities just noted, heritage travelers tend to enjoy certain activities much more so than their non-heritage counterparts. Examples include: "Geology/Fossils" (28% versus 5%), "Local Attractions/Events" (73% versus 31%), "Visiting National and State Parks" (80% versus 35%), and "Scenic Drives" (85% versus 51%), (See Exhibit 3.9m for details.)

Exhibit 3.9m: Which type of activities do you enjoy participating in during a vacation? (choose all that apply)

	All		Heritage		Non-Heritage	
	Frequency	%	Frequency	%	Frequency	%
Archeology/Geology/Fossils	330	19.19%	298	28.35%	32	4.78%
Biking	82	4.77%	59	5.61%	23	3.44%
Boating/Water Activities	121	7.03%	82	7.80%	39	5.83%
Camping	368	21.40%	262	24.93%	106	15.84%
Fishing	113	6.57%	79	7.52%	34	5.08%
Gambling	264	15.35%	193	18.36%	71	10.61%
Golfing	66	3.84%	38	3.62%	28	4.19%
Hiking	420	24.42%	319	30.35%	101	15.10%
Local Attractions/Events	977	56.80%	767	72.98%	210	31.39%
Museums/Historic Places	**882**	**51.28%**	**882**	**83.92%**	**0**	**0.00%**
Native American Heritage	**532**	**30.93%**	**532**	**50.62%**	**0**	**0.00%**
Old West History	**596**	**34.65%**	**596**	**56.71%**	**0**	**0.00%**
Scenic Drives	1235	71.80%	891	84.78%	344	51.42%
Visiting National & State Parks	1072	62.33%	839	79.83%	233	34.83%
Water Parks	92	5.35%	67	6.37%	25	3.74%
Wildlife Viewing	776	45.12%	626	59.56%	150	22.42%
Wineries	160	9.30%	126	11.99%	34	5.08%
Other	161	9.36%	50	4.76%	111	16.59%
No Response	118	6.86%	0	0.00%	118	17.64%
Total Respondents	1720		1051		669	

In sum, the above is a reconnaissance investigation into the characteristics of heritage travelers to South Dakota. This is an exploratory effort that needs to be built on and refined in the future.

Let us turn to a key goal of analyzing the South Dakota traveler intercept information—estimating the annual spending of heritage travelers in this state. Based on our definition of the South Dakota heritage traveler (trip interest in "Museum/Historic Places," "Native American Heritage" and "Old West History") and the trip intercept travel survey-indicated spending by such heritage travelers, Rutgers estimates that of total 2011 tourism spending in South Dakota of $1,059,201,417, $237,252,047, or 22 percent, was spent by heritage travelers (Exhibit 3.5). This annual $237 million heritage travel spending is then entered into our input-output model to quantify total annual economic impacts.

TOTAL ANNUAL IMPACTS FROM HERITAGE TOURISM

The following section translates the $237 million annual South Dakota heritage travel-attributed direct spending into total economic benefits by applying the Preservation Economic Impact Model (PEIM). An overview of the results is contained below. Detailed results are contained in Exhibits 3.11 through 3.16.

EXHIBIT 3.10
Total Economic Impacts of Annual South Dakota Heritage Tourism Spending ($237 million), 2011

	In-State	*Out-of-State*	*Total (U.S.)*
Jobs (person years)	4,970	851	5,821
Income ($millions)	79.3	31.4	110.7
Output ($millions)	243.3	130.3	373.6
GDP/GSP ($millions)	124.4	56.2	180.6
Total taxes ($millions)	39.1	6.9	46.0
Federal ($millions)	24.4	2.0	26.4
State/Local ($millions)	14.7	4.9	19.6
In-state wealth ($millions)	100.0	---	---

Nationally, the total (direct and multiplier) economic impacts from an annual $237 million in South Dakota heritage tourism spending include $374 million in output, 5,821 jobs, $111 million in earned income, and $181 million in GDP (Exhibit 3.10 and Exhibit 3.11 for greater detail). For South Dakota in particular, this translates to an additional $243 million in output, 4,970 jobs, $79 million in earned income, and $124 million in GSP (Exhibit 3.10). Subtracting federal taxes from the GSP figure means that in-state wealth derived from heritage tourism amounts to $100 million.

Of the total 5,821 jobs generated nationwide by South Dakota heritage tourism, the bulk are in two major industries: retail trade (2,900 jobs) and services (1,892 jobs) (see Exhibit 3.11). Of the total $111 million in national labor income generated, these same two industries account for $36 million and $33 million respectively. Simple division of the number of jobs into the amount of labor income generated shows that nationwide, the labor income per job supporting heritage tourism is $12,515 for retail trade and $17,667 for services. Because of South Dakota heritage tourism's emphasis in retail trade and services, the nation's average labor income per job supporting the tourism is $19,015. This figure is substantially lower than the $34,985 national average income per job supporting the state's historic building rehabilitation since the latter requires many more high-paying construction jobs.

The difference in job quality is even greater between the national jobs created indirectly and directly by South Dakota heritage tourism. Items 1 and 2 in Section II of Exhibit 3.11 reveal that indirectly created jobs pay on average $30,728, while jobs created directly pay on average $14,979—a difference of $15,749 per job. Low-paying jobs, in a way, indirectly create high-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 breakdown of national economic impacts by industry (Exhibit 3.12) shows that of the 1,892 jobs created in service industries, about 48.5 percent (918 jobs) are in the hotels/lodging category. Further, about 86 percent of the 2,900 retail jobs created through South Dakota heritage tourism are in eating/drinking establishments (2,487 jobs). These two industries are characterized for paying low wages (although the income numbers in this study include reported tips as well) and have an above-average share of part-time jobs. A detailed breakdown of national-level jobs by occupation resulting from South Dakota heritage tourism is shown in Exhibit 3.13. Not surprisingly given the nature of tourism, significant employment is found in marketing and sales occupations (650 jobs) and service occupations (2,836 jobs).

An evaluation of job productivity (GDP per job) reveals an even larger gap of $28,845 ($52,471 versus $23,626) between national indirect and direct jobs supporting South Dakota heritage tourism. The differences between the two indirect-to-direct-job pay gaps (labor income/job and GDP/job) suggest that heritage tourism is far more profitable to firms indirectly affected by the industry. At any rate, the pay gap between the indirectly and directly created jobs in this category causes the traditional national multiplier for labor income to be higher for heritage tourism (1.71) than for historic building rehabilitation (1.58). It also causes the national employment multiplier for heritage tourism (1.35) to be quite low (e.g., this multiplier is 1.66 for historic rehabilitation).

Which helps the national economy more on average, $1 million in heritage tourism spending or $1 million in historic building rehabilitation? The lower portion of Exhibits 3.11 and 2.25 informs the answer: historic building rehabilitation provides a higher return for income and GSP, but a lower return for employment. One can also readily infer that weak investment in historic building rehabilitation will eventually lead to lower annual spending on heritage tourism. Nonetheless, while historic building rehabilitation may technically "help" the national economy more than heritage tourism, it may be difficult to get one without the other.

Exhibits 3.14 through 3.16 present the total economic effects of South Dakota heritage tourism spending within the state. Item 1 in Section II of Exhibit 3.14 shows that South Dakota retains about 4,174 or 96 percent, of the total direct jobs (4,329) created in support of heritage tourism. This percentage is higher than the 86 percent job retention rate for historic building rehabilitation. South Dakota retains a lower proportion of the indirect and induced heritage tourism employment impacts—only about 53 percent (797 of 1,492 jobs).

In sum, through heritage tourism South Dakota gains 4,970 jobs (85.4 percent of 5,821 jobs total), $79 million in income (71 percent of $111 million total), $243 million in output (65 percent of $373.6 million total), and $124 million in GSP (69 percent of $180.6 million total GDP). Heritage tourism's state multiplier effects (measured by subtracting one from the multipliers and dividing the region's multiplier by the nation's) are about 50 percent of the nation's (Exhibits 3.11 and 3.14). Thus, the economic benefits of heritage tourism that accrue to South Dakota are concentrated in the direct effects.

Finer-grained detail of state impacts by industry (Exhibit 3.15) and occupation (Exhibit 3.16) are also quantified and reflect concentrations similar to those noted at the national level. Of the 4,970 total state-level jobs derived from South Dakota heritage tourism, most are to be found in eating/drinking establishments (2,441 jobs) and hotels/lodging (896 jobs). Of the total $79 million in annual state income generated by South Dakota heritage tourism, the eating/drinking and hotels/lodging industries garner $27.6 million and $12.7 million, respectively. The eating/drinking and hotels/lodging industries also comprise $42 million and $22.6 million, respectively, of the total $124 million increase in GSP (Exhibit 3.15).

A detailed break-out of the in-state jobs generated by South Dakota heritage tourism by occupation is found in Exhibit 3.16. Of the total 4,970 jobs, 2,744 are in service occupations (e.g., 2,273 jobs in food preparation), 578 in marketing and sales occupations (e.g., 253 cashiers), and 467 in administrative occupations (e.g., 128 clerical and administrative support workers).

Heritage travel in South Dakota generates important tax income to the state. The $237 million in 2011 South Dakota heritage tourism generates to the state of South Dakota about $8 million in state taxes and $7 million in local taxes (Exhibit 3.14). That is in addition to about $24 million in federal taxes paid by South Dakota businesses and individuals affected by heritage tourism in the state.

As just detailed, heritage tourism in South Dakota generates considerable economic benefit in terms of jobs, wealth created, income earned, etc. But that is not the full picture. Many heritage travelers to South Dakota come from out of state. Thus, heritage travel is an optimal strategy of economic pump priming. Additionally, heritage travel in South Dakota is often contextually most important to the economic vitality of the host communities containing the historic resources that are visited.

CONCLUSION

In sum, the travel spending in South Dakota is a key industry and in turn, heritage travel is an important component of South Dakota's overall travel sector. The overall travel industry in South Dakota has potential for even greater growth and enhanced heritage tourism can help realize that potential.

Heritage travel is intrinsically important to South Dakota in a number of ways. First, it has the potential to increase overall travel and tourism in the state with attendant economic benefits. Further, heritage tourism can broaden the appeal of the state both generally and to specific ethnic/minority groups which are frequently drawn to sites like those in South Dakota (e.g., Native Americans). Even better, heritage tourism nationally attracts higher percentages of overnight travelers, who are more likely to both be from out-of-state and spend more on their trips.

As elsewhere, heritage travel in South Dakota can benefit from changes occurring generally in the country and from economic and demographic trends affecting travel. These include: an aging population; a population with enhanced interest in education, tradition, and roots; a large baby-boom population with discretionary income; and an increase in family travel, domestic travel, and shorter-duration and shorter-distance trips. Thus, heritage travel is important to South Dakota tourism today and might be yet more important in the future.

EXHIBIT 3.11
Total National Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	6,141.5	14	367.2	518.3
2. Agri. Serv., Forestry, & Fish	456.8	4	193.9	411.1
3. Mining	3,989.6	8	609.5	1,758.9
4. Construction	5,907.3	40	1,341.5	2,399.2
5. Manufacturing	75,465.9	365	15,573.9	25,434.7
6. Transport. & Public Utilities	22,965.4	211	6,133.7	11,429.4
7. Wholesale	16,660.9	163	6,775.2	8,228.5
8. Retail Trade	103,710.6	2,900	36,293.9	57,909.1
9. Finance, Ins., & Real Estate	32,221.4	198	9,251.2	22,575.0
10. Services	103,647.7	1,892	33,426.7	48,777.2
11. Government	2,386.5	27	722.0	1,124.9
Total Effects (Private and Public)	373,553.6	5,821	110,688.7	180,566.3
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	208,627.2	4,329	64,842.3	102,279.1
2. Indirect and Induced Effects	164,926.4	1,492	45,846.4	78,287.1
3. Total Effects	373,553.6	5,821	110,688.7	180,566.3
4. Multipliers (3/1)	1.791	1.345	1.707	1.765
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				106,003.9
2. Taxes				31,311.8
a. Local				7,754.3
b. State				9,868.5
c. Federal				13,689.0
General				4,824.5
Social Security				8,864.5
3. Profits, dividends, rents, and other				43,250.6
4. Total Gross State Product (1+2+3)				180,566.3
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		106,003.9	82,679.5	
2. Taxes		31,311.8	14,699.8	46,011.6
a. Local		7,754.3	1,956.5	9,710.7
b. State		9,868.5	0.0	9,868.5
c. Federal		13,689.0	12,743.3	26,432.3
General		4,824.5	12,743.3	17,567.8
Social Security		8,864.5	0.0	8,864.5
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				24.5
Income				466,545
State/Local Taxes				82,525
Gross State Product				761,074
INITIAL EXPENDITURE IN DOLLARS				237,252,046

EXHIBIT 3.12: National Industrial Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

SECTOR/INDUSTRY	Output	Employment	Income	Gross State Prod.
Agriculture	**6,141.5**	**14**	**367.2**	**518.3**
Dairy Farm Products	1,226.9	3	73.3	60.4
Eggs	30.8	0	1.4	1.6
Meat Animals	2,818.2	4	126.3	146.3
Misc. Livestock	25.6	0	2.2	2.4
Wool	8.0	0	0.7	0.7
Cotton	70.8	0	7.0	9.8
Tobacco	5.6	0	0.3	0.8
Grains & Misc. Crops	184.8	0	4.6	28.9
Feed Crops	761.4	1	16.5	110.3
Fruits & Nuts	578.8	4	97.2	80.6
Vegetables	95.8	0	12.1	16.0
Greenhouse/Nursery Products	76.5	1	14.2	18.2
Sugar Beets & Cane	70.2	0	1.6	14.1
Flaxseed, Peanuts, Soybean	188.0	0	9.9	28.1
Agri. Serv., Forestry, & Fish	**456.8**	**4**	**193.9**	**411.1**
Agri. Services (07)	322.5	4	166.5	290.3
Forestry (08)	44.8	0	4.0	40.4
Fishing, Hunting, Trapping (09)	89.4	0	23.5	80.5
Mining	**3,989.6**	**8**	**609.5**	**1,758.9**
Coal Mining (12)	331.1	1	102.9	298.0
Oil & Gas Extraction (13)	3,557.8	6	477.0	1,392.7
Nonmetal Min.-Ex. Fuels (14)	71.9	0	22.1	48.3
Metal Mining (10)	28.7	0	7.4	19.8
Construction	**5,907.3**	**40**	**1,341.5**	**2,399.2**
General Bldg. Contractors (15)	1,772.4	17	553.7	892.5
Heavy Const. Contractors (16)	437.8	5	201.9	264.8
Special Trade Contractors (17)	3,697.2	18	585.8	1,241.9
Manufacturing	**75,465.9**	**365**	**15,573.9**	**25,434.7**
Food & Kindred Prod. (20)	20,034.5	73	2,786.7	5,342.9
Tobacco Manufactures (21)	612.6	1	52.4	418.0
Textile Mill Prod. (22)	1,610.2	11	400.3	15.1
Apparel & Other Prod. (23)	2,988.7	24	837.9	883.4
Limber & Wood Prod. (24)	738.5	5	170.4	219.6
Furniture & Fixtures (25)	552.4	5	163.9	301.3
Paper & Allied Prod. (26)	2,375.9	10	523.2	920.1
Chemicals & Allied Prod. (28)	8,856.4	22	1,513.9	2,996.1
Petroleum & Coal Prod. (29)	8,344.0	4	412.7	1,519.9
Rubber & Misc. Plastics (30)	1,910.8	12	535.1	669.0
Leather & Leather Prod. (31)	551.6	4	146.8	232.3
Stone, Clay, & Glass (32)	697.9	5	221.7	323.2
Primary Metal Prod. (33)	812.0	3	176.3	246.6
Fabricated Metal Prod. (34)	1,653.1	12	465.0	482.6
Machinery, Except Elec. (35)	1,183.7	8	384.7	402.4
Electric & Elec. Equip. (36)	2,065.3	8	525.7	921.5
Transportation Equipment (37)	4,032.2	17	696.1	1,732.1
Instruments & Rel. Prod. (38)	2,283.0	10	514.0	1,439.0
Misc. Manufacturing Inds. (39)	9,624.1	85	3,653.8	4,505.8
Printing & Publishing (27)	4,538.9	46	1,393.2	1,864.0

EXHIBIT 3.12: National Industrial Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

Transport. & Public Utilities	**22,965.4**	**211**	**6,133.7**	**11,429.4**
Railroad Transportation (40)	443.5	4	183.9	347.6
Local Pass. Transit (41)	3,818.7	99	1,648.2	2,033.8
Trucking & Warehousing (42)	3,318.2	54	1,616.8	1,866.2
Water Transportation (44)	431.3	6	123.4	115.4
Transportation by Air (45)	822.5	10	286.2	427.7
Pipe Lines-Ex. Nat. Gas (46)	168.0	0	18.2	57.8
Transportation Services (47)	463.0	4	175.4	323.7
Communication (48)	5,719.0	20	1,170.3	2,654.1
Elec., Gas, & Sanitary Serv. (49)	7,781.1	14	911.4	3,603.2
Wholesale	**16,660.9**	**163**	**6,775.2**	**8,228.5**
Wholesale-Nondurable Goods (51)	10,334.5	110	4,202.5	5,104.0
Wholesale-Durable Goods (50)	6,326.4	53	2,572.6	3,124.5
Retail Trade	**103,710.6**	**2,900**	**36,293.9**	**57,909.1**
Bldg. Mat.-Garden Supply (52)	833.0	13	361.8	598.2
General Merch. Stores (53)	4,528.5	87	1,632.9	3,251.8
Food Stores (54)	2,421.3	62	944.0	1,738.7
Auto. Dealers-Serv. Stat. (55)	4,280.3	49	1,125.4	3,073.6
Apparel & Access. Stores (56)	1,511.0	51	709.7	1,085.0
Furniture & Home Furnish. (57)	402.9	7	188.2	289.3
Eating & Drinking Places (58)	82,677.9	2,487	28,105.0	42,805.8
Miscellaneous Retail (59)	7,055.7	144	3,226.9	5,066.6
Finance, Ins., & Real Estate	**32,221.4**	**198**	**9,251.2**	**22,575.0**
Banking (60)	3,259.8	19	860.4	2,537.5
Nondep. Credit Institutions (61)	5,306.3	63	2,779.4	3,487.0
Security, Comm. Brokers (62)	777.3	4	382.0	472.5
Insurance Carriers (63)	4,294.9	36	1,728.2	2,834.3
Ins. Agents, Brokers (64)	1,196.1	11	460.6	523.4
Real Estate (65)	14,241.4	56	1,392.8	11,568.2
Holding and Invest. Off. (67)	3,145.6	8	1,647.7	1,152.2
Services	**103,647.7**	**1,892**	**33,426.7**	**48,777.2**
Hotels & Other Lodging (70)	46,781.6	918	12,969.9	23,102.3
Personal Services (72)	6,731.8	136	2,473.6	2,647.1
Business Services (73)	7,009.7	138	3,003.5	2,942.7
Auto Repair, Serv., Garages (75)	9,485.8	76	1,884.3	3,659.6
Misc. Repair Services (76)	2,669.4	21	996.3	831.6
Motion Pictures (78)	6,688.0	65	1,729.1	2,027.0
Amusement & Recreation (79)	12,252.9	369	4,562.1	7,091.4
Health Services (80)	4,153.8	55	2,152.9	2,301.2
Legal Services (81)	1,126.9	13	521.2	571.0
Educational Services (82)	679.9	17	348.6	291.6
Social Services (83)	469.9	11	239.5	259.7
Museums & Gardens (84, 86)	2,257.4	42	1,089.6	2,020.1
Engineer. & Manage. Serv. (87)	2,204.7	18	979.0	686.5
Private Households (88)	22.9	2	22.9	22.9
Miscellaneous Services (89)	1,113.0	12	454.3	322.5
Government	**2,386.5**	**27**	**722.0**	**1,124.9**
Total	**373,553.6**	**5,821**	**110,688.7**	**180,566.3**

EXHIBIT 3.13: National Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

TOTAL NUMBER OF JOBS	**5,821**
Executive, administrative, and managerial occupations	**451**
Managerial and administrative occupations	363
Management support occupations	87
Professional specialty occupations	**198**
Engineers	15
Architects and surveyors	1
Life scientists	1
Computer, mathematical, and operations research occupations	19
Physical scientists	2
Religious workers	3
Social scientists	1
Social and recreation workers	17
Lawyers and judicial workers	6
Teachers, librarians, and counselors	44
Health diagnosing occupations	3
Health assessment and treating occupations	15
Writers, artists, and entertainers	56
All other professional workers	16
Technicians and related support occupations	**64**
Health technicians and technologists	37
Engineering and science technicians and technologists	14
Technicians, except health and engineering and science	13
Marketing and sales occupations	**650**
Cashiers	263
Counter and rental clerks	73
Insurance sales agents	5
Marketing and sales worker supervisors	70
Models, demonstrators, and product promoters	2
Parts salespersons	6
Real estate agents and brokers	3
Retail salespersons	134
Sales engineers	1
Securities, commodities, and financial services sales agents	3
Travel agents	2
All other sales and related workers	89
Administrative support occupations, including clerical	**619**
Adjusters, investigators, and collectors	27
Communications equipment operators	10
Computer operators	4
Information clerks	117
Mail clerks and messengers	4
Postal clerks and mail carriers	15
Material recording, scheduling, dispatching, and distributing occupations	108
Records processing occupations	97
Secretaries, stenographers, and typists	62
Other clerical and administrative support workers	176

EXHIBIT 3.13: National Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

Service occupations	**2,836**
Cleaning and building service occupations, except private household	337
Food preparation and service occupations	2,322
Health service occupations	16
Personal service occupations	102
Private household workers	2
Protective service occupations	50
All other protective service workers	7
Agriculture, forestry, fishing, and related occupations	**63**
Farm operators and managers	2
Farm workers	9
Fishers and fishing vessel operators	0
Forestry, conservation, and logging occupations	0
Landscaping, grounds-keeping, nursery, greenhouse, and lawn service occupations	38
Supervisors, farming, forestry, and agricultural related occupations	1
Veterinary assistants and nonfarm animal caretakers	7
All other agricultural, forestry, fishing, and related workers	6
Precision production, craft, and repair occupations	**378**
Blue-collar worker supervisors	40
Construction trades	36
Extractive and related workers, including blasters	3
Mechanics, installers, and repairers	151
Machinery mechanics, installers, and repairers	81
Vehicle and mobile equipment mechanics and repairers	34
Other mechanics, installers, and repairers	32
Production occupations, precision	**79**
Assemblers, precision	2
Food workers, precision	13
Inspectors, testers, and graders, precision	13
Metal workers, precision	29
Printing workers, precision	3
Textile, apparel, and furnishings workers, precision	10
Woodworkers, precision	4
Other precision workers	5
Plant and system occupations	**3**
Chemical plant and system operators	0
Electric power generating plant operators, distributors, and dispatchers	1
Gas and petroleum plant and system occupations	1
Stationary engineers	1
Water and liquid waste treatment plant and system operators	0
Operators, fabricators, and laborers	**481**
Machine setters, set-up operators, operators, and tenders	111
Hand workers, including assemblers and fabricators	61
Transportation and material moving machine and vehicle operators	191
Helpers, laborers, and material movers, hand	117

EXHIBIT 3.14
Total In-State Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	344.7	1	20.3	32.8
2. Agri. Serv., Forestry, & Fish	226.1	2	106.5	203.5
3. Mining	44.6	0	7.1	19.0
4. Construction	2,874.4	12	393.8	927.9
5. Manufacturing	12,710.7	74	2,750.8	4,199.3
6. Transport. & Public Utilities	13,166.3	132	3,627.4	6,666.8
7. Wholesale	9,744.3	100	3,962.5	4,812.6
8. Retail Trade	101,147.0	2,833	35,378.6	56,376.1
9. Finance, Ins., & Real Estate	11,500.5	97	4,243.2	7,980.0
10. Services	91,109.5	1,715	28,637.0	42,981.7
11. Government	402.7	4	127.6	219.6
Total Effects (Private and Public)	243,270.9	4,970	79,254.7	124,419.2
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	180,690.6	4,174	58,490.8	91,782.6
2. Indirect and Induced Effects	62,580.3	797	20,763.9	32,636.6
3. Total Effects	243,270.9	4,970	79,254.7	124,419.2
4. Multipliers (3/1)	1.346	1.191	1.355	1.356
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				77,905.9
2. Taxes				24,968.2
a. Local				4,895.5
b. State				7,901.6
c. Federal				12,171.1
General				3,673.8
Social Security				8,497.4
3. Profits, dividends, rents, and other				21,545.1
4. Total Gross State Product (1+2+3)				124,419.2
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		77,905.9	79,254.7	
2. Taxes		24,968.2	14,090.9	39,059.1
a. Local		4,895.5	1,875.4	6,770.9
b. State		7,901.6	0.0	7,901.6
c. Federal		12,171.1	12,215.5	24,386.6
General		3,673.8	12,215.5	15,889.3
Social Security		8,497.4	0.0	8,497.4
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				20.9
Income				334,053
State/Local Taxes				61,844
Gross State Product				524,418
INITIAL EXPENDITURE IN DOLLARS				237,252,046

EXHIBIT 3.15: In-State Industrial Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

SECTOR/INDUSTRY	Output	Employment	Income	Gross State Prod.
Agriculture	**344.7**	**1**	**20.3**	**32.8**
Dairy Farm Products	0.0	0	0.0	0.0
Eggs	0.0	0	0.0	0.0
Meat Animals	233.8	0	10.8	12.3
Misc. Livestock	0.6	0	0.1	0.1
Wool	0.0	0	0.0	0.0
Cotton	0.0	0	0.0	0.0
Tobacco	0.0	0	0.0	0.0
Grains & Misc. Crops	36.0	0	0.9	5.6
Feed Crops	19.1	0	0.4	3.1
Fruits & Nuts	0.0	0	0.0	0.0
Vegetables	1.2	0	0.1	0.1
Greenhouse/Nursery Products	39.4	0	7.3	9.4
Sugar Beets & Cane	0.0	0	0.0	0.0
Flaxseed, Peanuts, Soybean	14.6	0	0.8	2.2
Agri. Serv., Forestry, & Fish	**226.1**	**2**	**106.5**	**203.5**
Agri. Services (07)	174.1	2	93.2	156.7
Forestry (08)	2.4	0	0.2	2.1
Fishing, Hunting, Trapping (09)	49.7	0	13.0	44.7
Mining	**44.6**	**0**	**7.1**	**19.0**
Coal Mining (12)	0.9	0	0.3	0.8
Oil & Gas Extraction (13)	39.4	0	5.3	15.4
Nonmetal Min.-Ex. Fuels (14)	3.9	0	1.4	2.7
Metal Mining (10)	0.5	0	0.1	0.2
Construction	**2,874.4**	**12**	**393.8**	**927.9**
General Bldg. Contractors (15)	844.9	5	174.2	344.2
Heavy Const. Contractors (16)	84.2	1	46.4	59.8
Special Trade Contractors (17)	1,945.3	5	173.2	523.9
Manufacturing	**12,710.7**	**74**	**2,750.8**	**4,199.3**
Food & Kindred Prod. (20)	6,292.4	26	901.1	1,262.0
Tobacco Manufactures (21)	0.0	0	0.0	0.0
Textile Mill Prod. (22)	18.8	0	4.3	0.2
Apparel & Other Prod. (23)	234.7	2	58.9	68.4
Limber & Wood Prod. (24)	204.4	2	50.7	61.3
Furniture & Fixtures (25)	50.5	1	15.9	29.3
Paper & Allied Prod. (26)	87.5	1	23.0	33.4
Chemicals & Allied Prod. (28)	95.2	0	16.5	33.7
Petroleum & Coal Prod. (29)	0.0	0	0.0	0.0
Rubber & Misc. Plastics (30)	73.7	1	22.0	26.8
Leather & Leather Prod. (31)	7.7	0	2.0	3.4
Stone, Clay, & Glass (32)	72.2	1	24.6	31.4
Primary Metal Prod. (33)	18.0	0	3.2	5.2
Fabricated Metal Prod. (34)	260.7	2	79.6	87.4
Machinery, Except Elec. (35)	228.0	1	70.4	76.7
Electric & Elec. Equip. (36)	56.5	0	17.3	27.7
Transportation Equipment (37)	211.9	1	45.1	96.8
Instruments & Rel. Prod. (38)	852.5	4	194.4	535.8
Misc. Manufacturing Inds. (39)	2,647.8	19	787.0	1,262.6
Printing & Publishing (27)	1,298.0	15	434.9	557.2

EXHIBIT 3.15: In-State Industrial Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

Transport. & Public Utilities	**13,166.3**	**132**	**3,627.4**	**6,666.8**
Railroad Transportation (40)	112.3	1	46.6	88.0
Local Pass. Transit (41)	2,877.8	75	1,242.1	1,532.7
Trucking & Warehousing (42)	1,503.3	28	825.7	895.2
Water Transportation (44)	7.7	0	2.8	2.5
Transportation by Air (45)	392.7	5	136.7	204.2
Pipe Lines-Ex. Nat. Gas (46)	10.7	0	1.2	3.7
Transportation Services (47)	206.8	2	79.2	156.6
Communication (48)	3,770.4	13	761.9	1,753.9
Elec., Gas, & Sanitary Serv. (49)	4,284.6	8	531.3	2,029.9
Wholesale	**9,744.3**	**100**	**3,962.5**	**4,812.6**
Wholesale-Nondurable Goods (51)	7,861.0	84	3,196.7	3,882.4
Wholesale-Durable Goods (50)	1,883.3	16	765.9	930.1
Retail Trade	**101,147.0**	**2,833**	**35,378.6**	**56,376.1**
Bldg. Mat.-Garden Supply (52)	751.8	12	326.5	539.9
General Merch. Stores (53)	4,361.5	84	1,572.7	3,132.0
Food Stores (54)	2,272.7	58	886.0	1,632.0
Auto. Dealers-Serv. Stat. (55)	4,016.3	46	1,055.0	2,884.1
Apparel & Access. Stores (56)	1,400.7	48	657.8	1,005.8
Furniture & Home Furnish. (57)	357.9	6	167.2	257.0
Eating & Drinking Places (58)	81,140.8	2,441	27,582.5	42,009.9
Miscellaneous Retail (59)	6,845.3	139	3,130.8	4,915.5
Finance, Ins., & Real Estate	**11,500.5**	**97**	**4,243.2**	**7,980.0**
Banking (60)	2,365.3	14	624.3	1,841.2
Nondep. Credit Institutions (61)	4,700.1	56	2,461.9	3,088.6
Security, Comm. Brokers (62)	342.3	2	168.2	208.1
Insurance Carriers (63)	1,153.5	10	464.2	761.2
Ins. Agents, Brokers (64)	790.5	8	304.4	345.9
Real Estate (65)	2,125.3	8	207.9	1,726.3
Holding and Invest. Off. (67)	23.5	0	12.3	8.6
Services	**91,109.5**	**1,715**	**28,637.0**	**42,981.7**
Hotels & Other Lodging (70)	45,872.8	896	12,674.4	22,597.9
Personal Services (72)	5,922.5	123	2,175.7	2,309.3
Business Services (73)	3,973.7	90	1,773.2	1,690.6
Auto Repair, Serv., Garages (75)	8,748.5	69	1,707.9	3,369.3
Misc. Repair Services (76)	1,858.3	15	682.5	581.4
Motion Pictures (78)	4,875.8	55	1,226.2	1,516.6
Amusement & Recreation (79)	11,433.0	346	4,284.4	6,354.9
Health Services (80)	3,822.8	50	1,989.4	2,126.7
Legal Services (81)	625.7	7	289.4	317.0
Educational Services (82)	546.6	14	284.5	234.5
Social Services (83)	374.9	9	185.9	205.3
Museums & Gardens (84, 86)	1,245.1	23	571.8	1,111.6
Engineer. & Manage. Serv. (87)	1,253.7	10	552.6	390.7
Private Households (88)	20.7	2	20.7	20.7
Miscellaneous Services (89)	535.5	6	218.6	155.1
Government	**402.7**	**4**	**127.6**	**219.6**
Total	**243,270.9**	**4,970**	**79,254.7**	**124,419.2**

EXHIBIT 3.16: In-State Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

TOTAL NUMBER OF JOBS	**4,970**
Executive, administrative, and managerial occupations	**355**
Managerial and administrative occupations	298
Management support occupations	57
Professional specialty occupations	**144**
Engineers	8
Architects and surveyors	0
Life scientists	0
Computer, mathematical, and operations research occupations	10
Physical scientists	1
Religious workers	2
Social scientists	1
Social and recreation workers	14
Lawyers and judicial workers	3
Teachers, librarians, and counselors	39
Health diagnosing occupations	3
Health assessment and treating occupations	13
Writers, artists, and entertainers	40
All other professional workers	10
Technicians and related support occupations	**44**
Health technicians and technologists	30
Engineering and science technicians and technologists	7
Technicians, except health and engineering and science	7
Marketing and sales occupations	**578**
Cashiers	253
Counter and rental clerks	66
Insurance sales agents	2
Marketing and sales worker supervisors	61
Models, demonstrators, and product promoters	1
Parts salespersons	4
Real estate agents and brokers	1
Retail salespersons	125
Sales engineers	0
Securities, commodities, and financial services sales agents	2
Travel agents	1
All other sales and related workers	61
Administrative support occupations, including clerical	**467**
Adjusters, investigators, and collectors	17
Communications equipment operators	9
Computer operators	2
Information clerks	106
Mail clerks and messengers	2
Postal clerks and mail carriers	9
Material recording, scheduling, dispatching, and distributing occupations	80
Records processing occupations	72
Secretaries, stenographers, and typists	41
Other clerical and administrative support workers	128

EXHIBIT 3.16: In-State Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity: Heritage Tourism ($237 million, 2011)

Service occupations	**2,744**
Cleaning and building service occupations, except private household	313
Food preparation and service occupations	2,273
Health service occupations	14
Personal service occupations	97
Private household workers	1
Protective service occupations	39
All other protective service workers	6
Agriculture, forestry, fishing, and related occupations	**43**
Farm operators and managers	0
Farm workers	2
Fishers and fishing vessel operators	0
Forestry, conservation, and logging occupations	0
Landscaping, grounds-keeping, nursery, greenhouse, and lawn service occupations	32
Supervisors, farming, forestry, and agricultural related occupations	0
Veterinary assistants and nonfarm animal caretakers	6
All other agricultural, forestry, fishing, and related workers	3
Precision production, craft, and repair occupations	**273**
Blue-collar worker supervisors	21
Construction trades	18
Extractive and related workers, including blasters	1
Mechanics, installers, and repairers	117
Machinery mechanics, installers, and repairers	63
Vehicle and mobile equipment mechanics and repairers	27
Other mechanics, installers, and repairers	25
Production occupations, precision	**38**
Assemblers, precision	0
Food workers, precision	8
Inspectors, testers, and graders, precision	5
Metal workers, precision	11
Printing workers, precision	1
Textile, apparel, and furnishings workers, precision	7
Woodworkers, precision	3
Other precision workers	3
Plant and system occupations	**1**
Chemical plant and system operators	0
Electric power generating plant operators, distributors, and dispatchers	0
Gas and petroleum plant and system occupations	0
Stationary engineers	0
Water and liquid waste treatment plant and system operators	0
Operators, fabricators, and laborers	**285**
Machine setters, set-up operators, operators, and tenders	41
Hand workers, including assemblers and fabricators	26
Transportation and material moving machine and vehicle operators	144
Helpers, laborers, and material movers, hand	74

CHAPTER 4 – SOUTH DAKOTA HISTORIC MUSEUMS

INTRODUCTION

Historic museums deserve separate consideration when we evaluate the impact of economic activity related to South Dakota's heritage. These places and organizations often have operating and capital budgets and are the locus of spending by visitors for admission charges and gift shop purchases. While these economic activities are both partially covered by the discussions in Chapters 2 and 3, separate consideration of the unique, synergistic role these sites play in the South Dakota economy is necessary.

Before considering the specific economic numbers associated with South Dakota history museums, we present a few illustrative examples of these museums. One of the most prominent such institutions is the museum of the South Dakota State Historical Society. The Museum's South Dakota Experience recreates the cultural history of South Dakota in three permanent galleries. Beginning with the stories of Native tribes that inhabited South Dakota before statehood and following the state's history into the 21st century, the museum provides unique learning opportunities for people of all ages. This museum is a "must see" for those interested in the history and culture of South Dakota.

The state has numerous other historic museums and we present some illustrative examples below.

ILLUSTRATIVE HISTORIC MUSEUMS IN SOUTH DAKOTA

The High Plains Western Heritage Center
Spearfish, South Dakota
http://www.westernheritagecenter.com/

Live longhorn at the Western Heritage Center. *www. westernheritagecenter.com.*

Sculpture from the Western Heritage Center's Museum. *www.westernheritagecenter.com*

Preserved stagecoach at the High Plains Western Heritage Center. *www.westernheritagecenter.com.*

In the mid-1970's, area ranchers were concerned that the story of settlement in the High Plains Region would not be preserved. Two ranchers, Harry Blair and Edgar (Slim) Gardner, are considered founders of the High Plains Heritage Society d/b/a High Plains Western Heritage Center, a non-profit organization. Through donations and fundraising efforts, monies were accrued to purchase land and start building the structure. On September 1, 1989, a grand opening ceremony took place. Six categories of High Plains History were chosen to be honored: pioneering, cattle and sheep ranching, rodeo, transportation, American Indians, and mining.

The High Plains Western Heritage Center includes a regional museum founded to honor the old west pioneers and American Indians of North Dakota, South Dakota, Montana, Wyoming and Nebraska. Over 20,000 square feet of exhibits feature Western art, artifacts and memorabilia, including a transportation room that includes the original Spearfish to Deadwood stagecoach, chuckwagons, "Tally Ho" wagons, buggies, and sleighs. Outdoor displays feature live buffalo and longhorns, a summertime small animal farm, a furnished log cabin, rural schoolhouse, antique farm equipment, a turn-of-the-century kitchen, saddle shop and a blacksmith shop. The Center also has a spacious theatre complete with a sound system. "Historical Campfire Series" and live monthly cowboy music and poetry performances are offered throughout the year.

The Center is mostly staffed by over thirty volunteers who donate their time assisting with admissions, the bookstore, clerical work, maintenance, animal care, and special events. Many individuals and businesses from the area contribute time, labor, materials and funding. Grain and hay are donated to feed the live buffalo and longhorn steers, which are displayed permanently in the front pasture of the 40-acre site.

The High Plains Western Heritage Center currently provides a community forum for entertainment and education. The mission is to oversee the ongoing historical preservation of this region of the American West.[13]

The Journey Museum
Rapid City, South Dakota
http://www.journeymuseum.org/

Artifact from the Minnilusa Pioneer Museum at the Journey Museum. *www.journeymuseum.org.*

Pottery from the Journey Museum's Archaeological Research Center. *www.journeymuseum.org.*

The Journey Museum is an education venue that serves as a forum to preserve and explore the heritage of the cultures of the Black Hills region and the knowledge of its natural environment so that visitors may understand and value the past, enrich the present, and meet the challenges of the future.

The Journey Museum takes visitors on a trek through time, from the violent upheaval that formed the Black Hills over 2.5 billion years ago to the continuing saga of the Western Frontier. The Museum brings together four major prehistoric and historic collections to tell the complete story of the Western Great Plains—from the perspective of the Lakota people and the pioneers who shaped its past, to the scientists who now study it.

[13] Text adapted and pictures taken from http://www.westernheritagecenter.com/

Event at the Sioux Indian Museum at the Journey Museum. *www.journeymuseum.org*.

View of the Journey Museum. *www.journeymuseum.org*.

The institutions that make up The Journey Museum are:

- The Museum of Geology and Paleontology on the campus of the South Dakota School of Mines and Technology;
- The South Dakota Archeological Research Center;
- "Into the Cosmos," a computer graphics platform projected on a large curved screen bringing the information database of the universe to life in a 3D environment much like an immersive computer game;
- The Sioux Indian Museum, where visitors travel along a 200-year timeline and watch the epic story of the Lakota nation unfold. Visitors come to understand the historical events that forever changed the Lakota homeland, and hear from Lakota elders and their descendants how they lived, hunted, played and fought;
- The Minnilusa Pioneer Museum, with illuminated story walls that guide visitors from the European settlers' first encounter of the Black Hills to the historic Battle of Little Big Horn and ultimately to the modern-day reconciliation with Wounded Knee and other historical events. Visitors see how the discovery of gold captured a young America's imagination. Visitors also encounter Jim Bridger, General George Armstrong Custer, Wild Bill Hickock, as well as the great Sioux leaders: Sitting Bull, Crazy Horse and Red Cloud;
- The City of Rapid City Duhamel Plains Indian Artifact Collection; and
- The Western Native Gardens[14]

[14] Text adapted and pictures taken from http://www.journeymuseum.org/

Days of ’76 Museum
Deadwood, South Dakota
daysof76museum.com/

Image from the Deadwood Trails project. *www.daysof76museum.com.*

The Days of ’76 began as a way to honor Deadwood’s first pioneers: the prospectors, miners, muleskinners and madams who poured into the Black Hills in 1876 to settle the gold-filled gulches of Dakota Territory. Since the first celebration in 1923, the Days of ’76 has grown into a legendary annual event with a historic parade and an award-winning PRCA rodeo.

The Days of ’76 museum began informally, as a repository for the horse-drawn wagons and stage coaches, carriages, clothing, memorabilia and archives generated by the Celebration. In 1990 Don Clowser installed his collection of important Old West Pioneer and American Indian artifacts, firearms and archives into the pole barn that was the museum. Added to what was recognized as the largest collection of horse-drawn vehicles in the state, it became clear that the Days of ’76 Museum needed a new home. In 2004 the board of the Days of ’76 Museum, supported with a $3,000,000 gift from the City of Deadwood, pledged to construct a new $5.25 million, 32,000 square foot home for its collections of Western and American Indian artifacts, archives, photos and artwork. Designated an “American Treasure” as a recipient of the “Save America’s Treasures” grant program, the Days of ’76 Museum houses one of the nation’s most significant collections of American Western history.

The Wagons and Vehicles exhibit from the Days of ’76 Collections.
www.daysof76museum.com.

There are four important collections:

Wagons and Vehicles. When the Days of ’76 event began in 1924, the parade down Deadwood’s historic Main Street was a major part of the celebration. As the years passed, an impressive number of wagons, carriages, stagecoaches and other 19th-century vehicles were donated to the event to serve in the parade. Today, they are recognized as an impressive collection of vintage horse-drawn vehicles, the largest and most comprehensive in South Dakota.

Rodeo Collection. The Days of ’76 Rodeo is the reason for the Days of ’76 Celebration. The museum honors South Dakota’s official state sport and the flagship event of the American West with photos, documents and artifacts and exhibits.

Clothing Collection. The Centennial Clothing Collection began as part of the original Days of ’76 parade. Residents of the Black Hills and high plains gladly donated their old pioneer clothing to the event, and each year parade participants wore them to honor the generations that came before.

Clowser Collection. Deadwood resident, historian, poet and businessman Don Clowser spent his life assembling the remarkable collection of 19th-century pioneer, cowboy, and American Indian art and artifacts throughout the Days of ’76 Museum.

Artwork is found throughout the museum, from a spectacular Lakota beaded saddle cover and a painting riddled with bullets that came from behind Poker Alice’s bar to incomparable rodeo poster art.

The Days of ’76 Museum also sponsors Deadwood Historic Preservation’s efforts to document Deadwood’s historic trails system. From 1876 until the coming of the railroad in 1890, Deadwood was a transportation and communication hub for routes from Ft. Pierre, SD; Miles City, MT; Sydney, NE; Cheyenne, WY and Medora and Bismarck, ND. The location of these routes, along with the story of their importance and contribution to the development of this part of our history, is under-researched, underreported and dangerously close to being lost.[15]

MUSEUM SPENDING METHODOLOGY

Museum spending data was gathered from the survey in *South Dakota Connects to Collections: What Does the Future Hold for South Dakota’s Historic Objects?* Appendix 3, Table 1 of the *Historic Objects* report (shown here as Exhibit 4.1) displays grouped budget levels for the responding institutions. The midpoint of each budget level range was assumed for finding the spending totals in each level. Spending from each range was added to find the total historic object-related museum spending. For the “Over $500,000” budget level, a value of $750,000 was assumed as a reasonable estimation of spending for these institutions. Note that 15 institutions responded in this category, but 7 were removed from our analysis since their mission was not specifically related to “history” (they were reported to be libraries). It was not determined how many of the lower-budget institutions are not historically significant. Rather, it was assumed that removing libraries, at least those with the largest budgets, would produce a more reasonable estimate of total historic museum spending.

[15] Text adapted and pictures taken from www.daysof76museum.com/

EXHIBIT 4.1

Appendix 3, Table 1, Paid-Staff Levels by Budget *

Budget Level	# of Institutions Responding	Full-Time Equivalents
Under $5,000		
	45	0 FTE's
	6	Less than 1 FTE
	1	1 FTE
	1	1+ - 2 FTE's
$5,001 - $25,000		
	10	0 FTE's
	26	Less than 1 FTE
	3	1 FTE
	1	1+ - 2 FTE's
	1	2+ - 5FTE's
$25,001- $100,000		
	3	0 FTE's
	3	Less than 1 FTE
	7	1 FTE
	13	1+ - 2 FTE's
	4	2+ - 5FTE's
$100,001 - $250,000		
	1	1 FTE
	5	1+ - 2 FTE's
	4	2+ - 5FTE's
$250,001 - $500,000		
	4	2+ - 5FTE's
	9	More than 5 FTE's
Over $500,000		
	15	More than 5 FTE's

* 162 Institutions Reporting

Source: *South Dakota Connects to Collections: What Does the Future Hold for South Dakota's Historic Objects?*

As can be seen from Exhibit 4.2, the majority of institutions spends under $1 million per year and has budget levels under $25,000. As spending and budget levels increase, the number of institutions drastically decreases.

EXHIBIT 4.2

Budget Level	No. of Institutions	Spending
Under $5,000	53	$132,500.00
$5,001-$25,000	41	$615,020.50
$25,001-$100,000	30	$1,875,015.00
$100,001-$250,000	10	$1,750,005.00
$250,001-$500,000	13	$4,875,006.50
Over $500,000*	8	$6,000,000.00
	Total:	$15,247,547.00

*7 responding library institutions were removed in this spending category due to their not being historic preservation in character.

Source: *South Dakota Connects to Collections: What Does the Future Hold for South Dakota's Historic Objects?*

TOTAL ANNUAL ECONOMIC IMPACTS OF SOUTH DAKOTA HISTORIC MUSEUMS

As noted in Exhibit 4.2, it is estimated from the survey data that historic museums in South Dakota account for approximately $15.2 million annually in spending. This number is then entered into the PEIM.

As done earlier, PEIM was employed to estimate the effects on output, employment, income, and GDP/GSP both nationally and within the state of South Dakota. The results are detailed in the following paragraphs and the tables at the end of this chapter.

National Effects

The overall effects of the $15.2 million of spending on historic museums are $24.3 million in additional industrial output, 282 jobs created, $8.3 million in added income, and $16 million of wealth or Gross Domestic Product (GDP) injected into the national economy (Exhibit 4.3 and Exhibit 4.4 for greater detail). It is not at all surprising that the services sector received the largest share of the impacts ($9.9 million GDP, $4.2 million income and $11.6 million output), since this includes the museums, gardens and memorial organizations "industry" itself.

EXHIBIT 4.3
Total Economic Impacts of Annual South Dakota Historic Museums ($15.2 million), 2011

	In-State	Out-of-State	Total (U.S.)
Jobs (person years)	219	63	282
Income ($million)	6.0	2.3	8.3
Output ($million)	15.9	8.4	24.3
GDP/GSP ($million)	12.3	3.7	16.0
Total taxes ($million)	2.3	0.3	2.6
Federal ($million)	1.7	0.1	1.8
State/Local ($million)	0.6	0.2	0.8
In-state wealth ($million)	10.6	---	---

Beyond this, the manufacturing sector had the second-largest impact in output and income, while retail trade placed second for jobs and GDP; again, this is because retail trade produces a large number of relatively lower-pay jobs, while manufacturing relies on a small pool of high-pay, high-skill employees to operate machinery. By industry, the most significant effects are found in the "museums and gardens" category (no surprise), with $9.3 million GDP and $3.7 million income, followed by "special trades contractors" ($0.75 million GDP and $0.6 million income) and "apparel and accessories stores" ($0.6 million GDP and $0.4 million income).

The two leading occupations benefiting from the $15.2 million South Dakota museum spending nationally are "administrative support" and "marketing and sales," each securing about 20 percent of total sales.

In-State Effects

In-state impacts from the $15.2 million of spending by South Dakota historic museums are summarized in Exhibit 4.3 and detailed in Exhibit 4.5. In-state effects include 219 jobs, $6.0 million in income, $15.9 million in output, $12.3 million in Gross State Product (GSP) and $10.6 million in in-state wealth.

Based on the very local nature of historic museum visitation and employment, it is not at all surprising that most economic benefits are retained within the state of South Dakota; for example, 219 of the total 282 jobs (78 percent) are retained within state lines (Exhibit 4.3). Overall, the effects are very similar to those at the national level, but South Dakota's relatively low levels of industrial activity lead to increased "leakages" in that sector; only $.79 million of $4.89 million (16 percent) of total manufacturing output impact is retained within the state.

At the industry detail level, about half of the in-state effects are secured by the "museums and gardens" category (again, no surprise), with $8.3 million in GSP and $3.3 million in income, followed by "special trade contractors" ($0.7 million in GSP and $0.6 million in income) and "apparel and accessories stores" ($0.6 million in GSP and $0.4 million in income). The above in-state industrial-level effects parallel those observed earlier for the national impacts.

Also similar to the earlier national observed effects, the two leading occupations benefiting from the $15.2 million South Dakota museum spending are "administrative support" and "marketing and sales"; these two categories combined secure about 47 percent of total in-state jobs.

THE LARGER ECONOMIC IMPACT OF SOUTH DAKOTA HISTORIC MUSEUMS

Following the overall study protocol, this chapter entered the estimated direct $15.2 million budgetary spending by South Dakota history-related museums into the PEIM. This yielded the results shown in Exhibits 4.3, 4.4 and 4.5, and described in earlier sections.

While technically correct, the PEIM-induced economic impacts for entities such as museums do not convey the larger economic importance and operation of South Dakota's historic-related museums. First, the PEIM only quantifies paid employment, but for museums, unpaid volunteers far outnumber compensated workers. For example, one South Dakota historic museum visited by Rutgers researchers had two paid staff and a far larger number of unpaid volunteers, approximately forty. This twenty-to-one ratio should be kept in mind when observing the approximate 300 national jobs associated with the annual operations of the South Dakota museums. That job tally does not convey the much larger number of persons involved, which include numerous volunteers.

A second consideration is the close connection between South Dakota historic museums and heritage travel in this state. While the former's total annual budget of about $15 million is modest (in large part due to the uncompensated labor of volunteers), the scale of South Dakota's heritage travel spending (about $275 million annually) is quite large. Most significantly, South Dakota's historic museums contribute to the state's attraction to heritage travelers. Therefore, the large economic contributions of South Dakota's $275 million heritage tourism spending quantified in Chapter 3 (5,000 in-state jobs, $124 million GSP, $79 million income, etc.) are in no small measure due to this state's outstanding historic museums.

EXHIBIT 4.4
Total National Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Museums ($15.2 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	409.0	1	24.9	39.5
2. Agri. Serv., Forestry, & Fish	22.4	0	7.1	20.2
3. Mining	100.7	0	17.5	49.3
4. Construction	1,117.3	19	653.9	834.1
5. Manufacturing	4,892.0	27	1,057.2	1,466.9
6. Transport. & Public Utilities	932.1	7	236.2	459.9
7. Wholesale	1,233.5	13	501.6	609.2
8. Retail Trade	2,318.8	59	947.1	1,590.9
9. Finance, Ins., & Real Estate	1,620.3	11	590.6	1,056.8
10. Services	11,591.5	144	4,216.6	9,851.8
11. Government	86.0	1	26.1	40.8
Total Effects (Private and Public)	24,323.7	282	8,278.7	16,019.4
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	15,234.5	193	5,564.6	11,754.1
2. Indirect and Induced Effects	9,089.2	88	2,714.1	4,265.2
3. Total Effects	24,323.7	282	8,278.7	16,019.4
4. Multipliers (3/1)	1.597	1.456	1.488	1.363
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				11,639.6
2. Taxes				1,508.7
a. Local				300.5
b. State				354.5
c. Federal				853.6
General				189.8
Social Security				663.8
3. Profits, dividends, rents, and other				2,871.1
4. Total Gross State Product (1+2+3)				16,019.4
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		11,639.6	6,191.2	
2. Taxes		1,508.7	1,100.7	2,609.4
a. Local		300.5	146.5	447.1
b. State		354.5	0.0	354.5
c. Federal		853.6	954.2	1,807.9
General		189.8	954.2	1,144.1
Social Security		663.8	0.0	663.8
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				18.5
Income				542,953
State/Local Taxes				52,568
Gross State Product				1,050,620
INITIAL EXPENDITURE IN DOLLARS				15,247,547

EXHIBIT 4.5
Total In-State Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Museums ($15.2 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	53.7	0	2.7	6.0
2. Agri. Serv., Forestry, & Fish	4.1	0	2.0	3.7
3. Mining	3.0	0	0.6	1.5
4. Construction	988.0	18	613.7	771.5
5. Manufacturing	788.0	5	170.4	236.8
6. Transport. & Public Utilities	485.9	3	118.6	241.0
7. Wholesale	821.6	9	334.1	405.8
8. Retail Trade	2,153.0	55	887.8	1,491.6
9. Finance, Ins., & Real Estate	683.9	6	287.5	455.5
10. Services	9,951.2	123	3,610.6	8,643.9
11. Government	12.1	0	3.8	6.5
Total Effects (Private and Public)	15,944.6	219	6,031.9	12,264.0
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	12,427.1	171	4,794.6	10,364.0
2. Indirect and Induced Effects	3,517.4	48	1,237.3	1,899.9
3. Total Effects	15,944.6	219	6,031.9	12,264.0
4. Multipliers (3/1)	1.283	1.280	1.258	1.183
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				9,198.1
2. Taxes				1,193.0
a. Local				164.9
b. State				258.8
c. Federal				769.3
General				122.6
Social Security				646.7
3. Profits, dividends, rents, and other				1,872.8
4. Total Gross State Product (1+2+3)				12,264.0
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		9,198.1	6,031.9	
2. Taxes		1,193.0	1,072.4	2,265.4
a. Local		164.9	142.7	307.7
b. State		258.8	0.0	258.8
c. Federal		769.3	929.7	1,699.0
General		122.6	929.7	1,052.3
Social Security		646.7	0.0	646.7
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				14.3
Income				395,600
State/Local Taxes				37,148
Gross State Product				804,323
INITIAL EXPENDITURE IN DOLLARS				15,247,547

CHAPTER 5 – SOUTH DAKOTA MAIN STREET AND DOWNTOWN REVITALIZATION

INTRODUCTION: A NATIONAL OVERVIEW OF THE MAIN STREET PROGRAM

The national Main Street program follows decades of economic and physical decline in America's cities and downtowns. Nathaniel Baum-Snow (2007) documents that "the aggregate population of the 139 largest metropolitan areas in the United States declined by 17 percent between 1950 and 1990 while aggregate metropolitan area population growth was 72 percent during this period" (Baum-Snow 2007). In addition, "central cities as defined by their geographies in 1960 were the origin and/or destination of only 38 percent of commutes made by metropolitan area residents in 2000, down from 66 percent in 1960" (Baum-Snow 2007). As roadways were expanded and people moved farther away from city centers, downtown retail districts began to lose their customer base and employment centers to suburban areas and subsequently experienced significant decline, leaving formerly vibrant and successful downtown districts in economic turmoil.

In 1980, the National Trust for Historic Preservation (the National Trust) established "The National Trust Main Street Center®" (NMSC). The NMSC was created to revitalize declining downtown centers through a "preservation-based strategy" to restore the economic activity that was on the decline in downtown retail centers. Worth noting, Hot Springs, South Dakota, was one of the three pilot communities for the Main Street Program. Since 1980, more than 2,000 affiliated Main Street programs have been launched in about 40 states. Today, the program consists of a coast-to-coast network of more than 1,200 state, regional, and local coordinating programs.

The NMSC is a community-driven, comprehensive approach to downtown revitalization that provides professional training, networking, technical assistance, and national resources and support for participating communities. The program operates through the Main Street Four-Point Approach® to implementation that corresponds to the NMSC-envisioned four forces of real estate value, which are social, political, physical and economic.

The "Four-Point" Approach

Organization: Public- and private-sector collaboration to assign responsibilities and form consensus and cooperation among key community members with a vested interest in the downtown area. Main Street organizational structure includes a governing board, standing committees, a paid program director, and volunteers.

Promotion: Advertising the downtown through promotional retail activity, special events and marketing campaigns carried out by local volunteers aimed at consumers, investors, developers and new businesses. These activities aim to brand the Main Street District as a place where consumers want to live, work, shop, play, and invest.

Design: Enhancing the physical appearance of the downtown district by creating an inviting atmosphere. Some of the ways this is achieved include attractive window displays, parking area enhancements, building improvements, and streetscaping (i.e. landscaping, furniture upgrades, sidewalks, signage, and light and street enhancements). The Main Street district is revitalized by creating pedestrian-oriented streets, careful review of new construction applications for conformance with existing structures, and a sustainable, long-term planning approach. Throughout this process, special attention is paid to the maintenance of historic structures to protect and promote the character of the district.

Economic Restructuring: The main goal is to enhance the competitiveness of existing businesses and to diversify the area by bringing in new businesses, thereby increasing the consumer base of the downtown district. One of the fundamental aspects of this process is adaptive reuse of existing

buildings and underutilized spaces to make them more profitable and contribute to the character and demands of the downtown district as it is being redefined and revitalized.

The implementation of the Main Street Four-Point Approach® is based on the following eight principles:

The "Eight Principles"

1. **Comprehensive:** Implementing a sustainable, successful, long-term revitalization plan that includes activity in each of Main Street's Four Points.

2. **Incremental:** Taking realistic steps forward which begin with basic activities that will create public confidence in the Main Street district. The revitalization effort will then evolve and become more sophisticated as more ambitious projects and problems are addressed, leading to a longer-lasting and dramatic positive change in the Main Street district.

3. **Self-help:** Local leadership needs to mobilize local resources and talent to produce long-term success and confidence in the Main Street Program.

4. **Partnerships:** Both public and private sectors must take an active role in the revitalization efforts.

5. **Identifying and capitalizing on existing assets:** The district must capitalize on the unique qualities that make them distinct and should serve as the foundation for all aspects of the revitalization program.

6. **Quality:** Emphasis should be on quality, not quantity, in every aspect of the revitalization program.

7. **Change:** Gain public support to change negative attitudes about the Main Street district. Change also involves engaging in better business practices and improving the physical appearance in order to change public perceptions about the district.

8. **Implementation:** It is important to create confidence in the district by completing projects that serve as a reminder that a revitalization effort is under way and succeeding.

Recently, the Main Street Program has become an advocate for making Main Street a "cornerstone of every grassroots sustainability effort." In 2006, The National Trust partnered with several national organizations to work with the U.S. Green Building Council on ways to improve the Leadership in Energy and Environmental Design (LEED) rating system to "better reflect the importance of reusing buildings and community revitalization" (Loescher 2009). The National Trust is also in the process of launching several pilot programs across the nation, called "Preservation Green Lab," that will coordinate demonstration projects and provide technical assistance and model policies to encourage municipalities and states to consider historic preservation and the existing building stock when formulating climate change action plans that will optimally provide a new tool for communities in the Main Street Program to utilize.

DATA MAINTAINED BY THE NATIONAL MAIN STREET PROGRAM

The NMSC keeps a statistical database of all participating communities which includes the following data:

Dollars reinvested (Total amount of reinvestment in physical improvements from public and private sources. This includes building rehabilitation, new construction and enhanced public infrastructure.)

Net gain in businesses (new less closed businesses)

Net gain in jobs (new less lost jobs)

Number of building rehabilitations

Reinvestment Ratio (The average number of dollars generated in each community for every dollar used to operate the local Main Street Program)

Statistics collected from the Main Street communities and tracked from 1980 to 2011 reveal that the Main Street Program has been quite extensive. Exhibit 5.1 details the change over time of the various economic data collected by the Main Street Program between 2001 and 2011:

Exhibit 5.1: National Main Street Statistics 2001-2011[16]

Year	Dollars Reinvested (billions)	Net Gain in Businesses	Net Gain in Jobs	Number of Building Rehabilitations	Reinvestment Ratio	Average Reinvested Per Community	Approximate Number of Participating Communities
2001	$16.1	56,300	226,900	88,700	39.96 to 1	$9,659,000	1,668
2002	$17.0	57,470	231,682	93,734	40.35 to 1	$9,512,151	1,787
2003	$18.3	60,577	244,545	96,283	35.17 to 1	$10,000,000	1,834
2004	$23.3	67,000	308,370	107,179	26.67 to 1	$12,431,287	1,800
2005	$31.5	72,387	331,417	178,727	28.31 to 1	$12,486,058	1,900
2006	$41.6	77,799	349,148	186,820	25.76 to 1	$11,083,273	2,050
2007	$44.9	82,909	370,514	199,519	25 to 1	$11,083,273	2,212
2008	$48.2	88,019	392,894	208,218	25 to 1		
2009	$50.9	92,690	413,705	214,998			
2010	$53.1	98,022	432,695	222,510			
2011	$53.6	104,961	448,835	229,164	18 to 1		

Source: The National Trust for Historic Preservation National Main Street Reinvestment Statistics. Information could not be obtained for the missing values in this exhibit.

The amount of dollars invested has consistently increased between 2001 and 2011. The net gain in jobs and businesses, as well as the number of building rehabilitations, has also risen. There has been a recent decline in the reinvestment ratio, however, which may be linked to national economic trends, including the recent housing price crash, and the beginnings of the current economic recession. Although dollars reinvested into the program have consistently increased, the average reinvestment per community began to decline in 2006, which may be related to the fluctuating reinvestment ratio. Program participants currently stand at more than 2,000 communities, up from about 1,700 in 2001.

[16] 2008/2009/2010 numbers calculated cumulatively by adding annual figures released for each year, reinvestment ratios and number of participating communities not released for these years. 2011 numbers as released for 2011

MAIN STREET AND DOWNTOWN ASSOCIATIONS IN SOUTH DAKOTA

While there are currently no NMSC-connected Main Street programs in South Dakota, the state has at least 15 downtown entities or related associations that use aspects of the Main Street approach in varying degrees to promote their city's downtown. These include the following:

SOUTH DAKOTA DOWNTOWN IMPROVEMENT ASSOCIATIONS

CITY	ASSOCIATION NAME
Aberdeen	Aberdeen Downtown Association
Brookings	Downtown Brookings
Watertown	Watertown Urban Renewal District
Huron	Huron Downtown Beautification Committee
Pierre	Historic Downtown Pierre Association
Lead	Lead Downtown Revitalization Project
Mitchell	Mitchell Main Street and Beyond
Sioux Falls	Downtown Sioux Falls
Yankton	Historic Downtown Yankton
Rapid City	Downtown Rapid City
Vermillion	Downtown Vermillion
Deadwood	Deadwood Chamber of Commerce
Hot Springs	Hot Springs Chamber of Commerce
Spearfish	Downtown Spearfish
Dell Rapids	Dell Rapids Chamber of Commerce

We briefly describe some of these South Dakota downtown improvement entities below.

Aberdeen: ***Aberdeen Downtown Association***
http://www.aberdeendowntown.org/

Brown County Courthouse Cupola, Aberdeen, SD. *Flickr Creative Commons. 2007. Seth Werkheiser. DSCF6689.*

Aberdeen Commercial Historic District, South Main Street, Aberdeen, SD. Aberdeen Community Theatre. *http://aberdeencommunitytheatre.com/?page_id=2.*

Historic Chicago, Milwaukee, St. Paul & Pacific Depot, North Main Street, Aberdeen, SD. *Courtesy Jason Haug. South Dakota State Historical Society.*

Aberdeen is a city of about 25,000 people, making it the third largest in South Dakota. The community is the home of Northern State University. It has its roots as a railroad town. Originally a stop along the Milwaukee railroad, Aberdeen was named after the hometown of the railroad's president. Aberdeen gained the nickname "Hub City" because it became such a railroad center. Two lines of the Chicago, Milwaukee and St. Paul, the Great Northern line, the Chicago and Northwestern Line, and the Minneapolis and St. Louis rail line all ran through town by the early 20th Century. Downtown Aberdeen is characterized by numerous historic buildings, and is a National Register listed historic district. Aberdeen Downtown Association (ADA) works with business owners to enhance the historic merits of their establishments and preserve the historic character of the downtown area. For business owners occupying Aberdeen historic buildings, the Facade Grant Program provides funding for efforts to restore the buildings' original appearance. ADA also offers a Revolving Loan Fund (RLF) for both new and existing downtown businesses to offset improvement and maintenance costs. In general, Aberdeen Downtown Association works with businesses to help select and apply for financial assistance. Downtown Aberdeen hosts many festivals that attract tourists and many others each year.

Brookings: ***Downtown Brookings***
http://downtownbrookings.com/

Classic cars parked along historic Main Street for the Brookings Car Festival. *2010. Downtown Brookings, Inc.*

Brooking Commercial Historic District. *Wikimedia Commons. 2011. John Platek.*

Brookings is the fourth largest city in South Dakota, with a population of just over 22,000. It is the home of South Dakota State University, and offers many college town amenities including a number of restaurants, shops and bars. Several events are held in Brookings throughout the year, such as the annual Brookings Car Festival, a two-day event which in June 2012 celebrated its 20th anniversary. Brookings also hosts the offbeat annual Hobo Days, a long-running South Dakota State homecoming week tradition that features a colorful school spirit parade. Downtown Brookings offers several financial assistance programs for local businesses. Funds are available[17] for exterior renovations and infrastructure that complies with local design standards, as the area is a designated National Register Historic District. For signs and awnings, Downtown Brookings will meet the percent paid between 10% and 30% (up to $1,000).

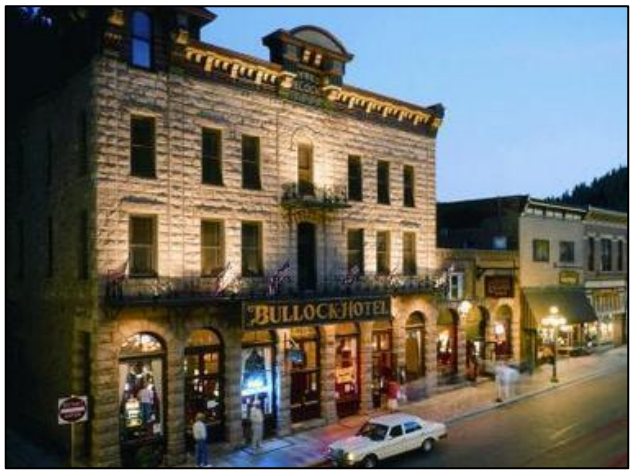
[17] The Downtown Economic Development Incentive Fund (DEDIF) can be used for real estate improvements, repairs, historic preservation, signs, sidewalks, etc.

Deadwood: ***Deadwood Economic Development Corporation***
http://www.deadwood.com/

Deadwood, a National Historic Landmark, is a city of just over 1,000 people that has a rich history as a rough and tumble gold rush town. The name Deadwood derives from its original founding, when miners discovered copious amounts of gold within a gulch full of dead trees. The try-your-luck ethos of Deadwood's prospecting heritage lives on is its varied gaming scene—over 80 gaming halls can be found within Deadwood, many of which carry historical significance. The Deadwood Chamber of Commerce oversees downtown economic development activities. About 60% of its annual budget is allocated toward advertising and promoting Deadwood. The Chamber of Commerce annually produces and distributes the Official Guide to Deadwood (about 100,000 annually according to the Chamber's website) highlighting tourism opportunities in the city. Businesses that partner with the Deadwood Chamber of Commerce receive benefits such as a listing in the Membership Directory and visibility on the website, local business mixers, newsletter mailings, and discounted local advertising rates. Business owners can also benefit from Deadwood's Economic Development Corporation, which provides 5% interest loans to both new and existing businesses, and provides assistance to business owners who want to utilize state and federal loan programs.

Streetscape view, historic Main Street, Deadwood, SD. *Flickr: 2009, Kent Kanouse, Deadwood, South Dakota*.

Reenactment of the shooting of Wild Bill Hickok on Deadwood, SD's historic Main Street. © 2010 Deadwood.org. *Photography Credits: Johnny Sundby Photography, Jerry Rawlings and Mark Norby*.



Historic Bullock Hotel, Downtown Deadwood, SD. © 2010 Deadwood.org. *Photography Credits: Johnny Sundby Photography, Jerry Rawlings and Mark Norby*.

Business on Deadwood, SD's historic Main Street uses local history to draw patronage. *Flickr Creative Commons. 2009. Kent Kanouse. Deadwood, South Dakota*.

Dell Rapids: ***Dell Rapids Chamber of Commerce***
http://www.dellrapids.org/

Dell Rapids is a community of 3,650 and derives its name from the many dells (tiny valleys) carved out by the Big Sioux River that runs through the town. Much of Dell Rapids was rebuilt during the tail end of the 19th century after a disastrous fire ravaged the downtown in 1888. Many of these buildings were rebuilt with Sioux Quartzite since Dell Rapids sits on top of a massive quartzite vein; as such, many of the 39 pre-1900s historic buildings in its downtown area feature the rose-colored stone. Downtown Dell Rapids is a National Register-listed historic district with a great deal of architectural significance. One of its most notable buildings is the opera house, a Romanesque Revival structure built in 1888 that features many period design flourishes. Dell Rapids takes pride in its quarry, which also serves as an important economic engine. Its incredibly hard, rose-colored stone is shipped across the country for its sought after use in concrete and decorative masonry, and the quarry has created many jobs for local citizens. Public tours are offered, and an annual event, Quarry Days, serves to promote the quarry and educate the public about this unique and important geological asset.

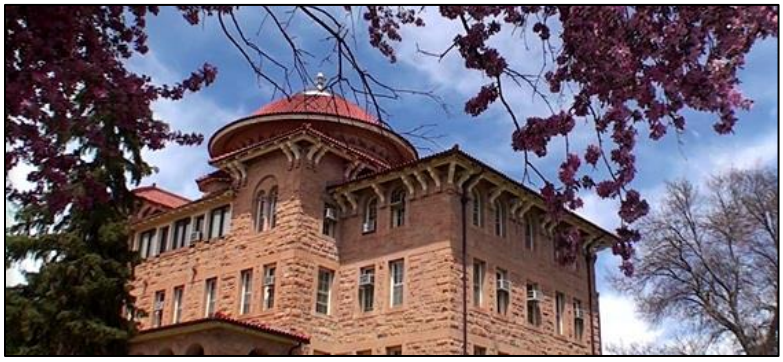
Single-story commercial building in the Dell Rapids Downtown Historic District. *Flickr Creative Commons. 2007. Mike Willis. Dell Rapids Deli.*

Smith Block, downtown Dell Rapids. *Flickr Creative Commons. 2011. Daren Jessip. 2011 10 08 006.*

Quartzite buildings line the street in the Dell Rapids Downtown Historic District. *Courtesy of the South Dakota State Historical Society.*

Hot Springs: ***Hot Springs Chamber of Commerce***
http://www.hotsprings-sd.com/

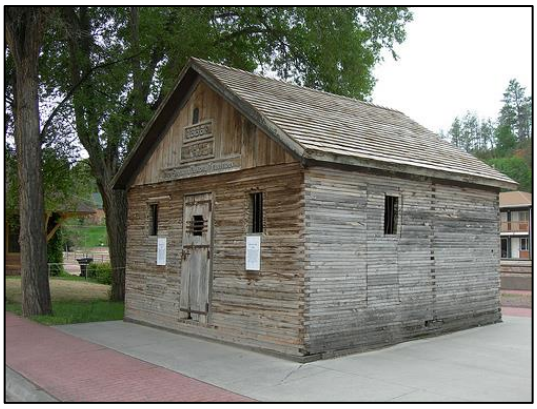
Hot Springs is a community of just under 4,000. The town is situated on a number of hot springs, such as Evans Plunge, which maintains a natural temperature of 87 °F, making Hot Springs a historically popular health club area. The Hot Springs Chamber of Commerce is focused on promoting its downtown attractions, as well as promoting its available land to new developers and businesses. It markets itself for having affordable land for commercial development, and a convenient location as a community along the Heartland Express, part of the Ports-to-Plains corridor. The Chamber also markets the abundance of local recreational opportunities available, which range from hiking and biking to boating and fishing, as well as a rare wild horse sanctuary. In recent years, many artists have settled in Hot Springs, thanks in part to the Chamber's efforts, which have helped to build an increasingly vibrant local arts scene.



Battle Mountain Sanitarium National Historic Landmark. *© 2010 Hot Springs*.

Hot Springs Historic District. *Flickr Creative Commons. 2005. Immolation scene*.

City Hall in Hot Springs Historic District. *Flickr Creative Commons. 2009. Jimmy Emerson.*

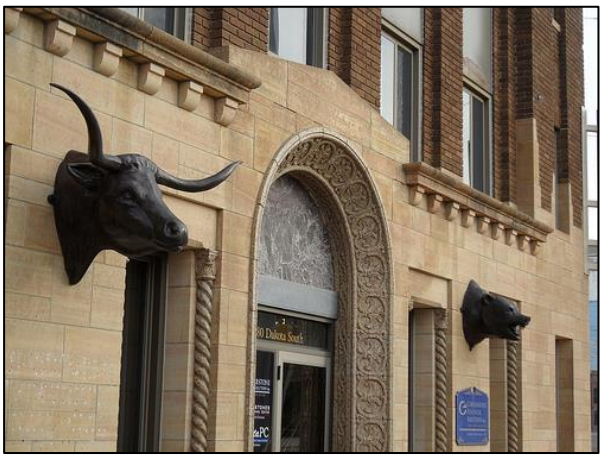


Dakota Territorial Jail. *Flickr Creative Commons. 2009. Jimmy Emerson.*

Huron: ***Huron Downtown Beautification Committee***
http://www.huronsd.com/downtown-beautification-committee

Huron is a small city of about 12,600. Its biggest event is the South Dakota State Fair, which is held the week before Labor Day. A local tourist highlight is the site of the world's largest Ringnecked Pheasant, a recently renovated 22-ton fiberglass statue. The Huron Downtown Beautification Committee was established to encourage downtown business owners to invest in new development, including building restoration, in the downtown area. The Committee is driven through volunteer efforts, and coordinates a Façade Grant Matching Program for local businesses to improve the overall aesthetic character of the downtown "core area." The Program covers up to 50% of the cost incurred for up to $5,000. Among the ongoing downtown projects are the murals featured on many of the city's buildings. These murals showcase points in Huron's history and new ones are added annually.

Historic masonic temple in downtown Huron, SD. *Flickr Creative Commons. 2010. Nels Olsen. SAM_0724.*



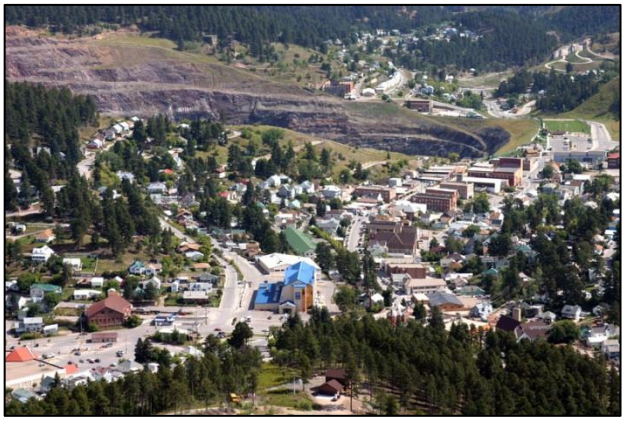
Historic building detail in downtown Huron, SD. *Flickr Creative Commons. 2010. Nels Olsen. SAM_0731.*

Mural in Downtown Huron. *Courtesy Jason Haug. South Dakota State Historical Society.*

Lead: ***Lead Chamber of Commerce***
http://leadmethere.org/

Lead (pronounced "Leed") is a community of just over 3,000 people with a history as a gold mining town. It is on the site of the Homestake Mine, which until 2002 was the largest gold mine in the western hemisphere. Lead has been presented the opportunity to associate with modern scientific industry, as the selected site for the new National Science Foundation Deep Underground Science and Engineering Laboratory, where nuclear physics and other high tech experiments will be conducted. Since 1974, most of Lead has been a recognized National Historic District, and within the downtown area are buildings with significant historic value, such as the Homestake Opera House, an ornately designed structure that has been hosting cultural events for over a century. The Lead Chamber of Commerce works to promote downtown business activity, and does so by holding frequent business mixers, ribbon cutting ceremonies to welcome new businesses, and assistance with devising promotional events. The Chamber also puts together local events to bring together community members and showcase existing businesses, such as LeadLIVE, a monthly open air market that attracts regional tourists and artists.

The Open Cut at the Homestake Mine in the Lead Historic District. *Wikimedia Commons. 2005. Rachel Harris.*



View of the Lead Historic District. *Wikimedia Commons. 2004. Gary Chancey. Lead, South Dakota.*

The Historic Town Hall Inn in downtown Lead. *Flickr Creative Commons. 2009. J. Stephen Conn.*

Mitchell: ***Mitchell Main Street and Beyond***
http://mitchellmainstreet.com/

Mitchel is a small city of just over 15,000 people and is the county seat of Davison County. Its most unique attraction is the Mitchell Corn Palace, a large events complex that is covered in dried corn cobs to create murals, which are changed annually. Mitchell Main Street and Beyond (MMSB) is an economic development program that was established to promote downtown tourism and business development. The organization coordinates a Revolving Loan Fund, from which $210,000 has already been distributed to local businesses to help offset the costs of development and improvements. MMSB hosts several events throughout the year, and strives to donate some of its proceeds toward local nonprofit groups. It also hosts private events to help local business owners network and be informed of the latest promotional and funding opportunities like social media marketing.

Historic Corn Palace, downtown Mitchell, South Dakota. *Wikimedia Commons. 2008. Parkerdr CornPalace2008.*

Downtown Mitchell. *Courtesy of the South Dakota State Historical Society.*

This motorcycle mural on the Mitchell Corn Palace represents the importance of the annual Sturgis motorcycle rally to the state's economy. *Flickr Creative Commons. 2010. Craig Bennet.*

Streetscape view, Mitchell Commercial Historic District. *Courtesy of the South Dakota State Historical Society.*

Rapid City: ***Downtown Rapid City***
http://downtownrapidcity.com/

Rapid City, with a population of over 65,000, is the second largest city in South Dakota. Its downtown is listed on the National Register of Historic Places. The former outpost for Black Hills gold miners is today an outpost for regional tourists, many of whom are travelling to Mount Rushmore, which is located 20 miles from Rapid City. The downtown area contains many dining, shopping and cultural venues. Presidents is a theme that carries throughout Rapid City, and visitors can learn about the United States Presidents by walking through the downtown area to see the bronze statues made for each president. The Rapid City Downtown Association is the entity responsible for business development and promotion. Some of its functions to downtown businesses are publicity (both online and in print), participation in event planning, and networking opportunities. The Downtown Association also works to enhance and revitalize the downtown area with public amenities, such as Main Street Square, a public green space with a seasonal ice rink that serves as a hub for downtown cultural events.

Firehouse Brewing Company in Rapid City Historic Commercial District. *Courtesy Debbie Sheals.*

Streetscape view of buildings in Rapid City Commercial Historic District. *Courtesy Debbie Sheals.*

Ice skating rink in Rapid City Commercial Historic District.
© 2011 Downtown Rapid City.

Downtown Rapid City features the City of Presidents, a series of life-size bronze statues. President James Monroe pictured. *Flickr Creative Commons. 2008. rachaelvoorhees. Top of the Mornin'.*

Sioux Falls: ***Downtown Sioux Falls***
http://www.dtsf.com/

Sioux Falls is the largest city in South Dakota, with a population of 158,000. The city, whose downtown is listed on the National Register of Historic Places, has been rapidly growing since the 1970s. Local economic development initiatives are managed by Downtown Sioux Falls, Inc., a nonprofit corporation. DTSF coordinates a number of events to bring together community members and regional tourists. Some of these events include the annual summer Sculpture Walk, Party in the Park (a free outdoor music event), the Sioux Empire Fair, and the summer First Friday series, which features evening concerts and business promotions. In recent decades, Sioux Falls has experienced growth in its downtown cultural scene, as is reflected by such events as the annual JazzFest. Downtown Sioux Falls focuses on advertising and public relations to help bring in both visitors and new residents to this rapidly growing city. Downtown Sioux Falls has also been providing "Loft Tours" as a way of promoting adaptive reuse of its downtown buildings.

Sioux Falls Downtown Historic District. *Wikimedia Commons. 2008. John Platek.*

Old Courthouse Museum in Sioux Falls. © *2011 Downtown Sioux Falls, Inc. Photo taken by Chris Reistroffer. www.dstf.com.*

CONCLUSION

In short, while there are currently no officially linked NMSC Main Street programs in South Dakota, there are numerous (about 15) very active downtown improvement associations in the state. We also observe that there is no state-level main street office in South Dakota as there are in other states. For the record, South Dakota had an NMSC-linked main street program in the 1970s, but it did not survive budget cuts and other challenges.

Should South Dakota re-enter the NMSC-linked Main Street program? That is clearly a policy question for South Dakota to decide. Arguing against linking with the national program is that successful local templates for downtown revitalization are already in place throughout South Dakota—so why not keep the status quo? Yet, there are arguments for South Dakota to join once again with the NMSC. The National Main Street Center provides guidance and advice, helps coordinate Main Streets throughout the nation, and helps Main Street organizations learn from others' experiences. Being part of the program does not mean that independent downtown improvement organizations will lose autonomy; in fact, the national program aims for local organizations to attain self-sufficiency within three to five years. The

NMSC is simply meant to provide assistance to local organizations, and provide locals with the tools they need to successfully execute the programs themselves.

A further benefit of NMSC affiliation is that it would encourage the keeping of consistent data regarding the status of downtown improvement. The NMSC metrics for their purpose were shown in part in Exhibit 5.1 and include statistics on dollars invested, and net gains in businesses and jobs. For policy and strategic purposes it would be helpful if the South Dakota downtown improvement associations kept such uniform data on their operations, a goal that would be advanced through NMSC affiliation. An added bonus is that the NMSC data fields can be entered into the PEIM to quantify the total (direct and multiplier) impacts from downtown improvement operations.

CHAPTER 6 – SOUTH DAKOTA HISTORIC PRESERVATION CASE STUDIES

QUALITATIVE IMPACTS OF THE REHABILITATION AIDED BY SOUTH DAKOTA GRANTS, TAX CREDITS, AND OTHER FUNDING SOURCES

Thus far the analysis has quantified the economic impacts of historic funding as estimated by the Rutgers Input-Output model (PEIM). We get a further perspective on these impacts through qualitative case study analysis. The latter describe what transpired on a project-by-project basis and provide not only the local economic impacts, but additionally what the rehabilitation aided by the funding has meant to the local community.

As part of the current investigation, several case studies were conducted. These cases involved the rehabilitation of the:

- Windsor Block (Rapid City, Pennington County)
- Charles Gurney Hotel (Yankton, Yankton County)
- South Dakota School for the Blind (Gary, Deuel County)
- Security Bank Building (Sioux Falls, Minnehaha County)

Each case study is organized in a parallel format that includes the following sections:

- Project summary
- Information on the local host community
- Property description
- Project description
- Project budget and sources of funding
- Project results/impacts

We encourage the reader to browse the case studies for they show the important preservation "facts on the ground" realized by the preservation funding. As a preview of these cases, we offer the following synopsis.

All of these case studies used a variety of subsidies to rehabilitate important historic buildings, often involving adaptive reuse. The programs tapped by the cases included:

- Federal historic tax credit
- Deadwood grants (e.g., SDSHS Deadwood Fund Grant)
- South Dakota Property Tax Moratorium
- Sioux Falls Façade Easement
- HOME Funds
- State aid for hazardous material removal and utility company rebates

The four case studies had many positive historic preservation, downtown revitalization, affordable housing, economic development, and other benefits. For instance, the Rapid City Windsor Block project comprised this community's largest downtown rehabilitation project in two decades, spurred additional downtown retail sales, provided attractive space to both existing and new community businesses, and offered upscale downtown residences. The historic rehabilitation of the Charles Gurney Hotel preserved an impressive late 19th-century building on the edge of downtown Yankton while at the same time offered affordable housing for the disabled and senior citizens.

Project Summary

Current Name:	Windsor Block
Historic Name:	Windsor Block
Construction Date:	1886
Date Listed in the National Register:	1974/amended 2006
Date of Rehabilitation:	2006-2012
Original Use:	Retail
New Use:	Mixed Use (Retail/Housing)
Total Project Costs:	$1.4 million
Housing Units Created:	9, average monthly rent of $1,200
Incentives Used:	SDSHS Deadwood Fund Grant, State Property Tax Moratorium, Federal Historic Tax Credits

The largest historic rehab in downtown Rapid City in over a decade removed a 1960s slipcover to reveal a late 19th century architectural gem and add new upscale downtown housing.

Host Community: Rapid City

Population in 2009: 67,107
Houses built before 1960: 7,991 (estimate)
Median Gross Rent in 2009: $662

Estimated Median Household Income in 2009:
Rapid City: $42,639
South Dakota: $45,043

Estimated Median House or Condo Value in 2009:
Rapid City: $156,900
South Dakota: $126,200

About the Property

The Windsor Block has occupied a prominent corner in downtown Rapid City since 1886. The large Italianate style building features polychromatic brickwork, with red brick walls enlivened by distinctive gold brick accents. The second floor of the two walls that face public streets are lined with tall windows that have corbelled hoods of gold bricks. Matching gold bricks are also used for slim string courses and other accents.

The building was constructed by one of the city's first civic leaders. It is one of several buildings in the commercial center that were built by Robert Flormann, who moved to the Black Hills in 1875 in search of gold. Flormann may have come for gold, but he made his mark in community development. According to historian Jean Kessloff, Flormann "was responsible for making the deal that brought the Chicago & Northwestern Railroad to Rapid City, something the town needed to secure its position as the trading center of the Black Hills." Railroad service provided an essential boost, and the town saw explosive growth in the 1880s. The Windsor Block was one of the first buildings to be constructed in the boom period—it was built the same year the first train arrived in Rapid City.

The building is said to have included an unusual feature when it was new. Local history holds that it was built with a ramp that provided access to a livery stable in the basement, where visitors could park their wagons and acquire food and water for their horses. One historian wrote that "it must surely be South Dakota's first indoor parking structure." Although the wagon parking apparently did not continue long, the commercial function of the floors above endured, and the building has been in continual commercial use for well over a century.

Community Benefits

- Long-vacant second floor space converted to upscale loft apartments.
- Largest single rehabilitation project in the center city in two decades.
- Added two new businesses and gave well-established downtown businesses improved quarters.
- Increased sales in the retail spaces, and added customers from the lofts resulted in increased sales tax revenue for the downtown area.

Even though it is one of the older buildings in the downtown commercial district, a casual observer would have had a hard time telling it until recently. A modernization project in the 1960s included the installation of all new materials on the two most visible sides of the building. Large flat panels were added to the upper walls, covering all of the second floor windows and obscuring any indication that it was a 19th-century structure. The ground floor was equally transformed. Smaller display windows were installed, and flat brick veneer was added around the storefronts and on the first floor of the side wall.

Although the ground floor retail spaces remained in service, the second floor gradually fell from use. By the time owner Dan Senftner began contemplating a rehabilitation project in the early 21st century, the second floor had been vacant for decades.

Project Description

Senftner was very familiar with the property. A native of Rapid City, he worked in the music store that occupied much of the ground floor as a youth, and went on to buy the business and the building in 1985. Over the years, he became involved in economic development in the downtown area, which in turn led to an interest in historic preservation. He joined the Rapid City Historic Preservation commission to learn more about historic preservation principles, and began working with historian Jean Kessloff to learn more about the history of the Windsor Block.

He knew from historic photos that the building had originally looked much different than the flat white box he had purchased, and the idea of restoring it was appealing for business as well as aesthetic reasons. He was aware of a growing market for housing in the downtown area, and saw the vacant second floor of the building as a perfect candidate for new apartments. The project was well-researched. Senftner toured upscale loft projects in other parts of the country, looked into available development incentives, and in 2005, began planning to remove the 1960s slipcover.

The rehab presented a daunting task. Although the second floor was empty, the ground floor spaces were all occupied by good retail tenants. Careful planning was required to allow the businesses to stay open while the work was being done. The work was divided into phases, which included restoring just one or two bays of the exterior at a time to minimize disruptions to surrounding businesses.

Removal of the 1960s wall sheathing brought good news and bad news. The finely crafted ornamental brickwork was in surprisingly good condition, and many of the early eight and one-half foot tall window sashes were still in place behind modern coverings. The original bracketed cornice, however, had been completely removed, leaving rough unfinished masonry along the top of both street elevations. Additional exploration revealed that a large structural steel beam had been inserted above the lower new storefront openings, which would make it very difficult to restore the original tall storefronts.

For exterior repairs, a local construction company removed the sheathing and repaired the historic masonry. All of the second floor window openings were reopened, and even though the surviving sashes proved to be too damaged to reuse, they provided good models for the design of the replacement sashes. New wood sashes were custom-fabricated to match the originals. Historic photos and marks on the building guided the creation of a new cornice, which was fabricated by a local welding firm. Some of the ground floor storefronts were rebuilt, and historically-appropriate signs and lights were added across the facade.

Interior work focused on the second floor, where some 13,000 square feet of vacant space was transformed into nine new apartments. The first step of that process involved reconstruction of an interior stairway and street level entrance on the façade. The original stair had been partially removed, then boarded over when the building was remodeled in the mid-20th century. Although much of the second floor had been gutted over the years, the original wood floors remained although they were black with age and dirt. The floors were sanded and given a coat of clear sealant that brought out the natural tones of the wood, creating a feature that one article described as the "first thing in the lofts that catches the eye" (*Rapid City Journal* 4-22-09). The combination of restored wood floors, oversized windows, and modern kitchens and baths created some of the first upscale historic lofts in downtown Rapid City.

Budget and Financial Incentives

There was much to be done. Labor, materials and other hard costs totaled more than $1.25 million dollars. The reconstructed cornice alone was $80,000, and a new insulated roof cost almost as much. New eight and one-half foot tall windows replicated to match the historic windows were more than $2,000 each. Although Senftner handled much of the paperwork himself, soft costs were also significant. Professional fees totaled close to $75,000, and financing costs added another $15,000.

Financial incentives were critical to the viability of this project. Before any preservation incentives could be accessed, some of the modern materials had to be removed from the façade so that the building could be counted as a contributing resource in the existing historic district. With that designation, the project became eligible for a Deadwood grant of $10,000, and federal historic preservation tax credits, equal to 20% of qualified rehabilitation expenses. Finally, the State Property Tax Moratorium provided relief from increased property taxes for an eight year period. The moratorium, which will save approximately $17,000 per year for eight years for this project, offers a recovery period in which the owner can get the property back into service and start to pay off some of the rehabilitation costs before facing increased property tax bills.

Even with his strong record in local business and an active role in downtown economic development, Mr. Senftner recalled that it was difficult to get construction financing. Economic incentives for preservation were vital to the success of the project. As it is, the new monthly income for the building just covers loan payments and mainenance costs.

Project Impacts

This was very much a local venture. The owner is a long-time resident of Rapid City, the contractors were almost all local, and the financing and professional service providers were all from South Dakota. Senftner made a conscious effort to use local businesses whenever possible. As he explained to a reporter for the *Rapid City Journal* in 2009, "I've lived here 31 years and I like to support the local businesses" (April 2, 2009). The project not only created a one of a kind space, it also accounted for well over one million dollars in trade for Rapid City businesses.

The project began in earnest in 2008, just as the Great Recession was beginning, and Senftner recently noted that he "could not have done the project without the tax credits and the moratorium."

The project was also good for the ongoing business climate of downtown Rapid City. Existing businesses were able to expand, interesting new businesses found a place to start up, and the housing base of the area was diversified. Post-rehab businesses in the Windsor Block include two that have been in operation downtown for many years, as well as two that are new to the area. The city's first independent brew pub recently moved into one fully restored retail space, and a design gallery has set up shop in the storefront next door.

The new apartments, described in the local paper as "a collection of living spaces never before seen in Rapid City," are an especially notable component of the project (*Rapid City Journal* 4-22-09). Senftner built the apartments to appeal to professionals. He explained recently that he is particular about who he rents to, not only to ensure the right mix of tenants, but also to make sure he likes his neighbors—he and his wife were among the first residents of the building. They joined a growing number of professionals and empty nesters who have chosen to trade in suburban life and mortgage payments for low-maintenance urban living. As *Forbes Magazine* wrote in 2009, "moving downtown has the obvious allure of trendy restaurants, ample entertainments, quick commutes and a spare bedroom in a place your kids will actually want to visit" (*Forbes*, 7-15-09). His plans paid off—the apartments were all rented before the project was completed and have stayed full. Apartment occupants represent a range of professions, including architecture, accounting, military and higher education.

One can't help but think that Flormann would be pleased to see the current state of the building he constructed in 1886. As historian Jean Kessloff wrote: "today's revitalization and restoration efforts prove that the pioneering spirit and cowboy ingenuity of men such as Flormann still exists."

Sources:

Dan Seftner, photos, project background, and budget.
Rapid City Journal, various articles.
Jean Kessloff, project background.
National Register of Historic Places
City-data.com and U. S. Census: community statistics
South Dakota State Preservation Office: project data and photographs
Debbie Sheals: photos and text.

Project Summary

Current Name:	Sir Charles Apartments
Historic Name:	Charles Gurney Hotel
Construction Date:	1891
Date Listed in the National Register:	1979
Date of Rehabilitation:	2010
Original Use:	Hotel
New Use:	Housing
Total Project Costs:	$3,925,323
Housing Units Created:	34
Awards/Accolades:	US Department of Housing and Urban Development's "Doorknocker Award"
Incentives Used:	State Historic Property Tax Moratorium, South Dakota Housing Development Authority (SDHDA) HOME funds, SDHA Preservation loan, Federal Low Income Housing Tax Credits

Host Community: Yankton

Population in 2010: 14,454
Houses built before 1960: 2247 (estimated)
Median Gross Rent in 2009: $494

Estimated Median House or Condo Value in 2009:
Yankton: $118,107
South Dakota: $126,200

Estimated Median Household Income in 2009:
Yankton: $42,126
South Dakota: $45,043

The recent rehabilitation of the historic Charles Gurney Hotel not only saved a landmark building in downtown Yankton, it provided safe, secure independent living facilities for disabled and senior citizens.

About the Property

The Charles Gurney Hotel is an impressive Romanesque Revival style building which features a combination of brick from St. Louis and red granite from South Dakota. The completion of the building in 1891 was heralded by the local paper as "the most important improvement to Yankton" for that year. It is listed in the National Register of Historic Places for significance in the areas of Architecture, Commerce, and Social History.

Although the building took its current form in 1891, parts of it were in place before South Dakota became a state. The west and north wings were originally part of the St. Charles Hotel, which was built on this site in 1870. The north wing at one time housed a United States courtroom for the Dakota Territory. The courtroom is best known as the location of the trial of Jack McCall, the convicted murderer of "Wild Bill" Hickock.

In 1981, the hotel closed, and the building underwent a major rehabilitation project which created 34 new apartments for low income senior citizens. Thirty years later, the building was once again in need of attention. Many of the mechanical systems and finishes installed in the 1980s had reached the end of their useful life, and deferred maintenance was accelerating the overall deterioration. New subsidized senior housing had opened elsewhere, causing occupancy rates to fall. Vacated apartments were leased to adults with disabilities, including serious mental illnesses (SMI). In spite of a strong

Community Benefits

- Most of the $3.9 million in project costs were spent with local companies.
- Retained 34 units of affordable housing.
- Preserved an impressive late 19th century building on the edge of downtown Yankton.
- Greatly increased the safety of the building and allowed a consolidation of services for the residents.

need for such housing in the region, the facility was poorly suited for those tenants. Occupancy rates continued to decline and the facility was in danger of being closed.

The building presented a safety issue for the remaining tenants. There was no fire detection or suppression system, and the floor plan was aptly described as having a "convoluted and confusing" system of hallways and exits. Numerous dead end corridors, inadequate exit signage, and lack of fire control systems created a recipe for disaster. The floor plan was so confusing that local volunteers for Meals on Wheels routinely got lost trying to deliver meals to the residents.

The outlook improved when Lewis and Clark Behavioral Health Services (LCBHS) and Dr. Thomas Stanage, a clinical psychologist with decades of experience in the mental health field, decided to get involved. Several of LCBHS's clients lived in the building. Stanage and the board of LCBHS were concerned about their safety, as well as the potential loss of 34 units of subsidized housing. Although LCBHS had no background in historic preservation, the board had a good understanding of the population that was being served, and believed the building and the subsidized housing were worth saving. In late 2009, LCBHS formed a limited partnership to purchase the building, and a comprehensive rehabilitation project began in early 2010.

Project Description

Although the exterior of the building was relatively intact, many elements were in poor condition. The 1980s wood windows had rotted away, and the exterior masonry was starting to deteriorate. The Rehabilitation team worked with Historic Yankton, Inc. to select historically appropriate new windows, and the exterior walls were cleaned and repointed by a firm that specializes in historic masonry. An elevator tower that had been installed in the 1980s was repainted to better blend with the historic building.

The interior of the building saw a complete overhaul. The few historic elements that had survived past remodeling projects were retained and repaired. Early tile flooring in the entry hall was cleaned and polished, and historic light fixtures were rewired. A large polished granite column in the first floor community room was also retained and repaired. Apartment finishes were updated, and new HVAC systems were installed throughout.

Much of the work inside focused on improving safety for residents. Even though the building was grandfathered to be exempt from newer building codes, all areas were brought up to modern standards. Smoke alarms and a fire sprinkler system were added, and selected demolition of hallway partitions greatly improved access to entrances and exits.

The new management team also added services for the residents, including case management, a meal program and some housekeeping assistance. The basement was remodeled to include office space, which allowed IMPACT, a service provider that works with many of the residents, to move from an offsite location for better resident access.

Project Budget and Sources of Financing

This project had a complicated financial structure that included low income housing tax credits and HOME funds from HUD.

The new owners faced a daunting financial situation. The building needed millions of dollars' worth of work, and it still had financial encumbrances from the previous owners. A high-interest loan from the earlier rehab was tied to a 40 year contract for Section 8 housing assistance, which meant the loan had to stay with the property. Additionally, the annual maintenance budget needed to be increased more than 5 times over to properly care for the building in the future.

Working with First Dakota Bank and the South Dakota Housing Development Authority (SDHA), the owners were able to put together a new financing package that would cover the $3.9 million project, and maintain the low rental rates. Financing for the project included two SDHA HOME loans with consecutive repayment periods, a loan from First Dakota Bank that was subordinate to those, and just under $2.3 million in Federal Low Income Tax Credits. **The South Dakota property tax moratorium for historic preservation will keep property tax rates at their former level for eight years, for a total savings of approximately $80,000**. With all of that, the Debt Coverage Ratio for the project has been between 1.15 and 1.25, just within the preferred range of 1.15 -1.35.

Even with the complex new financing package, the project would not have been possible if more than 30 limited partners for the first rehab project had not turned over their interests in the building to LCBHS. All of those partners were longtime residents of Yankton and all were interested in seeing the new project succeed. Dr. Stanage recently noted that "in this sense it really was a community project and it could not have happened without the donation of the limited partners. This cleared the way for everything that followed."

Total Development –

Existing Mortgage	$ 455,823	Acquisition	$ 530,823
HOME Funds	$ 788,240	Rehabilitation	$2,436,275
Housing Tax Credits	$2,288,103	Professional fees	$ 88,000
Local Lender	$ 393,157	Financing costs	$ 273,000
		Developer fee	$ 319,225
		Reserves	$ 95,000
		Other soft costs	$ 183,000
Total Financing	**$3,925,323**	**Total Costs**	**$3,925,323**

Project Impacts

The adaptive reuse of this historic building in downtown Yankton created a win-win situation. The residents and employees of the building now enjoy a safe and comfortable facility that is walking distance from a variety of businesses, and the community has retained an important historic resource that contributes to the viability of the central business district.

The changes made to the building created a secure and comfortable living facility that has been very well received. The apartments were all leased before construction was completed, and occupancy has remained at 100%, with a waiting list. In 2011, the project was one of a handful across the country to receive the coveted Doorknocker Award from HUD. According to the agency, the owners were recognized "for their outstanding work in producing affordable housing…This project is critical to retaining affordability and assistance" for disabled clients in the community.

The project has garnered similar praise from local preservationists. Lois Varvel of Historic Yankton, Inc recently wrote that the hotel "is an important historic structure representing Yankton's early development in its location, style and materials used… kudos…for this enormous contribution to Yankton, on so many levels!"

The suitability of the building for its new use illustrates the practical value of historic resources for the community at large. Like many historic buildings, it is located near the commercial core of the town. Redevelopment not only retained a tangible link to Yankton history, it took advantage of existing infrastructure, and kept residents and businesses in the downtown area. As local banker Carla Addy noted, the rehab was "absolutely a great project for Yankton—especially downtown. Like most communities, Yankton struggles to keep its downtown area full and vibrant….the community benefits were a predominant factor in supporting this project."

The rehabilitation project itself also had a significant economic impact upon Yankton, bringing more than $3 million of construction activity into the local economy at the height of the Recession. The majority of the rehabilitation work was done by area contractors, and most of the building materials were also purchased locally. One construction professional even ended up with a new job as a result. Donna Freng, the contractor who served as the construction manager for the rehabilitation, became so attached to the staff and clients that she stayed on to work as the maintenance manager.

The rehabilitation project greatly improved livability for residents, and ensured that the productive life of the historic building would continue for decades to come.

Sources:

Dr. Thomas Stanage and Donna Freng, project background
National Register of Historic Places
city-data.com: income, house prices
censusviewer.com: population
South Dakota State Preservation Office: project data, budget and photographs
Debbie Sheals: photos and text
HUD No 11-004, Press release for Doorknocker Awards
Louis Varvel, Historic Yankton, Inc.
Carla Addy, First Dakota National Bank

Project Summary

Current Name:	Buffalo Ridge Resort
Historic Name:	South Dakota School for the Blind
Construction Date:	1900-1930s
Date Listed in the National Register:	1988
Date of Rehabilitation:	2009-2010
Original Use:	State School for the Blind
New Use:	Resort, Corporate Offices
Total Project Costs:	$2.2 million (Phase 1)
Housing Units Created:	19 hotel rooms and more than two dozen campsites.
Incentives Used:	State Historic Property Tax Moratorium, State aid for hazardous material removal, utility company rebates

A recent restoration project transformed a long-vacant school campus into a modern resort and business center. Buildings which once housed blind school children have been returned to use, breathing new life into the small town that has welcomed the resort as much as they did the children who attended school there in the early years of the 20th century.

Host Community: Gary

Population in July 2000: 227
Median Gross Rent in 2009: $225
Houses built before 1960: 110 (estimated)

Estimated Median Household Income 2010:
Gary: $43,967
South Dakota: $46,520

Estimated Median House or Condo Value 2010:
Gary: $92,581
South Dakota: $127,600

About the Property

The historic South Dakota School for the Blind, which occupies an eleven-acre campus in the small town of Gary (population about 200), served as the state's only rehabilitation center for blind children for more than 60 years. The school was established in 1900, just a few years after the town lost its status as the seat of Deuel County. The creation of the school, the first of its kind in South Dakota, is said to have been the brainchild of local publisher Doane Robinson, who spearheaded the effort to have it located in Gary. The city owned the former county courthouse, which they offered to donate to the state for the creation of a "blind asylum." State officials were receptive to the idea, but required the city to build a new brick building for school use.

The school opened in the new brick building on March 1, 1900, and soon became a treasured part of the community. It was described by one early resident as having been a "focal point" for community life, and a local history noted that it was "a source of cultural activity and personal income of citizens of the small town. Students were often invited into private homes when severe weather did not permit them to go home for holidays."

Physical facilities developed quickly to keep up with the growing enrollment. The original brick building was expanded twice within a few years to create a single large administration and classroom building. A new brick laundry and power house was soon added, and a two-story dormitory for girls was completed in 1910. The construction of a boys' dorm in 1925 completed the administrative core of the campus, which housed up to 60 students at a time over the years. Final improvements took place in the 1930s, when workers dammed a nearby stream to create a small lake, dubbed "Lake Elsie," and added underground tunnels between the main buildings. The tunnels, which are built of concrete, allowed the students to easily go from building to building in inclement weather.

Community Benefits

- Long-vacant landmark returned to productive life.
- Well over a million dollars in wages paid to area residents during the construction phase.
- Permanent employment for 56 people, in a town of 227.
- Increased tourism in the region has resulted in higher sales tax revenues and increased property values.

In addition to Braille and the types of subjects taught in all public schools, the School for the Blind also had a vocational program that included classes in broom making, piano tuning and chair caning. An agricultural program provided education as well as food for the staff and students. The school was said to have had one of the best dairy herds in the state, and students also cared for chickens, hogs and a large garden. The dairy barn, which has survived, did double duty as a gymnasium—it was home to the first sanctioned wrestling match in South Dakota.

Like the barn, the dormitory buildings were built to serve multiple functions. The boys' dorm included classrooms and a small apartment for one of the teachers, and the girls' dorm was built with an auditorium. The auditorium soon became a favored gathering space for community members as well as students. The school had a strong music program, and student concerts were especially popular with area residents.

In spite of steady enrollment and strong community support, in the late 1950s, officials began making plans to move the school to Aberdeen. They cited a need for a more central location that was closer to a college. The move was bitterly opposed by the citizens of Gary, but after two years of debate, the school was relocated. The Gary campus closed to students in 1961, but hard feelings lingered. A local history published in 1972 proclaimed that "lies, corruptions and politics" were behind the decision to change locations.

The property found a new use shortly after the move, when it was refitted to serve as senior housing. Unfortunately, the new function lasted only a little more than a decade, and it was vacated in the 1970s. Community leaders struggled to find a new tenant. They sponsored a National Register nomination in 1988, with the stated hope that designation would "encourage preservation and use of the facility." That same document noted that "although vandals, weather and vermin have taken a toll on the structures" they were still impressive buildings that were little changed, albeit in poor condition. To great local disappointment, it was twenty years before anyone was able to reclaim the school from the vandals and vermin.

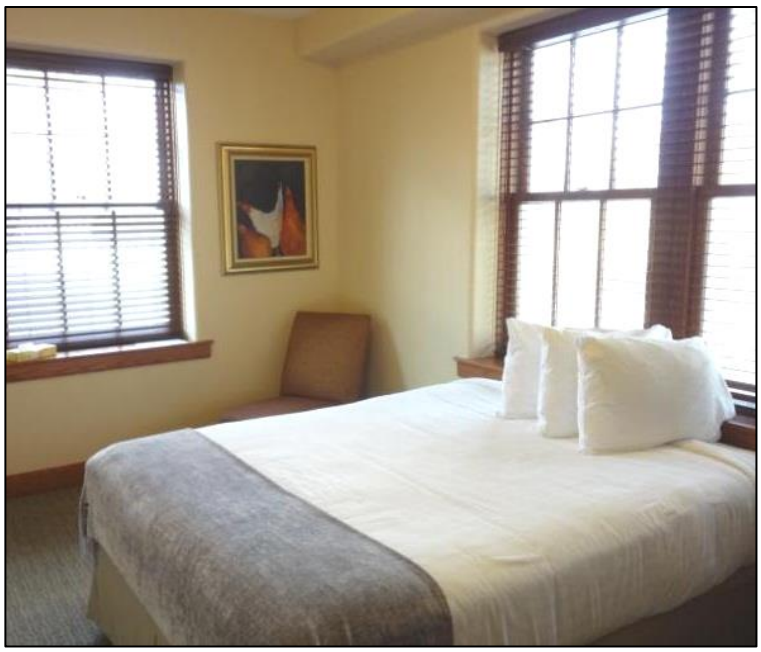
The future of the long-vacant school campus took a decided turn for the better late in 2008, when local entrepreneur Joe Kolbach became interested in the former school grounds. A resident of Gary, he was familiar with the school and was concerned that it would soon deteriorate past the point of no return. After watching it decline for several years, he purchased the property, and on a bitterly cold December night in 2008, held a public meeting to gather input on future possibilities. More than 140 people (in a town of 635) braved 20-below temperatures to attend that meeting, which spurred the decision to transform the campus into a resort and business center.

Project Description

Buoyed by the strong show of public support, Kolbach and his team developed an ambitious redevelopment plan. Although the work was divided into phases, Phase I encompassed a staggering amount of work. Phase I was to include full rehabilitation of the two dorm buildings and the power house, plus the restoration of Lake Elsie, which had been filled in about the time the school closed. The timeline was impressive; Kolbach allotted less than a year to transform buildings that had been vacant for more than thirty years into state of the art lodging and business facilities. He hired general contractor Jay Grabow to help oversee the project, and work began in December of 2008, with the goal to get the property into use in time for Gary's annual 4th of July celebration in 2009.

To the amazement of many, they met that goal. On July 3, 2009, thousands of area residents attended a grand opening to celebrate the completion of the first phase of the rehabilitation project. After months of intensive construction activity, the former boys' dorm had been transformed into a hotel, the girls' dorm was a business and event center, and Lake Elsie was back, this time ringed by campsites. A year later, the completion of Phase II was celebrated with the opening of the Rock Room Bar and Grill in the lower level of the administration building. Phase II included a full rehabilitation of the Administration building and the dairy barn.

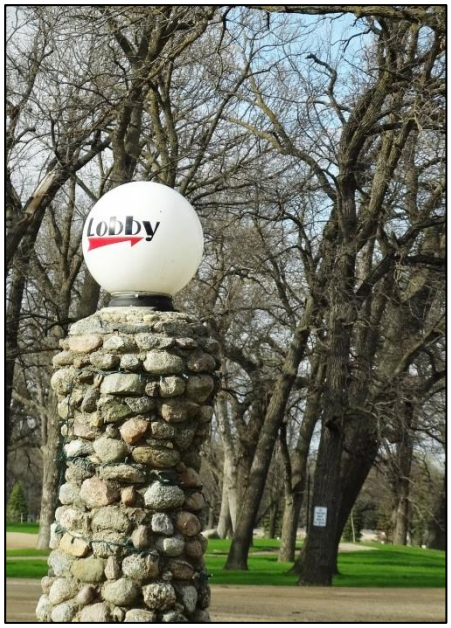
Although the new uses proved to be a good fit for the historic structures, the project presented many challenges. All of the buildings were in poor physical condition. They were filled with debris, and all tested positive for asbestos and lead paint. Leaking roofs and broken windows had exposed interior finishes to the weather for decades, resulting in significant water damage throughout. The roof of the boys' dorm had partially collapsed due to rotted framing members, and there were no useable plumbing, electrical or mechanical systems.



Special care was taken with exterior finishes. Masonry walls were repointed, using mortar and techniques that matched historic conditions and all of the buildings received new roofing. The surviving windows were evaluated one by one to determine the potential for restoration, and to document what they originally looked like. Once it became clear that the old windows were too deteriorated to restore, the team chose new windows which closely matched the originals. Concrete stucco was removed from the tall stone foundation walls of the administration building, and historic photos guided the restoration of its front porch.

Inside, surviving wood floors, doors and millwork were retained and restored, and missing components were replaced in-kind. New electrical, plumbing and mechanical systems were designed to provide maximum energy efficiency and minimum impact upon historic spaces. New HVAC systems were located in attics and closets, and duct work was carefully routed to be as unobtrusive as possible. Exterior walls and the ceilings of some corridors were furred out a few inches to conceal new electrical and plumbing runs, and to make room for new insulation. Energy efficiency was also boosted with the use of insulated glass in all new doors and windows, and the installation of new geothermal heat pumps.

The project also included restoration of landscape features. Bulldozers were brought in to restore Lake Elsie, which was then stocked with trout. Dozens of hookups for RV campsites were added to the grounds north of the school campus, and a new bathhouse for campers was modeled after a former chicken coop that had occupied that same location. Restored landscape features closer to the main buildings include the original playground, several rustic rock lampposts, and a matching rock fountain.



The restored complex, now known as Buffalo Ridge Resort, is once again a social and economic hub for Gary and the surrounding countryside. The unique combination of facilities has made it a popular site for weddings and group events. The Herrick Hotel (named after Gary's first hotel) contains 19 hotel rooms, and the campground has space for more than two dozen families. Woodbury Hall (the former girls' dorm) offers commercial offices and gathering spaces, including the original auditorium, which has been carefully restored and refitted with modern amenities. The administration building offers more lodging and office space, as well as the 153 seat-restaurant. The campus today is as full of life as it was when it housed the state's only school for the blind.

Community Impact

The rehabilitation project did more than save a cherished part of Gary's history; it has also had a significant impact upon the local economy. From the time the first construction worker arrived, Buffalo Ridge has been an economic engine for the Gary area. The timing could hardly have been better; the rehabilitation project began in December of 2008, at the heart of the Great Recession. The rehabilitation project had an immediate economic impact via construction jobs and supply purchases, and the resulting permanent jobs and new visitors to the community continue to boost the local economy.

The large scale of the project, teamed with Kolbach's resolve to use local contractors whenever possible, was a boon to the local construction industry. The first phase of the project alone represented more than $2 million dollars of private investment. Assuming that labor costs were at least half of that amount, the project generated at least $1 million in construction wages, paid when national unemployment in the construction industry was staggeringly high—17% to 27% in 2009. (Data from the Federal Bureau of Labor Statistics.) To look at it another way, $2.2 million in rehab costs amounts to more than $3,000 for each person living in the town of Gary.

The economic benefits did not end when the construction was over. Tourism and employment levels have seen permanent increases. Buffalo Ridge Resort employs 56 people, all of whom live in Gary or the surrounding communities. There is also a corporate office that leases space in one of the buildings, which accounts for eight more jobs. (The corporation relocated to Gary from Minnesota soon after the rehabilitation was completed.) The resort has developed into a popular destination for special events as well as overnight visits, which has boosted area tourism. The resort averages more than 7,000 overnight guests per year, which has had a significant impact upon sales tax revenues and property values in the region.

And, just as the original School for the Blind brought social as well as economic benefits to the community, Buffalo Ridge Resort has impacted the everyday lives of area residents. Customers of the Rock Room Bar and Grill include as many area residents as hotel guests. The on-site laundry and playground are open to the public, and the resort is often the site of community events.

Kellie Lewis, a former accountant who retired to Gary a few years ago, recently noted that she and her husband "visit with many locals when we're at Buffalo Ridge, but we also see many folks who we do not recognize. We are always happy about that as we know the restoration project is attracting new business to our community. It's so refreshing to have such a place in our town…Having the cultural opportunities Buffalo Ridge offers has truly enhanced our lives here."

Mr. Kolbach would be pleased to know she feels that way. As he said while Phase I was still underway, "having the community buy in like they have, that's a success for me."

Sources:
Buffalo Ridge Resort, project background
National Register of Historic Places
city-data.com: population, income, house prices.
Censusviewer.com: population
Kellie Lewis, Gary, South Dakota, project background.
South Dakota State Preservation Office: project data and photos.
Debbie Sheals: photos and text.

Project Summary

Current Name:	Security Bank Building
Historic Name:	Security Bank Building
Construction Date:	1916
Date Listed in the National Register:	1984
Date of Rehabilitation:	2007-2011
Original Use:	Bank and Offices
New Use:	Housing and Offices
Total Project Costs:	$7 million
Housing Units Created:	13
Incentives Used:	State Historic Property Tax Moratorium, Federal Rehabilitation Tax Credits, Sioux Falls Façade Easement

The rehabilitation of the Security Bank Building illustrates the important role historic preservation can play in downtown revitalization.

Rehabilitation of this local landmark created popular new downtown housing and one-of-a-kind office space for a prominent local law firm.

Host Community: Sioux Falls

Population in July 2009: 157,935
Houses built before 1960: 16,515 (estimate)
Median Gross Rent in 2009: $667

Estimated Median House or Condo Value in 2009:
Sioux Falls: $146,900
South Dakota: $126,200

Estimated Median Household Income in 2009:
Sioux Falls: $47,040
South Dakota: $45,043

About the Property

The Security Bank Building was constructed in downtown Sioux Falls in 1917. A promotional booklet published by the original developers in 1916 included a description of the property that remains accurate nearly a century later: "The central location of the Security Bank Building, in the heart of the city, and within easy access of the Courthouse, City Hall, Postoffice [sic], and the principal retail district, on a corner destined to be one of the most valuable in the city, together with unusually good light and air, are features which are to be especially desired."

A six story steel frame structure with smooth Bedford limestone walls, the building was built for the Security Bank Company. A double-height room on the ground floor was created for bank use, while the upper floors were designated as commercial office space. The builders' brochure in 1916 noted that "many conservative, substantial business and professional men have already applied for space" in the yet-to-be completed structure.

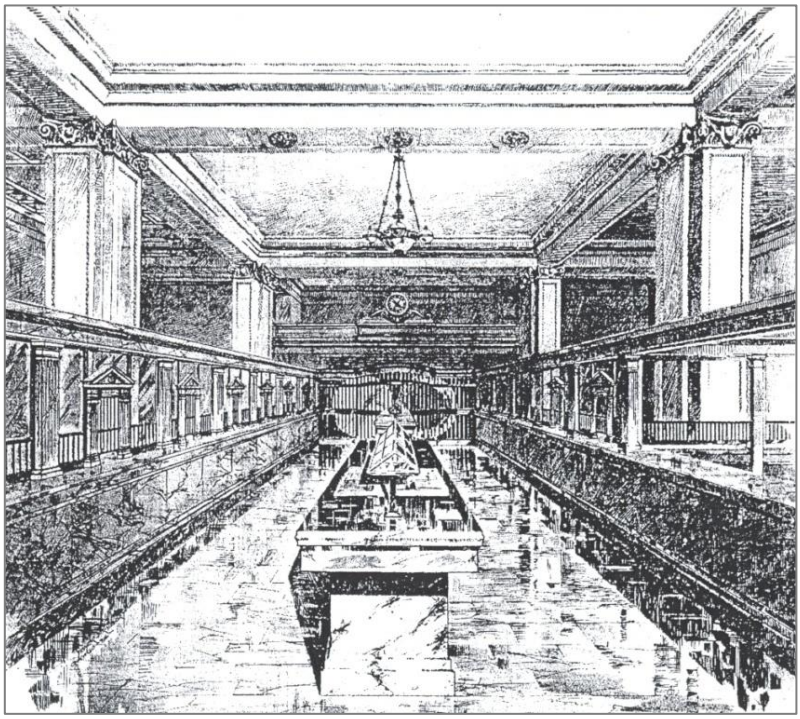
The building was completed in 1917, and operated according to plan until the 1930s, when the bank received an unexpected visit. On March 6, 1934, the Security Bank was robbed by John Dillinger and his gang, who made off with $46,000, which would be $754,098 in 2012 dollars. Newspaper accounts of the robbery noted that the gangsters were in the building for more than half an hour. The bank's security alarm was blaring most of that

Impact of this Project

- **Landmark building transformed from half-empty to fully-leased.**
- **The number of employees working in the building tripled.**
- **New housing addresses long-range planning objectives for Sioux Falls.**
- **Downtown redevelopment capitalizes on existing infrastructure.**

time, which caused a large crowd to form on the sidewalk outside the

building. The robbers fired several rounds from machine guns, critically injuring an off-duty police officer outside by firing through a plate glass window.



Fortunately, the officer survived, and no one else was harmed. When the gangsters left the building, they forced bank employees to ride on the running board of the getaway car to serve as a human shield, but let them off unharmed once they were out of town.

The Security Bank Company survived the effects of the bank robbery and the Great Depression, and remained in operation at this location until 1975. Although the building saw few exterior changes, many original interior features were removed over the years. Major remodeling and expansion projects in the 1950s completely transformed the ground floor banking space, which saw further alterations after the bank moved out in the 1970s. Upper-floor commercial spaces were also remodeled numerous times.

By the early 21st century, little original interior fabric remained. The mezzanine used by the bank had been partitioned off to form a low second floor, the lofty beamed ceiling and wood paneling of the original banking room had been replaced with flat plaster and recessed light fixtures, and many of the ground floor window openings had been walled in. Room layouts in the upper floors had been reconfigured numerous times, and almost all original office finishes were gone or covered over. By the time the Security Building Investment Company, LLC purchased the building in 2007, the interior looked more like a 1970s suburban shopping mall than the "beautifully finished" downtown commercial building described in the 1916 brochure.

Project Description

The new owners were not intimidated by the condition of the building; they bought it specifically to restore it to its former glory. They had worked on historic warehouse rehabilitations in the past, and had a good feel for the challenges, as well as the potential rewards, associated with historic redevelopment projects. However, they learned early in the process that preservation is not a one size fits all discipline. The type of bare brick walls and rough-hewn surfaces that typified their warehouse projects, for example, would have been out of place in the Security building, which was originally a highly finished office building. Working with state and local preservation experts, they developed a rehabilitation plan that capitalized on the ambiance that was unique to this building.

The group's experience with real estate development came in handy as they researched likely new uses for the building. Although there was a strong demand for housing in the downtown area, the prime location and long commercial history of the property made it a good candidate for offices. They settled on a mixed-use plan that would address both markets. The upper floors were converted into upscale loft apartments, and the lower levels were reconfigured for commercial use. Although the two-story former banking room was recognized as a potential gem, the owners decided to wait for a specific tenant before tackling that part of the project.

Rehabilitation work began outside. The stone walls were cleaned and repointed, and a rusted fire escape on a side wall was replaced. Many of the nearly century-old windows were repaired and reglazed; those too deteriorated to salvage were carefully replicated to maintain the original appearance. New indoor parking was created by shortening extra deep retail spaces in an adjacent building to provide parking in the back part of that structure, and an existing parking area was upgraded.

Interior work proceeded from the top down, beginning with 13 new urban loft apartments on the upper floors. Care was taken to reuse what little historic fabric remained in those areas. Historic wood and glass office doors were retained and reused within the units, and marble bathroom stall dividers were repurposed to serve as fireplace surrounds. A new elevator lobby was added to the first floor to create separate entrances for residential and commercial users, and new office and commercial space was added to the third floor. The apartments and the commercial spaces on the third floor proved to be very popular. They were all leased within a few months, and have stayed full since.

The basement was also remodeled. New offices and a fitness center for the residents were added, and a former bank fixture was given a creative new function. One corner of the lower level is occupied by a massive bank vault, which was originally featured in the banking room on the first floor. The 14 ton vault, which was moved to the basement when the bank was remodeled in the 1950s, was transformed into a community room, replete with comfortable furniture and a flat screen television.

The work on the exterior and upper floors attracted a major new tenant who shared the owners' desire to restore the character of the building. A law firm leased the former banking space when it was just a shell, with the understanding that it would be finished to historic standards. Their lease even

specified that the in-filled ground floor windows be restored.

Although the main banking space had been largely gutted in the mid-20th century, historic images provided inspiration, as well as information, about the original appearance. Lowered flat ceilings and recessed fluorescent lights were replaced with wood beams and period light fixtures. The drywall and mirror-wrapped columns were restored to their original configuration, with rich wood paneling and custom-made capitals modeled from those seen in historic drawings. The result is an impressive space that reflects the historic appearance and provides state of the art office space to the law firm headquartered there.

Budget and Financial Incentives

Even with experienced developers and a solid plan for adaptive reuse, the project faced significant financial hurdles. It took several years and nearly seven million dollars to complete the work. As is often the case with historic rehabilitation work, unknown conditions made it difficult to develop a reliable budget. Many of the biggest expenses were related to unseen but essential items such as electrical, plumbing and HVAC systems, all of which had to be replaced. Abatement for hazardous materials proved particularly expensive.

Financing a project of this size and complexity required multiple sources. Preservation incentives included federal rehabilitation tax credits, the South Dakota historic property tax moratorium, and a Sioux Falls façade easement. All of those programs target buildings listed in the National Register of Historic Places, and require that the project meet recognized historic preservation standards. This is one of several recent major rehabilitation projects in downtown Sioux Falls that has been leveraged by the federal program, which provides a 20% income tax credit for eligible rehabilitation work.

The state property tax program was also beneficial. The South Dakota property tax moratorium will account for approximately $350,000 in savings over the eight year term of the agreement. The level of savings is significant enough that the financing structure for the project will be changed once the moratorium expires. Relief from an immediate increase in property taxes was especially important for this project, which began on the eve of the Great Recession. The resulting weakness in the real estate market made it difficult to secure the commercial tenants needed to complete the rehab project.

Developer Norman Drake recently observed that project "costs would have been prohibitive without development incentives."

The project was also eligible to participate in a façade easement program offered by the city of Sioux Falls. Through the city program, a property owner makes agreed-upon improvements to the façade of a building, and then sells an easement on the character-defining features of the façade to the city. The city pays up to $100,000 or all of the actual costs of

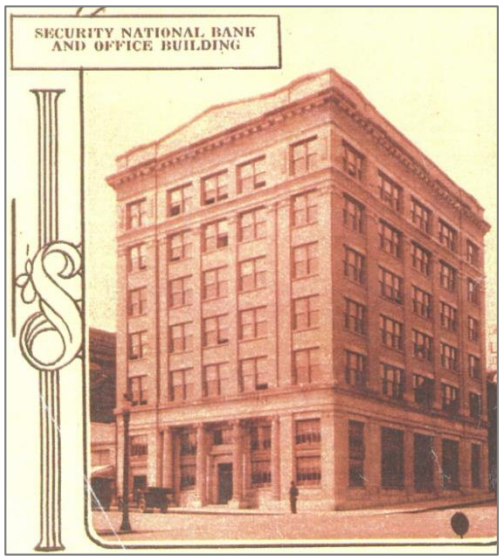
improvements for the easement; the Security Bank Building was eligible for the maximum amount. The easement acts as a deed restriction, which requires current and future owners to preserve and maintain the features that were identified in the easement document. The program created a win-win situation for the Security Building project. The owners did not see the easement as overly burdensome, since they already planned to maintain the features they worked so hard to restore, and the city gained assurance that any future owners must be just as diligent.

Historic preservation incentives played a vital role in transforming a half-empty building in the commercial center of Sioux Falls into a fully leased architectural showpiece.

Project Impacts

A bank once robbed by the Dillinger gang now houses a law firm, and the safe they plundered in 1934 contains nothing more valuable than a flat screen T.V. The transformation of the Security Bank Building in Sioux Falls is part of a downtown renaissance that has been fueled by historic preservation. This is one of 24 major rehabilitation projects completed in the city since 2000.

Historic preservation not only retains architecture that is unique to the community, it is also an inherently "green" approach to development. Preservation projects take advantage of existing infrastructure, and keep tons of demolition debris out of landfills. Downtown redevelopment projects like this one also increase density of housing and services, which in turn enhances the walkability of the area. As the *Sioux Falls Argus Leader* noted in an article about downtown redevelopment, "Venues for eating, entertainment and music are all readily available downtown without driving" (May 25, 2007).



The financial incentives that helped make this project feasible represent good public policy. All three programs are beneficial to the government entities as well as the property owners. Federal tax credits leveraged more than four dollars of private investment for every dollar of federal credit. The building now houses more jobs, and therefore generates more federal income tax revenue. The property tax moratorium provides a net benefit to the county. The moratorium only applies to any tax increase that would be created by the rehab, which means that the county now receives the same level of taxes as before the project began. Once the moratorium expires, county coffers will see a permanent annual increase in property tax revenue from this property. The local façade easement program has also proven to be an effective way to encourage and guide investment in historic properties, and to secure long term protection of important historic features. For this project, a $100,000 easement from the city helped leverage a seven million dollar investment in downtown real estate.

And all seven million dollars spent on the rehab stayed in South Dakota. The building owners are all from Sioux Falls, and all of the work on the building was done by South Dakota companies. Financing was handled by local banks as well. Co-owner Norman Drake, who was born and raised in Sioux Falls, found the local impact of the project to be particularly rewarding. He remembers visiting downtown as a child and likes the idea that he had a hand in maintaining the vitality of the area: "Not to use a cliché, but I like the idea of leaving a legacy."

Sources:

Norman Drake: photos, project background, and budget.
National Register of Historic Places.
City-data.com and U. S. Census: population, income, house prices.
South Dakota State Preservation Office: project data and photographs
Sioux Falls Argus Leader, various issues 2007-2011.
Debbie Sheals: photos and text.

CHAPTER 7 – SOUTH DAKOTA ECONOMIC IMPACTS FROM HISTORIC PRESERVATION: SUMMARY, CONTEXT, AND POLICY

SUMMARY

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 use by preservationists. Annual direct economic effects from historic activity in South Dakota include at a minimum $22.64 million in historic rehabilitation spending, $237.25 million in heritage tourism spending, and $15.25 million in historic museum outlays for a total of $275.14 million (all in annual 2011 dollars). Further, the long-term program that was examined in this study, historic rehabilitation effected in South Dakota over 1982 through 2011 with the aid of major federal and state/local subsidies, has produced $329.76 million in direct economic effects (adjusted for inflation).

In all cases, base data were assembled and input-output analyses applied to project total effects (direct and multiplier, the latter encompassing indirect/induced consequences) of these activities. Results are summarized in Exhibits 7.1 and 7.2. When multiplier effects are taken into account from the $275.14 million annual preservation investment, the total annual impacts to the nation include a net economic gain of 6,535 jobs, $134.4 million in income, $438.4 million in overall output, $218.8 million in Gross Domestic Product (GDP), and $52.9 million in tax revenues (Exhibit 7.1). These are the effects realized by the entire nation. Renovation of a historic home in Sioux Falls may require lumber from Oregon, plumbing fixtures from Ohio, and paint from Tennessee. South Dakota garners roughly 65 to 85 percent of total jobs, income, wealth, and tax benefits of preservation activities that accrue to the nation. On an annual basis, the in-state effects to South Dakota from the annual $275.14 million investment in historic preservation include 5,511 jobs, $96.3 million in income, $283.9 million in output, $152.2 million in gross state product (GSP), and $45 million in taxes ($29.2 million federal and $15.8 million state and local). The net in-state wealth added to the economy is roughly $123 million annually ($152.2 million GSP added minus $29.2 million in federal taxes).

Meanwhile, with regard to the $329.76 million in cumulative effects from the aggregate historic rehabilitation, those investments contributed 6,600 jobs to the national economy, as well as $610.3 million in industrial output, $301.8 million in gross domestic product, $230.7 million in earned income, and $66.7 million in taxes. When out-of-state effects are excluded, South Dakota benefited from the aggregate historic rehabilitation a total of 4,810 jobs, as well as an additional $343.2 million in output by the state's businesses, $198.4 million in new gross state product (GSP or gross wealth), $159.3 million in added salary for South Dakota residents, and a total of $10.4 million deposited in the coffers of state and local governments across the state (Exhibit 7.2). Overall, net in-state wealth in South Dakota (GSP minus federal taxes) grew by $151.9 million as a result of this rehabilitation.

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 very large. As of 2010, South Dakota had approximately 556,500 people employed and a total personal income of $32.3 billion.[18] The in-state economic benefits of historic preservation traced above are clearly a small fraction of the statewide employment and earnings totals. In part, the fraction is so small because a portion of the economic activity associated with rehabilitation and heritage tourism leaks out of that state. Recall the Sioux Falls restoration using materials from around the country. But even at the national level, historic preservation is small when it is compared to the total economic scale of the country.

[18] U.S. Bureau of Economic Analysis

Although comparing historic preservation to total economic activity at both the state and national levels is somewhat instructive, it is also misleading: indeed, nearly any well-defined economic activity will not appear large against the sum of all activities. Rather than measuring historic preservation's economic benefits by the yardstick of *all* statewide 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 South Dakota employer in the totality of all employment, preservation is an important contributor to the travel industry, which comprised roughly 6.6 percent of non-farm employment in South Dakota[19].

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 numerous downtown revitalizations in small South Dakota communities that were described previously in Chapter 5. In these localities, downtown specifically, and historic preservation generally, are very important to local economic invigoration. The same is true with respect to the penetration of "bricks and mortar" historic preservation. Thus, as discussed in Chapter 5, rehabilitation via Main Street is an important activity.

Further, there is the positive support that historic rehabilitation lends to other construction activity in a community. When buildings in a historic neighborhood are rehabilitated in a town, doesn't this encourage further rehabilitation in the city? What often makes communities distinctive is their place in history, so the preservation of these places fosters further rounds of renovation (as well as added tourism and other benefits).

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 not quantified does not mean they do not exist. The point is that at a local 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.

[19] U.S. Travel Association

EXHIBIT 7.1
Summary of the Annual Economic Impacts of Historic Preservation in South Dakota, 2011

		I *Historic Rehabilitation*	II *Heritage Tourism*	III *Historic Museums*	***Total Examined Economic Impacts***
SOUTH DAKOTA DIRECT EFFECTS		**$22.64 million** annually of historic rehabilitation expenditures results in:	**$237.25 million** annually of heritage travel-attributed expenditures results in:	**$15.25 million** annually of construction and added retail payroll results in:	**$275.14 million** ***(I + II + III)***
↓	**National Total (Direct and Multiplier) Impacts**				
NATIONAL TOTAL IMPACTS (DIRECT AND MULTIPLIER)	Jobs (person-years)	453	5,821	282	**6,535**
	Income ($ million)	15.8	110.7	8.3	**134.4**
	Output ($ million)	41.9	373.6	24.3	**438.4**
	GDP* ($ million)	20.7	180.6	16.0	**218.8**
	Taxes ($ million)	4.6	46.0	2.6	**52.9**
	Federal ($ million)	*3.4*	*26.4*	*1.8*	***31.6***
	Local/State ($ million)	*1.2*	*19.6*	*0.8*	***21.3***
↓	**In-State South Dakota Total (Direct and Multiplier) Impacts**				
SOUTH DAKOTA PORTION OF NATIONAL TOTAL IMPACTS	Jobs (person-years)	330	4,970	219	**5,511**
	Income ($ million)	10.9	79.3	6.0	**96.3**
	Output ($ million)	23.5	243.3	15.9	**283.9**
	GSP* ($ million)	13.6	124.4	12.3	**152.2**
	Taxes ($ million)	3.9	39.1	2.3	**45.0**
	Federal ($ million)	*3.2*	*24.4*	*1.7*	***29.2***
	Local/State ($ million)	*0.7*	*14.7*	*0.6*	***15.8***
	In-state wealth* ($ million)	10.4	100.0	10.6	**123.0**

Source: Rutgers University, Center for Urban Policy Research, 2012.
*GDP = Gross Domestic Product; GSP = Gross State Product; In-state wealth = GSP less federal taxes.
Note: Totals may differ from indicated subtotals because of rounding.

EXHIBIT 7.2
Summary of the Cumulative Economic Impacts of Historic Rehabilitation in South Dakota, 1982-2011

		I *Historic Rehabilitation*	***Total Examined Economic Impacts***
SOUTH DAKOTA DIRECT EFFECTS		**$329.76 million** cumulative of historic rehabilitation expenditures results in:	**$329.76 million** ***(I)***
↓	**National Total (Direct and Multiplier) Impacts**		
	Jobs (person-years)	6,600	**6,600**
NATIONAL TOTAL IMPACTS (DIRECT AND MULTIPLIER)	Income ($ million)	230.7	**230.7**
	Output ($ million)	610.3	**610.3**
	GDP* ($ million)	301.8	**301.8**
	Taxes ($ million)	66.7	**66.7**
	Federal ($ million)	*49.7*	***49.7***
	Local/State ($ million)	*17.0*	***17.0***
↓	**In-State South Dakota Total (Direct and Multiplier) Impacts**		
	Jobs (person-years)	4,810	**4,810**
SOUTH DAKOTA PORTION OF NATIONAL TOTAL IMPACTS	Income ($ million)	159.3	**159.3**
	Output ($ million)	343.2	**343.2**
	GSP* ($ million)	198.4	**198.4**
	Taxes ($ million)	56.9	**56.9**
	Federal ($ million)	*46.5*	***46.5***
	Local/State ($ million)	*10.4*	***10.4***
	In-state wealth* ($ million)	151.9	**151.9**

Source: Rutgers University, Center for Urban Policy Research, 2012.
*GDP=Gross Domestic Product; GSP = Gross State Product; In-state wealth = GSP less federal taxes.
Note: Totals may differ from indicated subtotals because of rounding.

A final note on the scale of the historic preservation benefits also relates to the inadequacy of our measuring capabilities. The quality of life, educational, community pride and other benefits of preservation are not being tallied here. For instance, in the renovation of the historic house in Sioux Falls, we count as an economic benefit to the state's economy the job, output, 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 South Dakota'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 HISTORIC PRESERVATION

Of the annual benefits from historic preservation noted earlier and summarized in Exhibit 7.1, the largest contribution is from heritage tourism, followed more distantly by historic rehabilitation, and yet more distantly by the investment in historic museums. 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 $237.25 million in annual spending in South Dakota, followed by the $22.64 million in historic rehabilitation, and $15.25 million annually for historic museums.

EXHIBIT 7.3
Economic Effects by Component of Historic Preservation Activity in South Dakota

Economic Sector	Historic Rehabilitation	Heritage Tourism	Historic Museums
	Effects Per Million Dollars of Initial Expenditure		
National			
Employment (jobs)	20.0	24.5	18.5
Income	$699,923	$466,545	$542,953
State/Local Taxes	$51,488	$82,525	$52,568
GDP	$914,586	$761,074	$1,050,620
State			
Employment (jobs)	14.6	20.9	14.3
Income	$482,524	$334,053	$395,600
State/Local Taxes	$31,563	$61,844	$37,148
GSP	$600,611	$524,418	$804,323
	Ratio of Total to Direct Effects (Multiplier)		
National			
Output	1.852	1.791	1.597
Employment	1.663	1.345	1.456
Income	1.576	1.707	1.488
GDP	1.749	1.765	1.363
State			
Output	1.443	1.346	1.283
Employment	1.402	1.191	1.280
Income	1.302	1.355	1.258
GSP	1.388	1.356	1.183

Source: Rutgers University, Center for Urban Policy Research, 2012.
Notes: GDP = Gross Domestic Product, GSP = Gross State Product

The respective component contributions must be viewed holistically, however. Vibrant historic museums throughout the state are essential to a healthy heritage tourism industry in South Dakota. In fact, the

multiplier effects from the historic rehabilitation compare quite favorably with those of the heritage tourism for output and employment, as is shown in Exhibit 7.3. 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 7.3. Construction generates a relatively high number of jobs per $1 million invested, but actually heritage tourism provides the highest job generation of all (reflecting its modest wages per job). While ascribing effects to various separate components of historic preservation is useful on one level, it is also an artificial construct, as the various elements interact with one another to create the "heritage economy."

Nationwide Impacts from the $275 Million Annual Historic Preservation Investment

The details of the national and in-state economic effects of the annual $275 million in direct preservation spending related to historic preservation activity—at the sector, industry, and occupational level, in order —are contained in Exhibits 7.4 through 7.9. Beyond the mere tabulations that have been presented earlier in this work, there are deeper economic truths to be drawn from these tables. For instance, Exhibit 7.4 shows that the *direct* effects to the nation of annual $275 million spending related to South Dakota historic preservation activity translates into $246.5 million in output, 4,783 new jobs, $80 million in earned income, and $128 million in Gross Domestic Product (GDP) (Exhibit 7.4, II.1). The ratio of the GDP impact to initial investment (0.46) indicates the importation 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 other activities (such as heritage tourism). Multiplier effects then add $192 million in output, 1,752 more jobs, $54 million more in income, and $91 million more in GDP (Exhibit 7.4, II.2). The sums of these figures generate the grand totals (Exhibit 7.4, II.3). In all instances, the indirect and induced effects do not exceed the direct effects (the traditional multipliers are less than 2.0).

To summarize, the national total direct and multiplier economic impacts from the annual (2011) South Dakota $275 million of historic preservation activity include 6,535 jobs, $438 million in output, $134 million in income, $219 million in GDP and $53 million in combined federal, state and local taxes (Exhibit 7.4).

Of the 6,535 total national jobs generated nationally by annual $275 million spending in activities related to historic preservation in South Dakota, nearly eight in ten are concentrated in two major sectors: retail trade (2,971 jobs or 45 percent) and services (2,172 jobs or 33 percent) (Exhibit 7.4). The next largest beneficiary is manufacturing (461 jobs, 7 percent). Combined, these three sectors account for a similar combined share of the total output, labor income and GDP generated. Between the sectors, however, there is wide variation in the quality of the job, as computed by average income per job. Simple division shows that nationwide the labor income per historic preservation job is $12,601 for retail trade, $19,425 for services, and $42,691 for manufacturing. Because of the concentration of jobs in retail trade and services through heritage tourism, the nation's average labor income per job generated by this activity is $19,015, substantially lower than the $34,985 average income for jobs generated through the state's historic building rehabilitation. Most of these latter jobs are in the higher-paying construction industry, however.

The difference in job quality is also noticeable between jobs created indirectly and directly by South Dakota annual activity related to historic preservation. Exhibit 7.4 reveals that indirectly created jobs pay on average $30,830, while directly created jobs pay on average $16,798—a difference of $14,032 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 breakdown of national economic impacts by industry (Exhibit 7.5) shows that a large number of these jobs are in the restaurant and hotel industries, which generally pay lower wages and offer most jobs on a part-time basis.

An evaluation of the national job productivity (GDP per job) from the annual South Dakota preservation investment reveals a much larger gap of $25,158 ($51,887 versus $26,729) between indirect and direct national jobs supporting South Dakota's $275 million activity related to historic preservation. A major reason for that gap is that for comparable jobs, wages in South Dakota are lower than for most other states. Another contributor is an even greater representation of lower-paying service-based jobs in the direct effects and higher-paying manufacturing jobs in the indirect sector.

The national distribution of jobs by occupation is shown in Exhibit 7.6. For instance, of the total national 6,535 jobs resulting from the annual South Dakota $275 million investment in historic preservation, 2,356 jobs are in food preparation and service occupations and 145 are in retail and sales.

State-Level Impacts from the $275 Million Annual Historic Preservation Investment

Exhibits 7.7, 7.8, and 7.9 present the total economic effects of the annual $275 million in direct historic preservation spending *within the state of South Dakota*. Exhibit 7.7 shows that South Dakota retains about 5,511 jobs (84 percent of the 6,535 direct jobs created nationally) by activity related to South Dakota historic preservation. This implies that indirect and induced employment has a much lower retention rate (938 of 1,752 jobs, or 53.5 percent), since suppliers of manufactured goods for rehabilitation or souvenirs for sale at historic tourist destinations are often out-of-state.

In sum, through annual $275 million activity related to historic preservation, South Dakota annually gains $284 million in industrial output (65 percent of the national total), 5,511 jobs (84 percent of the national total), $96 million in earned income (72 percent of the national total), and $152 million in Gross State Product or GSP (70 percent of the national total) (Exhibit 7.7). In addition, the annual South Dakota historic preservation investment garners over $8 million in state taxes and over $7 million annually in local taxes. The annual contribution to South Dakota in-state wealth (GSP less federal taxes) is $123 million.

Economic benefits of historic preservation-related activity that accrue to South Dakota are concentrated in the direct effects. A larger proportion of the direct jobs are in the relatively high-paying construction industry. The impact of these jobs is somewhat offset by the even larger proportion of lower-paying service and retail jobs. Hence, at $17,475, the average labor income per job in South Dakota (total South Dakota labor income divided by total South Dakota jobs) generated through the state's annual historic preservation activity is somewhat less than the national labor income per job of $20,560.

Industry detail of South Dakota state impacts (Exhibit 7.8) reflect concentrations similar to those noted at the national level. Of the 5,511 total (direct and multiplier) state-level jobs derived from annual historic preservation investment, the greatest concentrations are retail trade (2,892 jobs), most notably clustered in eating/drinking places (2,464 jobs); services (1,946 jobs), most notably clustered in hotels/other lodging (898 jobs); and the construction industry (190 jobs) with employment concentrated among general building contractors (133 jobs) (Exhibit 7.8). Likewise, those industries garner large shares of the labor income and gross state product tallies, as well as being associated with the most prominent occupations in Exhibit 7.9. For example, of the $152 million gross state product garnered from the annual South Dakota $275 million in historic preservation investment, $58 million is found in the retail trade industry including $42 million in eating and drinking places (Exhibit 7.8). There is an associated concentration of employment in related occupations including over 100 jobs for both cashiers (269 jobs) and retail salespersons (135 jobs) (Exhibit 7.9).

EXHIBIT 7.4
Total National Economic & Tax Impacts of Annual South Dakota Historic Preservation Activity: Historic Rehabilitation, Heritage Tourism, and Historic Museums ($275 million, 2011)

	Economic Component			
	Output (000$)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	6,575.4	15	398.7	560.8
2. Agri. Serv., Forestry, & Fish	707.1	7	284.1	636.4
3. Mining	4,873.3	13	846.8	2,278.5
4. Construction	16,145.9	222	7,288.3	10,027.1
5. Manufacturing	92,921.1	461	19,680.4	30,875.5
6. Transport. & Public Utilities	25,991.0	233	6,914.2	12,928.2
7. Wholesale	18,751.4	183	7,625.3	9,261.0
8. Retail Trade	106,822.6	2,971	37,438.5	59,933.0
9. Finance, Ins., & Real Estate	36,626.0	229	10,892.1	25,426.9
10. Services	126,297.7	2,172	42,190.3	65,578.3
11. Government	2,638.6	29	798.4	1,244.7
Total Effects (Private and Public)	438,350.0	6,535	134,357.2	218,750.4
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	246,517.3	4,783	80,343.3	127,843.9
2. Indirect and Induced Effects	191,832.6	1,752	54,013.8	90,906.5
3. Total Effects	438,350.0	6,535	134,357.2	218,750.4
4. Multipliers (3/1)	1.778	1.366	1.672	1.711
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				132,759.8
2. Taxes				35,063.1
a. Local				8,425.5
b. State				10,493.2
c. Federal				16,144.4
General				5,403.1
Social Security				10,741.2
3. Profits, dividends, rents, and other				50,927.5
4. Total Gross State Product (1+2+3)				218,750.4
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		132,759.8	100,183.3	
2. Taxes		35,063.1	17,811.8	52,874.9
a. Local		8,425.5	2,370.6	10,796.2
b. State		10,493.2	0.0	10,493.2
c. Federal		16,144.4	15,441.2	31,585.5
General		5,403.1	15,441.2	20,844.3
Social Security		10,741.2	0.0	10,741.2
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				23.8
Income				488,318
State/Local Taxes				77,376
Gross State Product				795,044
INITIAL EXPENDITURE IN DOLLARS				275,142,547

EXHIBIT 7.5: National Industrial Impacts of Annual South Dakota Historic Preservation Activity ($275 million, 2011)

SECTOR/INDUSTRY	Output	Employment	Income	Gross State Prod.
Agriculture	**6,575.4**	**15**	**398.7**	**560.8**
Dairy Farm Products	1,307.7	3	78.1	64.4
Eggs	31.2	0	1.4	1.6
Meat Animals	2,966.3	5	133.0	154.1
Misc. Livestock	29.2	0	2.5	2.7
Wool	9.1	0	0.8	0.9
Cotton	103.7	0	10.3	14.3
Tobacco	6.2	0	0.4	0.9
Grains & Misc. Crops	201.3	0	5.0	31.5
Feed Crops	809.6	1	17.5	117.3
Fruits & Nuts	642.5	5	107.9	89.4
Vegetables	99.2	0	12.5	16.5
Greenhouse/Nursery Products	91.7	1	17.1	21.8
Sugar Beets & Cane	74.7	0	1.7	15.0
Flaxseed, Peanuts, Soybean	203.0	0	10.7	30.4
Agri. Serv., Forestry, & Fish	**707.1**	**7**	**284.1**	**636.4**
Agri. Services (07)	474.9	6	247.6	427.4
Forestry (08)	140.6	0	12.4	126.5
Fishing, Hunting, Trapping (09)	91.6	0	24.0	82.5
Mining	**4,873.3**	**13**	**846.8**	**2,278.5**
Coal Mining (12)	380.2	2	118.2	342.2
Oil & Gas Extraction (13)	3,865.7	7	518.3	1,513.2
Nonmetal Min.-Ex. Fuels (14)	587.7	5	200.2	395.3
Metal Mining (10)	39.7	0	10.2	27.8
Construction	**16,145.9**	**222**	**7,288.3**	**10,027.1**
General Bldg. Contractors (15)	9,051.1	147	4,696.6	6,249.4
Heavy Const. Contractors (16)	2,213.3	39	1,395.0	1,731.7
Special Trade Contractors (17)	4,881.5	36	1,196.7	2,045.9
Manufacturing	**92,921.1**	**461**	**19,680.4**	**30,875.5**
Food & Kindred Prod. (20)	21,111.4	76	2,931.9	5,607.7
Tobacco Manufactures (21)	679.2	1	58.6	463.3
Textile Mill Prod. (22)	2,793.4	17	612.4	25.2
Apparel & Other Prod. (23)	3,339.5	27	937.6	988.4
Limber & Wood Prod. (24)	2,989.2	19	686.3	870.5
Furniture & Fixtures (25)	688.7	6	205.6	376.7
Paper & Allied Prod. (26)	2,690.4	11	592.3	1,043.0
Chemicals & Allied Prod. (28)	10,570.4	28	1,858.8	3,513.0
Petroleum & Coal Prod. (29)	9,881.1	7	640.9	1,861.3
Rubber & Misc. Plastics (30)	2,854.9	19	793.1	996.2
Leather & Leather Prod. (31)	617.5	5	164.3	260.1
Stone, Clay, & Glass (32)	2,522.8	17	786.2	1,088.4
Primary Metal Prod. (33)	1,401.8	5	300.5	419.7
Fabricated Metal Prod. (34)	4,019.3	31	1,176.3	1,227.0
Machinery, Except Elec. (35)	1,731.3	12	560.2	590.9
Electric & Elec. Equip. (36)	2,909.1	12	729.3	1,287.0
Transportation Equipment (37)	4,778.2	19	809.5	2,058.6
Instruments & Rel. Prod. (38)	2,431.7	10	557.7	1,528.8
Misc. Manufacturing Inds. (39)	9,830.1	86	3,708.8	4,586.5
Printing & Publishing (27)	5,081.3	51	1,570.2	2,083.2

EXHIBIT 7.5: National Industrial Impacts of Annual South Dakota Historic Preservation Activity ($275 million, 2011)

Transport. & Public Utilities	**25,991.0**	**233**	**6,914.2**	**12,928.2**
Railroad Transportation (40)	593.4	5	246.0	465.1
Local Pass. Transit (41)	3,899.1	102	1,682.9	2,076.7
Trucking & Warehousing (42)	4,072.8	64	1,942.0	2,267.2
Water Transportation (44)	541.2	7	154.3	144.6
Transportation by Air (45)	949.4	11	330.4	493.7
Pipe Lines-Ex. Nat. Gas (46)	183.1	0	19.8	62.9
Transportation Services (47)	513.1	4	194.1	355.0
Communication (48)	6,385.8	23	1,307.3	2,966.2
Elec., Gas, & Sanitary Serv. (49)	8,853.2	15	1,037.3	4,096.9
Wholesale	**18,751.4**	**183**	**7,625.3**	**9,261.0**
Wholesale-Nondurable Goods (51)	11,168.1	119	4,541.6	5,515.8
Wholesale-Durable Goods (50)	7,583.2	64	3,083.7	3,745.2
Retail Trade	**106,822.6**	**2,971**	**37,438.5**	**59,933.0**
Bldg. Mat.-Garden Supply (52)	1,008.9	16	438.2	724.5
General Merch. Stores (53)	4,889.4	94	1,763.0	3,511.0
Food Stores (54)	2,728.8	70	1,063.8	1,959.5
Auto. Dealers-Serv. Stat. (55)	4,788.0	55	1,259.3	3,438.2
Apparel & Access. Stores (56)	1,682.5	57	790.2	1,208.2
Furniture & Home Furnish. (57)	488.2	8	228.0	350.5
Eating & Drinking Places (58)	83,729.5	2,519	28,462.5	43,350.2
Miscellaneous Retail (59)	7,507.3	153	3,433.4	5,390.9
Finance, Ins., & Real Estate	**36,626.0**	**229**	**10,892.1**	**25,426.9**
Banking (60)	3,765.9	22	994.0	2,931.4
Nondep. Credit Institutions (61)	6,345.1	76	3,323.6	4,169.6
Security, Comm. Brokers (62)	960.5	5	472.1	583.9
Insurance Carriers (63)	5,187.1	43	2,087.3	3,423.1
Ins. Agents, Brokers (64)	1,447.7	14	557.4	633.5
Real Estate (65)	15,146.4	59	1,481.4	12,303.3
Holding and Invest. Off. (67)	3,773.3	10	1,976.5	1,382.1
Services	**126,297.7**	**2,172**	**42,190.3**	**65,578.3**
Hotels & Other Lodging (70)	47,002.5	923	13,041.4	23,224.5
Personal Services (72)	7,072.4	142	2,595.0	2,783.6
Business Services (73)	8,095.8	155	3,429.9	3,394.9
Auto Repair, Serv., Garages (75)	9,771.5	79	1,959.8	3,774.0
Misc. Repair Services (76)	2,842.9	23	1,063.3	885.1
Motion Pictures (78)	6,888.9	66	1,782.0	2,086.8
Amusement & Recreation (79)	12,391.8	373	4,615.5	7,213.1
Health Services (80)	4,497.3	60	2,339.7	2,493.0
Legal Services (81)	1,881.9	22	870.4	953.6
Educational Services (82)	848.6	21	430.9	364.3
Social Services (83)	552.5	13	279.8	304.7
Museums & Gardens (84, 86)	17,866.5	231	6,724.6	16,065.8
Engineer. & Manage. Serv. (87)	5,199.1	46	2,475.9	1,613.8
Private Households (88)	27.7	2	27.7	27.7
Miscellaneous Services (89)	1,358.2	15	554.4	393.5
Government	**2,638.6**	**29**	**798.4**	**1,244.7**
Total	**438,350.0**	**6,535**	**134,357.2**	**218,750.4**

EXHIBIT 7.6: National Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity ($275 million, 2011)

TOTAL NUMBER OF JOBS	**6,535**
Executive, administrative, and managerial occupations	**549**
Managerial and administrative occupations	436
Management support occupations	113
Professional specialty occupations	**260**
Engineers	24
Architects and surveyors	4
Life scientists	2
Computer, mathematical, and operations research occupations	24
Physical scientists	3
Religious workers	4
Social scientists	2
Social and recreation workers	18
Lawyers and judicial workers	9
Teachers, librarians, and counselors	63
Health diagnosing occupations	4
Health assessment and treating occupations	17
Writers, artists, and entertainers	65
All other professional workers	21
Technicians and related support occupations	**82**
Health technicians and technologists	40
Engineering and science technicians and technologists	24
Technicians, except health and engineering and science	18
Marketing and sales occupations	**723**
Cashiers	281
Counter and rental clerks	75
Insurance sales agents	7
Marketing and sales worker supervisors	80
Models, demonstrators, and product promoters	2
Parts salespersons	7
Real estate agents and brokers	5
Retail salespersons	145
Sales engineers	1
Securities, commodities, and financial services sales agents	4
Travel agents	8
All other sales and related workers	110
Administrative support occupations, including clerical	**755**
Adjusters, investigators, and collectors	31
Communications equipment operators	12
Computer operators	4
Information clerks	139
Mail clerks and messengers	5
Postal clerks and mail carriers	17
Material recording, scheduling, dispatching, and distributing occupations	124
Records processing occupations	117
Secretaries, stenographers, and typists	87
Other clerical and administrative support workers	219

EXHIBIT 7.6: National Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity ($275 million, 2011)

Service occupations	**2,897**
Cleaning and building service occupations, except private household	350
Food preparation and service occupations	2,356
Health service occupations	18
Personal service occupations	105
Private household workers	2
Protective service occupations	59
All other protective service workers	7
Agriculture, forestry, fishing, and related occupations	**80**
Farm operators and managers	2
Farm workers	10
Fishers and fishing vessel operators	0
Forestry, conservation, and logging occupations	1
Landscaping, grounds-keeping, nursery, greenhouse, and lawn service occupations	48
Supervisors, farming, forestry, and agricultural related occupations	1
Veterinary assistants and nonfarm animal caretakers	10
All other agricultural, forestry, fishing, and related workers	8
Precision production, craft, and repair occupations	**510**
Blue-collar worker supervisors	60
Construction trades	108
Extractive and related workers, including blasters	4
Mechanics, installers, and repairers	173
Machinery mechanics, installers, and repairers	91
Vehicle and mobile equipment mechanics and repairers	38
Other mechanics, installers, and repairers	37
Production occupations, precision	**90**
Assemblers, precision	3
Food workers, precision	13
Inspectors, testers, and graders, precision	16
Metal workers, precision	31
Printing workers, precision	4
Textile, apparel, and furnishings workers, precision	11
Woodworkers, precision	6
Other precision workers	6
Plant and system occupations	**3**
Chemical plant and system operators	1
Electric power generating plant operators, distributors, and dispatchers	1
Gas and petroleum plant and system occupations	1
Stationary engineers	1
Water and liquid waste treatment plant and system operators	0
Operators, fabricators, and laborers	**587**
Machine setters, set-up operators, operators, and tenders	137
Hand workers, including assemblers and fabricators	76
Transportation and material moving machine and vehicle operators	213
Helpers, laborers, and material movers, hand	161

EXHIBIT 7.7
Total In-State Economic & Tax Impacts of
Annual South Dakota Historic Preservation Activity:
Historic Rehabilitation, Heritage Tourism, and Historic Museums ($275 million, 2011)

	Economic Component			
	Output (000 $)	**Employment (jobs)**	**Income (000$)**	**Gross State Product (000$)**
I. TOTAL EFFECTS (Direct and Indirect/Induced)*				
1. Agriculture	364.7	1	22.3	36.2
2. Agri. Serv., Forestry, & Fish	369.8	4	177.5	332.8
3. Mining	185.7	1	55.7	112.5
4. Construction	12,734.8	190	6,226.4	8,376.0
5. Manufacturing	17,356.2	107	4,009.8	5,708.5
6. Transport. & Public Utilities	14,632.6	142	3,992.7	7,397.8
7. Wholesale	10,639.3	108	4,326.5	5,254.6
8. Retail Trade	103,785.7	2,892	36,354.1	58,117.0
9. Finance, Ins., & Real Estate	13,398.0	115	5,043.9	9,243.6
10. Services	110,011.7	1,946	35,955.8	57,422.6
11. Government	436.4	4	138.2	237.7
Total Effects (Private and Public)	283,915.0	5,511	96,302.8	152,239.4
II. DISTRIBUTION OF EFFECTS/MULTIPLIER				
1. Direct Effects	210,724.5	4,573	71,791.5	113,946.3
2. Indirect and Induced Effects	73,190.5	938	24,511.2	38,293.1
3. Total Effects	283,915.0	5,511	96,302.8	152,239.4
4. Multipliers (3/1)	1.347	1.205	1.341	1.336
III. COMPOSITION OF GROSS STATE PRODUCT				
1. Wages--Net of Taxes				98,191.5
2. Taxes				27,880.4
a. Local				5,210.0
b. State				8,272.6
c. Federal				14,397.8
General				4,072.7
Social Security				10,325.2
3. Profits, dividends, rents, and other				26,167.4
4. Total Gross State Product (1+2+3)				152,239.4
IV. TAX ACCOUNTS		**Business**	**Household**	**Total**
1. Income --Net of Taxes		98,191.5	96,302.8	
2. Taxes		27,880.4	17,121.9	45,002.3
a. Local		5,210.0	2,278.8	7,488.8
b. State		8,272.6	0.0	8,272.6
c. Federal		14,397.8	14,843.1	29,240.9
General		4,072.7	14,843.1	18,915.7
Social Security		10,325.2	0.0	10,325.2
EFFECTS PER MILLION DOLLARS OF INITIAL EXPENDITURE				
Employment (Jobs)				20.0
Income				350,010
State/Local Taxes				57,284
Gross State Product				553,311
INITIAL EXPENDITURE IN DOLLARS				275,142,547

EXHIBIT 7.8: In-State Industrial Impacts of Annual South Dakota Historic Preservation Activity ($275 million, 2011)

SECTOR/INDUSTRY	Output	Employment	Income	Gross State Prod.
Agriculture	**364.7**	**1**	**22.3**	**36.2**
Dairy Farm Products	0.0	0	0.0	0.0
Eggs	0.0	0	0.0	0.0
Meat Animals	237.5	0	11.0	12.5
Misc. Livestock	0.8	0	0.1	0.1
Wool	0.0	0	0.0	0.0
Cotton	0.0	0	0.0	0.0
Tobacco	0.0	0	0.0	0.0
Grains & Misc. Crops	40.1	0	1.0	6.3
Feed Crops	21.4	0	0.4	3.5
Fruits & Nuts	0.0	0	0.0	0.0
Vegetables	1.3	0	0.1	0.2
Greenhouse/Nursery Products	48.1	0	9.0	11.5
Sugar Beets & Cane	0.0	0	0.0	0.0
Flaxseed, Peanuts, Soybean	15.5	0	0.8	2.3
Agri. Serv., Forestry, & Fish	**369.8**	**4**	**177.5**	**332.8**
Agri. Services (07)	304.1	4	163.0	273.7
Forestry (08)	15.5	0	1.4	13.9
Fishing, Hunting, Trapping (09)	50.2	0	13.2	45.2
Mining	**185.7**	**1**	**55.7**	**112.5**
Coal Mining (12)	1.0	0	0.3	0.9
Oil & Gas Extraction (13)	46.4	0	6.2	18.2
Nonmetal Min.-Ex. Fuels (14)	137.6	1	49.0	93.2
Metal Mining (10)	0.7	0	0.2	0.2
Construction	**12,734.8**	**190**	**6,226.4**	**8,376.0**
General Bldg. Contractors (15)	8,012.1	133	4,267.6	5,631.7
Heavy Const. Contractors (16)	1,824.9	35	1,223.1	1,505.3
Special Trade Contractors (17)	2,897.7	23	735.7	1,239.0
Manufacturing	**17,356.2**	**107**	**4,009.8**	**5,708.5**
Food & Kindred Prod. (20)	6,627.6	27	945.8	1,328.2
Tobacco Manufactures (21)	0.0	0	0.0	0.0
Textile Mill Prod. (22)	26.9	0	6.1	0.3
Apparel & Other Prod. (23)	258.5	2	65.4	75.7
Limber & Wood Prod. (24)	1,315.4	9	317.0	376.5
Furniture & Fixtures (25)	78.4	1	25.5	46.0
Paper & Allied Prod. (26)	97.8	1	25.8	37.4
Chemicals & Allied Prod. (28)	105.7	0	20.0	37.5
Petroleum & Coal Prod. (29)	0.0	0	0.0	0.0
Rubber & Misc. Plastics (30)	130.4	1	38.4	46.9
Leather & Leather Prod. (31)	8.8	0	2.3	3.9
Stone, Clay, & Glass (32)	881.8	6	271.3	359.1
Primary Metal Prod. (33)	83.4	0	13.7	22.4
Fabricated Metal Prod. (34)	1,872.6	15	552.5	590.5
Machinery, Except Elec. (35)	498.8	3	154.6	170.1
Electric & Elec. Equip. (36)	89.7	0	27.6	44.1
Transportation Equipment (37)	243.5	1	50.9	111.3
Instruments & Rel. Prod. (38)	886.7	4	203.1	557.1
Misc. Manufacturing Inds. (39)	2,684.8	20	798.1	1,276.6
Printing & Publishing (27)	1,465.3	17	491.9	625.2

EXHIBIT 7.8: In-State Industrial Impacts of Annual South Dakota Historic Preservation Activity ($275 million, 2011)

Transport. & Public Utilities	**14,632.6**	**142**	**3,992.7**	**7,397.8**
Railroad Transportation (40)	152.7	1	63.3	119.7
Local Pass. Transit (41)	2,931.6	76	1,265.3	1,561.4
Trucking & Warehousing (42)	1,796.5	33	969.7	1,059.7
Water Transportation (44)	9.6	0	3.5	3.1
Transportation by Air (45)	449.1	5	156.3	233.6
Pipe Lines-Ex. Nat. Gas (46)	12.3	0	1.3	4.2
Transportation Services (47)	216.3	2	82.8	163.2
Communication (48)	4,186.5	15	845.9	1,948.4
Elec., Gas, & Sanitary Serv. (49)	4,878.0	9	604.5	2,304.5
Wholesale	**10,639.3**	**108**	**4,326.5**	**5,254.6**
Wholesale-Nondurable Goods (51)	8,364.7	89	3,401.5	4,131.2
Wholesale-Durable Goods (50)	2,274.7	19	925.0	1,123.4
Retail Trade	**103,785.7**	**2,892**	**36,354.1**	**58,117.0**
Bldg. Mat.-Garden Supply (52)	912.3	15	396.2	655.1
General Merch. Stores (53)	4,691.1	90	1,691.5	3,368.6
Food Stores (54)	2,552.7	65	995.2	1,833.0
Auto. Dealers-Serv. Stat. (55)	4,476.5	51	1,176.3	3,214.5
Apparel & Access. Stores (56)	1,551.1	53	728.5	1,113.8
Furniture & Home Furnish. (57)	435.1	7	203.2	312.5
Eating & Drinking Places (58)	81,908.9	2,464	27,843.6	42,407.6
Miscellaneous Retail (59)	7,258.0	148	3,319.5	5,211.9
Finance, Ins., & Real Estate	**13,398.0**	**115**	**5,043.9**	**9,243.6**
Banking (60)	2,712.7	16	716.0	2,111.6
Nondep. Credit Institutions (61)	5,630.2	67	2,949.1	3,699.8
Security, Comm. Brokers (62)	434.1	2	213.4	263.9
Insurance Carriers (63)	1,397.7	12	562.4	922.4
Ins. Agents, Brokers (64)	960.1	9	369.7	420.1
Real Estate (65)	2,235.0	9	218.6	1,815.5
Holding and Invest. Off. (67)	28.3	0	14.8	10.4
Services	**110,011.7**	**1,946**	**35,955.8**	**57,422.6**
Hotels & Other Lodging (70)	45,925.8	898	12,692.4	22,628.4
Personal Services (72)	6,143.8	127	2,253.3	2,395.9
Business Services (73)	4,527.9	100	1,988.5	1,921.5
Auto Repair, Serv., Garages (75)	8,892.9	71	1,748.5	3,427.8
Misc. Repair Services (76)	1,893.6	15	696.4	592.3
Motion Pictures (78)	4,936.2	55	1,240.7	1,536.2
Amusement & Recreation (79)	11,500.2	348	4,312.6	6,412.4
Health Services (80)	4,134.8	55	2,159.7	2,301.4
Legal Services (81)	1,252.0	14	579.0	634.4
Educational Services (82)	681.6	17	352.1	292.6
Social Services (83)	446.9	11	220.6	244.4
Museums & Gardens (84, 86)	15,155.3	191	5,567.6	13,628.8
Engineer. & Manage. Serv. (87)	3,838.1	34	1,851.0	1,190.8
Private Households (88)	25.1	2	25.1	25.1
Miscellaneous Services (89)	657.6	7	268.4	190.5
Government	**436.4**	**4**	**138.2**	**237.7**
Total	**283,915.0**	**5,511**	**96,302.8**	**152,239.4**

EXHIBIT 7.9: In-State Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity ($275 million, 2011)

TOTAL NUMBER OF JOBS	**5,511**
Executive, administrative, and managerial occupations	**433**
Managerial and administrative occupations	357
Management support occupations	76
Professional specialty occupations	**193**
Engineers	15
Architects and surveyors	3
Life scientists	1
Computer, mathematical, and operations research occupations	14
Physical scientists	1
Religious workers	2
Social scientists	1
Social and recreation workers	16
Lawyers and judicial workers	5
Teachers, librarians, and counselors	56
Health diagnosing occupations	3
Health assessment and treating occupations	14
Writers, artists, and entertainers	47
All other professional workers	15
Technicians and related support occupations	**57**
Health technicians and technologists	32
Engineering and science technicians and technologists	15
Technicians, except health and engineering and science	10
Marketing and sales occupations	**637**
Cashiers	269
Counter and rental clerks	67
Insurance sales agents	3
Marketing and sales worker supervisors	68
Models, demonstrators, and product promoters	1
Parts salespersons	5
Real estate agents and brokers	2
Retail salespersons	135
Sales engineers	1
Securities, commodities, and financial services sales agents	2
Travel agents	7
All other sales and related workers	76
Administrative support occupations, including clerical	**571**
Adjusters, investigators, and collectors	20
Communications equipment operators	10
Computer operators	3
Information clerks	124
Mail clerks and messengers	3
Postal clerks and mail carriers	11
Material recording, scheduling, dispatching, and distributing occupations	91
Records processing occupations	87
Secretaries, stenographers, and typists	61
Other clerical and administrative support workers	162

EXHIBIT 7.9: In-State Occupational Employment Impacts of Annual South Dakota Historic Preservation Activity ($275 million, 2011)

Service occupations	**2,789**
Cleaning and building service occupations, except private household	322
Food preparation and service occupations	2,297
Health service occupations	16
Personal service occupations	99
Private household workers	2
Protective service occupations	46
All other protective service workers	7
Agriculture, forestry, fishing, and related occupations	**56**
Farm operators and managers	0
Farm workers	2
Fishers and fishing vessel operators	0
Forestry, conservation, and logging occupations	0
Landscaping, grounds-keeping, nursery, greenhouse, and lawn service occupations	41
Supervisors, farming, forestry, and agricultural related occupations	0
Veterinary assistants and nonfarm animal caretakers	8
All other agricultural, forestry, fishing, and related workers	4
Precision production, craft, and repair occupations	**384**
Blue-collar worker supervisors	37
Construction trades	86
Extractive and related workers, including blasters	2
Mechanics, installers, and repairers	131
Machinery mechanics, installers, and repairers	68
Vehicle and mobile equipment mechanics and repairers	30
Other mechanics, installers, and repairers	30
Production occupations, precision	**43**
Assemblers, precision	1
Food workers, precision	8
Inspectors, testers, and graders, precision	6
Metal workers, precision	12
Printing workers, precision	1
Textile, apparel, and furnishings workers, precision	7
Woodworkers, precision	4
Other precision workers	4
Plant and system occupations	**1**
Chemical plant and system operators	0
Electric power generating plant operators, distributors, and dispatchers	0
Gas and petroleum plant and system occupations	0
Stationary engineers	0
Water and liquid waste treatment plant and system operators	0
Operators, fabricators, and laborers	**348**
Machine setters, set-up operators, operators, and tenders	49
Hand workers, including assemblers and fabricators	33
Transportation and material moving machine and vehicle operators	157
Helpers, laborers, and material movers, hand	109

RELATIVE ECONOMIC EFFECTS OF HISTORIC PRESERVATION

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. Exhibit 7.10 shows, in side-by-side fashion, the relative economic effects of the historic rehabilitation of different types of buildings (e.g., single and multi-family) vis-à-vis new construction of the same types of buildings. It further shows, for comparative purposes, 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.

The side-by-side comparisons in Exhibit 7.10 reveal that across building and investment types, historic preservation (in the form of historic rehabilitation) is a reasonably comparable, if not superior, (to highway construction), economic pump-primer vis-à-vis new construction. It is clear that historic rehabilitation is an equivalent if not better job creator than almost all of the other options listed. It is clearly better at employment pump priming than a current favored stimulus activity, that of highway construction. Income and GSP generation from historic rehabilitation do lag behind many of the competing construction activities, however.

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, farming, and so on. On this basis, historic preservation typically has economic advantages, as illustrated in Exhibit 7.11, which contains business activities important in South Dakota, such as banking, electronic production, farming, and meat packing. Investment in historic preservation typically has a much bigger "economic bang" per one million dollar investment relative to these other activities.

It is important to view these findings in a holistic fashion. A healthy economy will include *all* the activities noted above, such as new construction as well as rehabilitation of the historic stock and historic rehabilitation as well as a broad array of agriculture, manufacturing, services, and other pursuits. So, it is not a question of historic rehabilitation as *opposed* to other pursuits, but rather historic rehabilitation *joining* the many activities of the broader economy so as to realize the commendable strong economic "bang for the buck" offered by that rehabilitation.

APPLICATIONS OF THE FINDINGS OF THIS STUDY

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 South Dakota historic commission wanted to project the economic benefits of $10 million of historic rehabilitation occurring in a historic district. This projection can easily be made by referring to the base data contained in this study. Exhibit 7.3 shows the employment, income, output, and GDP effects per $1 million of investment in historic rehabilitation. 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 rehabilitation would generate in South Dakota 146 jobs, $4.8 million in income, $6.0 million in GSP, and about $316,000 in state-local taxes.

EXHIBIT 7.10
Relative Economic Effects in South Dakota of Historic Rehabilitation versus New Construction (per Million Dollars Spent)

Economic Effect: in-state	Construction Activity—Historic Rehabilitation and New Construction					
	Historic Rehabilitation	New Construction				
	Various Types	Single-Family	Multi-family	Nonresidential	Highway	Civic/ Institutional
	Effects Per Million Dollars of Initial Expenditure					
Employment (jobs)	14.6	14.8	14.3	14.8	12.6	15.2
Income ($000)	$483	$510	$497	$520	$492	$536
GSP ($000)	$602	$656	$635	$649	$596	$662
State-Local Taxes ($000)	$32	$37	$34	$35	$33	$33

Source: Rutgers University, Center for Urban Policy Research, 2008.
Notes: GDP = Gross Domestic Product, GSP = Gross State Product

EXHIBIT 7.11
Relative Economic Effects in South Dakota of Historic Rehabilitation versus Other Economic Activities (per Million Dollars Spent)

Economic Effect: in-state	*Historic Rehabilitation (various types)*	*Farming*	*Banking*	*Producing Electronics*	*Meat Packing*
Employment (jobs)	14.6	2.6	9.4	5.5	3.3
Income ($000)	$483	$132	$360	$279	$113
GSP ($000)	$602	$300	$923	$457	$144
State-local taxes ($000)	$32	$29	$24	$24	$2.8

The point of providing these data (see also Exhibits 7.10 and 7.11), 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 allow historic preservation to be viewed as an economic "producer."

THE ECONOMIC BENEFITS OF HISTORIC PRESERVATION IN SOUTH DAKOTA: A FINAL LOOK

It is instructive to recap some of the key economic and other impacts from historic preservation in South Dakota.

A *cumulative* (1982-2011) $330 million in *historic rehabilitation* in South Dakota aided by major federal and state/local subsidies has realized extensive total (direct and multiplier) economic impacts to South Dakota including about 4,800 jobs, $343 million in output, $198 million in gross state product, and $159 million in income. All this South Dakota-based economic activity has further generated about $57 million in taxes, comprised of approximately $47 million in federal taxes and $10 million in local/state taxes (about $7 million in South Dakota state taxes and $3 million in local taxes). (The economic and tax impacts to the nation—South Dakota and all other states—is yet larger, but we shall not recap that here.)

An *annual* $275 million in a broad array of South Dakota *historic preservation* activities (historic rehabilitation, heritage tourism and the operation of historic museums) also realizes extensive total (direct and multiplier) economic benefits to the state. These include about 5,500 jobs, $284 million in output, $152 million in gross state product, $96 million in income and $45 million in taxes ($29 million federal, $8 million state, and $7 million local).

We also find that $1 million invested in historic rehabilitation generates an equal if not sometimes superior economic impact in-state to South Dakota across multiple dimensions (employment, income, output, and Gross State Product) relative to a similar investment in other construction endeavors (new construction of different types and infrastructure [highway] improvements) as well as other forms of economic activity in South Dakota (agriculture, manufacturing, and banking). Thus, adding historic rehabilitation to a menu of other construction investments and other economic activities makes for a holistically stronger overall South Dakota economy.

Finally, the case studies point to many qualitative benefits of historic preservation including providing affordable housing, fostering downtown economic development and encouraging adaptive reuse.

It is further important to realize that our estimate of economic benefits from historic preservation in South Dakota is *understated* for various reasons:

- For technical reasons, our enumeration of the South Dakota historic preservation spending quantified in this study (historic rehabilitation, heritage tourism and historic museum budgets) is likely understated. For example, a more expansive definition of what travel characteristics "flag" a heritage traveler would have resulted in a higher estimate of annual heritage travel spending than the $275 million entered into the PEIM. In addition, because of data limitations, our annual estimate of $15 million of heritage museum spending is also very understated.
- Significant economic benefits that accrue from historic preservation in this state that have *not* been quantified by Rutgers University because they went beyond the scope of the current investigation. For example, in considering historic rehabilitation, we focus only on *construction*—a one-time investment. In fact, there are recurring year-by-year economic returns from historic rehabilitation. These *recurring* benefits include the renovated South Dakota historic rehabilitation enhancing tourism in the future, specifically heritage and cultural travel (a multi-billion dollar industry); the historic rehabilitation providing adaptively-reused and other commercial space for businesses that annually have a payroll and tax payments; and the positive historic rehabilitation impact on property values, which then yearly have tax, wealth and other

benefits. We have also not counted the well-known (though difficult to measure) tendency of historic rehabilitation to boost investor and neighborhood confidence and induce a broader trend toward community-wide revitalization.

- In a related fashion, we are not capturing how the enhanced "quality of life" (QOL) realized by the historic rehabilitation furthers the state economy and state tax generation. The case studies show how historic preservation in South Dakota improved the QOL in communities across the state. An enhanced QOL, in turn, realizes economic and state tax gains from attracting-retaining the "creative class" and more generally from enhanced worker efficiency, reduced medical expenses, and the like.
- In short, the previously specified multi-million dollar economic and tax gains from historic preservation in South Dakota is a considerable understatement of the larger recurring economic activity associated with this endeavor—from the multi-year operation of and employment in adaptively reused buildings, property appreciation, and QOL—and with it, multiple rounds of added revenue to the South Dakota economy and state and local tax coffers.

POLICY IMPLICATIONS

Given that historic preservation investment in South Dakota has important economic benefits besides the significant aesthetic and quality of life advantages afforded by preservation, consideration should be given to how enhanced preservation can be encouraged by this state. It is important to acknowledge that the state already has a strong preservation program in place, including attractive subsidies. Yet, South Dakota, as every other state, could do more to foster preservation.

In an ideal preservation world, unbounded financial resources would be available for historic preservation. For instance, one South Dakota historic rehabilitation developer interviewed by Rutgers recommended that the local property tax revenue lost under the current South Dakota property tax moratorium for historic rehabilitation be reimbursed to local communities, as is purportedly done in North Dakota. Realistically, however, South Dakota is already in the forefront of states supporting historic preservation with state resources, such as monies from Deadwood gaming, so it is unlikely that much more state aid for preservation will be forthcoming.

Given the many economic and other gains from historic preservation, it behooves South Dakota to continue to support this activity. As noted, the state already does more in this regard than many other states. The most prominent example of this is South Dakota allowing gaming in Deadwood and dedicating monies from this source for historic preservation purposes. Exhibit 2.4 shows the revenues realized from Deadwood for all historic preservation purposes from 1989 through 2011—a total of about $183 million[20]. Other than Colorado[21], no other state has secured such a resource for historic preservation. The continued nurturing of gaming in Deadwood is clearly an important policy for supporting historic preservation in South Dakota.

It is instructive to consider future policies to enhance historic preservation in South Dakota. In that regard, we present the following which considers some potential creative financing sources and regulatory consideration to aid preservation.

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[20] This amount includes Deadwood-funded preservation activities which we included in our PEIM analysis, such as historic rehabilitation, as well as other Deadwood-funded activities, not included in our PEIM study such as improving water and sewer infrastructure in that city.

[21] A portion of gaming tax revenue from the Colorado towns of Cripple Creek, Black Hawk and Central City goes to the Colorado State Historical Fund which in turn allocates monies for historic preservation activities across the state (http://www.historycolorado.org/oahp/state-historical-fund). Since 1990, more than $254 million has been awarded to historic preservation projects in all 64 Colorado counties.

Using Tax Increment Financing for Historic Preservation

Tax Increment Financing (TIF) is a popular tool to finance new development or redevelopment (rehabilitation and new construction) by capturing the property appreciation and associated nominal higher property tax payments ensuing from the development or redevelopment. The mechanism works as follows.

1. The area where the development/redevelopment is to occur is designated as a TIF district.

2. Property values for standard property taxation purposes are then frozen in the TIF district for a given period of time (e.g., 10 to 20 years).

3. As property values from the frozen levels increase over time, the appreciation (or "increment") is applied for development or redevelopment purposes. The amount captured is equal to the increment in property value multiplied by the property tax rate (the full rate or a portion, such as the municipal but not the school property tax rate).

To illustrate, say a city with an effective (or "equalized") property tax rate (EPTR) of 1 percent created a TIF to help preservation. If the TIF district appreciated $10 million in value from the frozen base, then $100,000 ($10 million × 1 percent) in preservation assistance would be made available annually.

Almost all states (49) allow TIFs, including South Dakota. As of 2007, there were about 150 TIF districts in the state. Rapid City alone has approved approximately 70 TIF districts since 1983.

As in many other states, the use of TIFs in South Dakota is restricted to certain areas. In South Dakota, a TIF can only be used in a "blighted" area. The South Dakota TIF enabling legislation states that at least 25 percent by area of real property must be blighted in order for a community to implement a TIF.

While TIF is allowed in South Dakota and there have been about 150 TIFs in the state, to our knowledge, TIF has not been used specifically for historic preservation in South Dakota or has only rarely been used for this specific purpose. *We respectfully encourage that South Dakota consider use or greater use of TIF for historic preservation purposes* as this mechanism has proved useful to encourage preservation in many places in the United States.

To understand TIFs and historic preservation better, we shall discuss this program and its application to historic preservation in Chicago, Illinois. Chicago and other Illinois cities are allowed to use a TIF to generate property tax dollars for economic development purposes in specifically designated areas. The TIF allows the city to invest all new property tax dollars generated from the designated TIF district (property value appreciation from the frozen tax base multiplied by the property tax rate) for as long as 23 years.

Illustrative is Chicago's North/Central Loop TIF—the first and largest (both in terms of land area and value of property) TIF project in Chicago and one of the largest in the United States. In order to revitalize the declining downtown area, the City of Chicago initiated the North Loop Tax Increment Financing (TIF) project in the mid-1980s. The original project, the North Loop covering about 32 acres of total property valued at about $53 million, was undertaken in 1984. Subsequently, in 1997, a considerably larger Central Loop extension was added to this project. Today, the entire project is generally referred to as the Central Loop. The Central Loop TIF district currently covers 171 acres of land and incorporates 22 redevelopment agreements where TIF subsidies were paid. Since the inception, the total dollar amount of TIF allocations has been about $300 million, of which about $200 million were developer subsidies and

$100 million were public works or infrastructure expenditures. The total amount of private investment in the North/Central Loop TIF has been $1.153 billion. Some of this area's major projects included renovation of the historic Blackstone Hotel and Palace Theater ($65 million private investment was aided by a $17 million TIF) and the historic rehab of the Chicago Theater ($42 million private investment aided by a $16 million TIF). The Chicago North/Central Loop is not alone but is joined by almost 130 other TIF locations in this city, comprising 30 percent of Chicago's land area.

Many other preservation projects nationally have used a TIF. The successful renovation of the historic Gateway/Statler hotel in St. Louis, a $200 million project, which used Missouri's state historic tax credit (HTC), also utilized $34 million secured by TIF. This TIF resource matched the combined equity obtained from the Federal HTC ($26 million) and state HTC ($12 million). The $0.7 million rehabilitation of the 1870s Summer Street apartments in Houston, Texas was largely funded by a $0.3 million TIF. In other instances, the TIF is proportionally smaller yet nonetheless is an important part of the preservation financing. The $5.2 million adaptive reuse of the 1893 Belvidere, Illinois High School into 57 housing units benefited from a $0.3 million TIF, and a $0.2 million TIF assisted a $3.4 million investment in the 1909 St. Luke's school in Two Rivers, Wisconsin.

In short, it behooves the historic preservation community in South Dakota to consider how to use the TIF mechanism to foster enhanced preservation in this state.

Making the Low-Income Housing Tax More Supportive of Historic Preservation

Created by the Tax Reform Act of 1986, the LIHTC gives states[22] the authority to issue tax credits to owners or developers who construct, rehabilitate, and acquire rental housing for lower-income households. Since its adoption, the LIHTC has been one of the most significant programs for the production of affordable housing in the United States. From the beginning of the program in 1987 through 2008, the LIHTC has allocated $10.0 billion for federal tax credits granted for the production of 1,761,245 units of affordable housing (Danter 2012). For 2008, the LIHTC allocation amounted to $933 million aiding 91,911 housing units (Danter 2012). Over the life of the program, about 40 percent of LIHTC activity has involved rehabilitation (Abt Associates 2000). As is shown in Exhibit 7.12, the cumulative (1987 through 2008) LIHTC allocation to South Dakota has amounted to about $30 million with about 7,645 housing units aided over time.

The tax credit is equal to a maximum of 9 percent annually over a 10 year period. To receive the 9 percent credit (equal to about 90 percent total over the decade), the low-income units[23] must either be new or "substantially rehabilitated" (at least $3,000 in improvements per unit or 10 percent of the building's adjusted basis) and the property could not otherwise be subsidized by the federal government. The dollar amount of the tax credits available in any given project is equal to the tax-credit rate (up to 9 percent

[22] The LIHTC is jointly administered by the Internal Revenue Service (IRS) and state agencies. The process of securing tax credits is competitive. Awards are based on the project criteria specified in the Qualified Allocation Plan (QAP) prepared by each state, following IRS guidelines. QAPs take into account such factors as proposed project location, cost, amenities, and other characteristics. See later discussion in this chapter.

[23] To qualify for tax credits, project developers successful in the QAP-based selection process must reserve a specified proportion of units for lower-income households for a mandatory compliance period (a minimum of 15 years). The minimum set-aside within a given project must equal or exceed one of two possible targets: at least 20 percent of the units are reserved for households at or below 50 percent of the area median household income (the "20/50 Test"), or at least 40 percent of the units are set aside for households at or below 60 percent of the area median household income (the "40/60 Test"). Rents on the affordable units may not exceed 30 percent of household income. Investors may claim the credits annually against their federal income tax over a 10-year period, as long as the specified minimum number of units in the project are rented to low-income households within the rent limits described above for the compliance period.

annually) multiplied by the dollar amount of the project's "qualified basis" which is increased in poor locations ("qualified census tracts," or QCTs) and difficult to develop areas (DDAs)[24].

There are numerous advantages in combining the LIHTC and federal HTC as is described by one Chicago developer (Listokin and Listokin 2001, 115):

1. More equity can be made available to the project when the two tax credits are combined. This makes for a less risky investment. In addition, the LIHTC provides subsidized rents with a lower likelihood of foreclosure.

2. The federal HTC will help cover risks of change orders and other increased costs over fixed price contracts during construction.

3. Hopefully, the incremental costs of a certified rehab, if any, are more than offset by the federal HTC.

4. Blending of the tax credits offers larger investment to a single investor.

As earlier observed in this chapter, South Dakota has extensively used the LIHTC with cumulative (1987-2008) subsidy of about 7,600 housing units and $30 million in total subsidy allocated (Exhibit 7.12). This study's Chapter 3 earlier quantified South Dakota's extensive utilization of the federal HTC and numerous other state/local subsidies for historic rehabilitation. Not surprisingly, South Dakota (as other states) has witnessed numerous housing projects involving historic buildings that have *combined* the LIHTC and federal LIHTC and state/local preservation subsidies. An example is one of our case studies detailed in Chapter 5—the Charles Gurney Hotel in Yankton County, South Dakota—that produced 34 affordable housing units for the disabled and senior citizens. This was accomplished by drawing on the federal HTC, the South Dakota Historic Preservation Property Tax Moratorium, and other aids from the South Dakota Housing Development Authority.

[24] The amount of tax credit available to a project is equal to the tax-credit rate (up to 9 percent annually) multiplied by the project's "qualified basis." The qualified basis is determined through a series of calculations (Danter 2001). First, total (project) development costs (TDC) are calculated. Next, the eligible basis is determined by subtracting non-depreciable expenses (e.g., land, permanent financing expenses, rent reserves, and marketing costs) from the TDC. The eligible basis is increased by 130 percent if the project is located in either a Qualified Census Tract (QCT) or a Difficult Development Area (DDA). Finally, to determine the qualified basis, the eligible basis is multiplied by the applicable fraction, which takes into account the share of project units that are low-income (i.e., the percentage of low-income units to total project units). For example, a $1.2 million project that had $0.2 million in non-depreciable expenses (producing an eligible basis of $1.0 million), that was located in a DDA (therefore qualifying for an increase of 130 percent in the eligible basis), and was fully occupied by low-income tenants (producing a 100 percent applicable fraction) would have a qualified basis of $1.3 million. If the project involved substantial rehabilitation and was not receiving federal subsidies, its tax-credit rate would be 9 percent. Therefore, $0.117 million ($1.3 million × .09) in tax credits would be available annually; $1.17 million in total tax credits would be available over the 10-year period.

Exhibit 7.12
LIHTC Statistics, 1987-2008[25]

Rank	*State Name*	*Population 2008*	*Total Allocations, 1987-2008*	*Total Tax Credit Units Allocated, 1987-2008*	*Allocation per unit, 1987-2008*
1	California	36,580,371	$1,163,716,964	134,267	$8,667
2	Texas	24,304,290	$653,441,577	196,833	$3,320
3	New York	19,467,789	$673,353,468	86,541	$7,781
4	Florida	18,423,878	$573,662,437	97,887	$5,860
5	Illinois	12,842,954	$417,556,683	67,355	$6,199
6	Pennsylvania	12,566,368	$399,422,684	63,985	$6,242
7	Ohio	11,528,072	$379,316,273	81,041	$4,681
8	Michigan	10,002,486	$344,945,237	68,993	$5,000
9	Georgia	9,697,838	$257,062,123	61,489	$4,181
10	North Carolina	9,247,134	$216,698,416	48,839	$4,437
11	New Jersey	8,663,398	$291,121,336	32,298	$9,014
12	Virginia	7,795,424	$254,090,397	59,322	$4,283
13	Washington	6,566,073	$195,553,932	31,095	$6,289
14	Massachusetts	6,543,595	$222,903,486	35,626	$6,257
15	Arizona	6,499,377	$168,754,215	25,473	$6,625
16	Indiana	6,388,309	$220,001,652	41,324	$5,324
17	Tennessee	6,240,456	$172,618,476	39,588	$4,360
18	Missouri	5,956,335	$180,416,178	37,561	$4,803
19	Maryland	5,658,655	$179,540,862	38,213	$4,698
20	Wisconsin	5,627,610	$182,270,305	39,026	$4,670
21	Minnesota	5,230,567	$157,507,035	31,641	$4,978
22	Colorado	4,935,213	$135,342,313	21,073	$6,423
23	Alabama	4,677,464	$183,523,157	36,813	$4,985
24	South Carolina	4,503,280	$119,955,758	27,968	$4,289
25	Louisiana	4,451,513	$358,808,901	52,759	$6,801
26	Kentucky	4,287,931	$142,938,618	30,731	$4,651
27	Oregon	3,782,991	$110,038,477	20,715	$5,312
28	Oklahoma	3,644,025	$102,947,532	30,675	$3,356
29	Connecticut	3,502,932	$116,502,290	13,204	$8,823
30	Iowa	2,993,987	$108,501,689	21,592	$5,025
31	Mississippi	2,940,212	$197,232,948	38,731	$5,092
32	Arkansas	2,867,764	$79,556,234	20,640	$3,854
33	Kansas	2,797,375	$95,231,663	23,972	$3,973
34	Utah	2,727,343	$78,394,416	15,695	$4,995
35	Nevada	2,615,772	$62,517,099	11,264	$5,550
36	New Mexico	1,986,763	$62,390,052	12,132	$5,143
37	West Virginia	1,814,873	$53,182,971	12,991	$4,094
38	Nebraska	1,781,949	$63,380,371	12,167	$5,209
39	Idaho	1,527,506	$42,652,594	8,349	$5,109
40	New Hampshire	1,321,872	$35,771,525	4,689	$7,629
41	Maine	1,319,691	$41,612,359	6,720	$6,192
42	Hawaii	1,287,481	$41,091,649	4,615	$8,904
43	Rhode Island	1,053,502	$43,781,815	7,290	$6,006
44	Montana	968,035	$29,832,770	5,042	$5,917
45	Delaware	876,211	$34,772,643	7,355	$4,728
46	South Dakota	804,532	$30,005,936	7,645	$3,925
47	Alaska	688,125	$26,342,387	2,965	$8,884
48	North Dakota	641,421	$31,808,525	6,150	$5,172
49	Vermont	621,049	$29,246,183	5,188	$5,637
50	District of Columbia	590,074	$19,919,495	7,531	$2,645
51	Wyoming	532,981	$27,622,777	4,345	$6,357

[25] Data accessed July 5, 2012 from www.danter.com

As for all states, it behooves South Dakota to continue to consider best practices to foster enhanced application of the LIHTC in a historic preservation context. One way of doing this is to evaluate the Qualified Allocation Plan criteria (QAP). All states allocating the LIHTC are required to adopt a QAP, which adhere to IRS requirements as well as reflect individual state housing priorities. In brief, QAPs take into account such factors as proposed project location, cost, amenities, and other characteristics. Since competition for the LIHTC is so fierce, the QAPs are important in guiding which projects are funded.

The QAP criteria for South Dakota's LIHTC allocation are as follows. Specific requirements and points awarded are shown in Exhibit 7.13.

South Dakota LIHTC applications must obtain at least 400 of a possible 1,000 points to be considered for funding. A higher score allows the applicant to be more competitive and more likely to receive LIHTC awards.

A. Local Housing Need
Local Housing Need – points will be awarded based on identified need for additional housing units, the physical condition of the proposed project, the degree of rehabilitation necessary, etc.

B. Primary Selection Criteria

1. *Deep Income Targeting* – within either the 20/50 or 40/60 election, points will be awarded for proposals which elect to set aside a minimum of 20 percent of the total tax credit units for households not exceeding 50 percent of median income or ten percent of the total tax credit units for households not exceeding 40 percent of the area minimum income.

2. *Extended Use Commitment* – an affordability period of 30 years is required, with additional points awarded to those who commit to extend this affordability period to 40 years.

3. *Qualified Census Tracts and Community Revitalization Plan* – points will be awarded to projects within Qualified Census Tracts that contribute to a Concerted Community Revitalization Plan.

4. *Project Characteristics* – points can be awarded for characteristics including "existing rental project, rental project with historic character, homeownership project, new construction rental project, parking, sidewalks, exterior construction, insulation, windows, roofing, floor covering, exterior entrance floors, interior entrance doors, unit interior doors, community rooms, main entrance area: service enriched housing or housing for older persons, laundry, window covering, appliances, special features, green features, energy star qualified units, bathroom minimum standards, heating, air conditioning, and signage."

5. *Rehabilitation or Reconstruction associated with Concerted Community Revitalization Plan* – points will be awarded for projects including the use of existing housing as part of a Concerted Community Revitalization Plan.

6. *Mixed Income Use* – points awarded based on the ratio of market-rate units to total project units.

7. *Financial Support from Local Sources* – points awarded for proposals with documentation of financing or incentives from a local government, a private party or foundation that assists in reducing development costs or enhancing project feasibility.

8. *Applicant Characteristics* – an entity with a demonstrated track record of quality experience, participation by minority- or woman-owned businesses.

9. *Tenant Ownership – Lease Purchase* – projects intended for eventual tenant ownership.

10. *Service Enriched Housing* – projects providing verifiable on-site services to tenants.

11. *Individuals with Children*.

12. *Public Housing Notification* – provides written commitment to notify local public housing agencies of vacancies and give priority to households on waiting lists of those agencies.

13. *Efficient Use of Tax Credits* – the largest number of units for the fewest amount of housing tax credits per housing tax credit unit.

14. *Percentage of Soft Costs Used for Project Costs* – projects which provide the highest percentage of the credit dollar amount to be used for project costs other than the cost of intermediaries.

15. *Project Location* – Projects located in close proximity of community services.

16. *Rural Housing Services (RHS) Projects* – projects involving the preservation or construction of affordable housing through RHS.

C. Readiness to Proceed Criteria

1. *Plans and Specifications*
2. *Site Control*
3. *Construction Financing*
4. *Permanent Financing*
5. *Equity Commitment*
6. *Utilities*
7. *Zoning*
8. *Platting*

EXHIBIT 7.13
South Dakota Housing Development Authority 2012-2013 Housing Tax Credit Program Qualified Allocation Plan Self-Scoring Worksheet

ITEM	POINTS AVAILABLE
A. Local Housing Needs	150
B. Primary Selection Criteria	
1. Deep Income Targeting	90
2. Extended Use Commitment	80
3. Qualified Census Tracts and Community Revitalization Plan	30
4. Project Characteristics	200
5. Rehabilitation or Reconstruction associated with Concerted Community Revitalization Plan	10
6. Mixed Income Use	40
7. Financial Support from Local Sources	25
8. Applicant Characteristics	30
Demonstrated track record (10 or 25 points)	
Minority- or woman-owned (10 points)	
Owner equity greater than 10% (10 points)	
9. Tenant Ownership – Lease Purchase	40
10. Service Enriched Housing	25
11. Individuals with Children	10
12. Public Housing Notification	10
13. Efficient Use of Tax Credits & Federal Funds	40
14. Percentage of Soft Costs used for Project	50
15. Project Location	20
16. Rural Housing Services Projects	20
C. Readiness to Proceed Criteria	150
Plans and Specifications 50% complete or PNA (25 points)	
Site Control; land purchased, owned, executed long-term lease or TPA approval (25 points)	
Construction/interim financing commitments (20 points)	
Permanent financing commitments (20 points)	
Applications submitted for permanent financing from FHLB, RD, or other state or federal financing programs (only 10 points)	
Commitment of equity financing (20 points)	
Evidence of availability of utilities (20 points)	
Evidence of land properly zoned (10 points)	
Evidence the final plat of land is recorded. (10 points)	
TOTAL POINTS	**1020 pts (1000 max)**

Source: South Dakota Housing Development Authority, December 2011.

Does the South Dakota QAP encourage or discourage projects that involve rehabilitation (as opposed to new construction) and specifically for rehabilitation projects, does the South Dakota QAP encourage or discourage historic preservation projects? In South Dakota, points can be awarded to new construction projects, but consideration is also given to historic properties throughout QAP consideration Number 5 states that "projects including the use of existing housing as part of a Concerted Community Revitalization Plan" will receive 10 points. Additionally, throughout the South Dakota QAP document, there are references to historic properties. Under South Dakota Housing Development Authority Purposes and Goals, the first goal is to assist in construction and preservation, "taking into consideration the historical significance of the property," among other things. The determination of credit amount can be affected by the "historic nature/character of the project," and "proceeds expected to be generated from the sale of tax credits, including historic tax credits."

An exhibit in the South Dakota LIHTC application ("Project characteristics") awards up to 50 points for rental projects with historic character. The exhibit also notes that while minimum construction standards apply to all new construction projects, rehabilitation and reconstruction projects should also strive to meet minimum standards.

From our reading of the above cited South Dakota QAP materials and our research on this subject nationally, it appears that South Dakota is in the forefront of states trying to harmoniously integrate the LIHTC and historic preservation. Nonetheless, it behooves South Dakota (as other states) to continue to monitor its QAP and other LIHTC-related policies to ensure a "smooth fit" between the LIHTC and historic preservation in South Dakota.

Transportation-Preservation Connection

In a similar vein, South Dakota, as all states, should review that it is maximizing historic preservation assistance from federal assistance for transportation. To understand this connection, some brief background is in order. Federal transportation actions have historically often been antithetical to preservation. Begun in 1956, the Interstate Highway System spawned a ribbon of concrete that doomed many a historical neighborhood (and such historic highways as Route 66) in the United States. In contrast, public transportation, important to historic centers, received modest federal support.

This paradigm and funding emphasis changed through the enactment of a series of linked federal legislation over the last 15 years. These included the Intermodal Service Transportation Act (ISTEA) of 1991, its successor (1998), the Transportation Equity Act for the 21st Century (TEA-21), and the more recent (2005) Safe, Accountable, Flexible and Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU).[26]

All of the above were transportation funding behemoths (ISTEA, about $155 billion; TEA-21, about $220 billion; and SAFETEA-LU, about $280 billion). More important for our purposes was their underlying change in transportation philosophy. They broke from the federal government's near sole transportation focus on the automobile, to encouraging "intermodalism" (i.e. many forms of getting about, including auto, mass transit, bicycle and walking). As the history, location and complex density of activities that characterize historic locations tended to imbue them with intermodalism as opposed to auto-dependency, this shift in transportation funding orientation was important.

The largest and most flexible component of the above troika of transportation legislation was the Surface Transportation Program (STP)—federal block grants to states for non-national highway purposes (Costello and Schamess 2006, 13). In turn, 10 percent of the STP was dedicated to what are referred to as Transportation Enhancement Activities (TEAs), which we will see in a moment are both directly and indirectly supportive of preservation. The TEA resources are very significant (ISTEA, $2.6 billion; TEA-21, $3.8 billion; and SAFTEA-LU, $4.2 billion), so monies going from this pool to preservation are large sums, especially relative to the paltry amounts available from other federal programmatic supports (e.g., the Historic Preservation Fund).

To receive TEA funding, a project must (1) be related to surface transportation *and* (2) must include an eligible enhancement activity. There are currently 12 eligible activities. These are listed and illustrated in

[26] A new transportation bill that will be shortly discussed was signed during the conclusion of the writing of this report: Moving Ahead for Progress in the 21st Century (MAP-21). This transportation bill was signed into law July 6, 2012. Budgeted funding for MAP-21 is about $105 billion for fiscal years 2013 and 2014, and for Transportation Enhancement Activities, an estimated $809 million for 2013.

Exhibit 7.14 and total and average annual funding by activity is shown for the period fiscal year 1992 through fiscal year 2010[27].

In brief, of the $9.87 billion distributed nationally in TEA support over this 19 year span, the activities which have received the most funds are pedestrian and bicycle facilities, ($4,891 million or 49.6 percent), landscaping and other scenic beautification ($1,863 million or 18.9 percent), and rehabilitation and operation of older historic transportation infrastructure ($926 million or 9.4 percent).

Of the 12 eligible activities, numerous investments are directly supportive of historic preservation. These include acquisition of scenic or historic sites (Activity 3), historic preservation (Activity 6), rehabilitation and operation of historic transportation infrastructure (Activity 7), and archaeological planning (Activity 9). The other activities are indirectly helpful to preservation of historic or older areas. For instance, an historic downtown would surely benefit from such TEA activities as enhanced pedestrian facilities and removing unsightly billboards. Further, the requirement that TEA funding must be "related to surface transportation (RST)" can at least technically be easily accommodated by most preservation projects because the RST mandate itself is flexible and includes environmental protection, community preservation, and livability (Costello and Schamess 2006, 22).

[27] Note: Not all of the twelve listed activities were eligible for funding throughout the FY 1992-2010 period. For instance, ISTEA had 10 eligible activities.

EXHIBIT 7.14: Transportation Enhancement Activities: Eligible Activities and Funding (FY 1992-2010)

List and Examples *The term Transportation Enhancement Activity means any of the following as they relate to surface transportation.*		***United States**: FY 1992-2010 Funding ($millions)*		***South Dakota**: FY 1992-2010 Funding ($millions)*	
		Total	*%*	*Total*	*%*
1	**Pedestrian and bicycle facilities:** New or reconstructed sidewalks, walkways, curb ramps, bike lane striping, paved shoulders, bike parking, bus racks, off-road trails, bike and pedestrian bridges and underpasses.	4,891	49.6	18.03	39.5
2	**Safety and educational activities for pedestrians and bicyclists:** Programs designed to encourage walking and bicycling by providing potential users with education and safety instruction through classes, pamphlets, and signs.	33	0.3	--	0.0
3	**Acquisition of scenic easements and scenic or historic sites, including historic battlefields:** Acquisition of scenic land easements, vistas and landscapes, including historic battlefields; purchase of building in historic districts or historic properties.	218	2.2	1.10	2.4
4	**Scenic or historic highway program including tourist and welcome center facilities:** Construction of turnouts, overlooks, visitor centers, and viewing areas, designation signs, and markers.	548	5.6	8.52	18.7
5	**Landscaping and other scenic beautification:** Street furniture, lighting, public art, and landscaping along street, highways, trails, waterfronts, and gateways.	1,863	18.9	5.77	12.6
6	**Historic preservation:** Preservation of buildings and facades in historic districts; restoration and reuse of historic buildings for transportation-related purposes; access improvements to historic sites and buildings.	343	3.5	3.35	7.3
7	**Rehabilitation and operation of historic transportation buildings, structures, or facilities:** Restoration of historic railroad depots, bus stations, canals, canal towpaths, historic canal bridges, and lighthouses; rehabilitation of rail trestles, tunnels and bridges.	926	9.4	2.99	6.6
8	**Preservation of abandoned railway corridors and the conversion and use of the corridors for pedestrian or bicycle trails:** Acquiring railroad rights-of-way; planning, designing and constructing multi-use trails; developing rail-with-rail projects; purchasing unused railroad property for reuse as trails.	713	7.2	3.08	6.8
9	**Inventory, control, and removal of outdoor advertising:** Billboard inventories or removal of nonconforming billboards.	40	0.4	0.82	1.8
10	**Archaeological planning and research:** Research, preservation planning and interpretation; developing interpretive signs, exhibits, guides, inventories, and surveys.	47	0.5	0.36	0.8
11	**Environmental mitigation to address water pollution due to highway runoff or to reduce vehicle-caused wildlife mortality while maintaining habitat connectivity:** Runoff pollution mitigation, soil erosion controls, detention and sediment basins, river cleanups, and wildlife crossings.	100	1.0	1.60	3.5
12	**Establishment of transportation museums:** Construction of transportation museums, including the conversion of railroad stations or historic properties to museums with transportation themes and exhibits, or the purchase of transportation related artifacts.	148	1.5	--	0.0
	TOTAL	9,870	100.0	45.62	100.0

Chapter 3 of this study identified how TEA monies in South Dakota were used for the specific purpose of historic rehabilitation. Let us here consider more broadly how South Dakota has utilized TEA funds by TEA category, including those TEA categories that are more closely associated with historic preservation (e.g., Activities 3, 6, 7 and 10).

The cumulative TEA spending by Activity (all 12 Activities) and for South Dakota is shown in Exhibit 7.14. This side-by-side national and South Dakota presentation allows us to examine how South Dakota is using its TEA monies relative to the national context. For our purposes, we will focus on those TEA categories more closely linked with historic preservation (TEA Activities 3, 6, 7 and 10). The results are summarized below.

EXHIBIT 7.15
Comparison of TEA spending in South Dakota versus the Entire United States

	1992-2011		
	South Dakota		Entire U.S.
TEA Category	$ millions	% of total TEA	% of total TEA
3. Acquisition of scenic easements and scenic or historic sites, including historic battlefields	1.10	2.4	2.2
6. Historic preservation	3.35	7.3	3.5
7. Historic transportation	2.99	6.6	9.4
10. Archaeology	0.36	0.8	0.5

For instance, from 1992 through 2011, South Dakota used $3.35 million of its TEA allocation for "historic preservation" (Activity 6) – or 7.3 percent of the total South Dakota TEA spending. By contrast, the national average for this historic preservation TEA is 3.5 percent of the total TEA investment. In almost all other preservation-leaning activities (TEAs 3 and 10), we again find that South Dakota has emphasized historic preservation in how it is using the TEA monies relative to the national average. This preservation orientation in spending transportation monies is to be applauded and we encourage South Dakota to continue to monitor its TEA priorities relative to the national and to maintain a preservation theme.

At the conclusion of the writing of this report, President Obama signed (July 6, 2012) a new transportation bill (Moving Ahead for Progress in the 21st Century, or "MAP-21") into law. Budgeted funding for MAP-21 is about $105 billion for fiscal years 2013 and 2014, and for Transportation Enhancement Activities, an estimated $809 million for 2013. This new law implemented changes to the TEA program. TEAs are now called Transportation Alternatives, and the number of eligible activities has been reduced from 12 to 9. Activities that are no longer eligible include TEA 3 (funding for acquisition of easements or sites), and TEA 12 (funding for transportation museums). Also not included are funding for pedestrian and bicycle safety and educational programs, and funding for scenic or historic highway programs including tourist and welcome centers. Historic preservation and rehabilitation of historic transportation facilities remains an eligible activity. A National Transportation Enhancements Clearinghouse Memorandum[28] states that the overall theme of these changes has been to "expand the eligibilities from strictly *enhancing* the transportation system to include planning, construction, and design related to *compliance* with existing federal regulations."

[28] Memorandum regarding "MAP-21 and Its Effects on Transportation Enhancements," National Transportation Enhancements Clearinghouse, July 13, 2012

An additional roadblock, however, is that there is no longer a 10 percent guaranteed set aside for TAs, so TAs must compete with other programs for funding. States can also use half of their TA funding on other projects. While funding for certain transportation-related historic rehabilitation projects remains possible, this funding may be reduced or become more difficult to obtain[29]. A summary of changes to historic preservation-related Transportation Alternatives is given in Exhibit 7.16.

EXHIBIT 7.16: MAP-21's Changes to Historic Rehabilitation-Related Transportation Alternatives		
	SAFETEA-LU Transportation Enhancement Activity	*Historic preservation-related changes in MAP-21 Transportation Alternative*
3	**Acquisition of scenic easements and scenic or historic sites, including historic battlefields:** Acquisition of scenic land easements, vistas and landscapes, including historic battlefields; purchase of building in historic districts or historic properties.	**Not included in MAP-21**
4	**Scenic or historic highway program including tourist and welcome center facilities:** Construction of turnouts, overlooks, visitor centers, and viewing areas, designation signs, and markers.	**Construction of turnouts, overlooks, and viewing areas** Note: Instead of all scenic and historic highway programs being eligible, MAP-21 only covers construction of turnouts and overlooks
6	**Historic preservation:** Preservation of buildings and facades in historic districts; restoration and reuse of historic buildings for transportation-related purposes; access improvements to historic sites and buildings.	**Historic preservation and rehabilitation of historic transportation facilities** [Combined with TEA 7] Note: Historic preservation is combined with historic transportation facility rehabilitation. Operation of historic transportation facilities is no longer covered
7	**Rehabilitation and operation of historic transportation buildings, structures, or facilities:** Restoration of historic railroad depots, bus stations, canals, canal towpaths, historic canal bridges, and lighthouses; rehabilitation of rail trestles, tunnels and bridges.	[See above]
8	**Preservation of abandoned railway corridors and the conversion and use of the corridors for pedestrian or bicycle trails:** Acquiring railroad rights-of-way; planning, designing and constructing multi-use trails; developing rail-with-rail projects; purchasing unused railroad property for reuse as trails.	**Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other nonmotorized transportation users** Note: Instead of "preservation," there is now emphasis on "conversion and use"
10	**Archaeological planning and research:** Research, preservation planning and interpretation; developing interpretive signs, exhibits, guides, inventories, and surveys.	**Archaeological activities relating to impacts from implementation of a transportation project eligible under this title** Note: Before, only archaeological activities related to surface transport but not required as part of a Federal-aid highway project were eligible. Now restricted to only archaeological activities relating to impacts from implementation of a transportation project.
12	**Establishment of transportation museums:** Construction of transportation museums, including the conversion of railroad stations or historic properties to museums with transportation themes and exhibits, or the purchase of transportation related artifacts.	**Not included in MAP-21**

[29] http://www.preservationaction.org/transportation.htm

Smart Building Code

Historically, building codes in the United States were oriented to new construction, an orientation that sometimes proved problematic when these same codes were used to regulate rehabilitation in existing buildings, especially historic buildings with archaic materials and building dimensions (e.g., lower door heights and narrower window widths). To address this problem, over the last two decades, "smart codes" have been developed in the United States. These are building codes specifically designed to be rational, reasonable and predictable concerning rehabilitation in existing buildings, including historic structures. The national building codes (adopted by many states) now include "smart code" features. Examples include regulations from the International Code Council (ICC) and the ICC's International Building Code (IBC) and the International Existing Building Code (IEBC), also from the ICC (Exhibit 7.17). Specialized smart codes have been adopted by some states, such as Maryland and New Jersey (e.g., New Jersey Rehabilitation Subcode) and national research has encouraged the smart code regulatory reform of recent years. A leading example of such research and a model regulation was funded by the U.S. Department of Housing and Urban Development (HUD). This HUD effort led to promulgation of the Nationally Applicable Recommended Rehabilitation Provisions (NARRP). Exhibit 7.18 summarizes the smart code provisions in the ICC's International Existing Building Code, New Jersey Rehabilitation Subcode, the NAARP and other regulations.

South Dakota follows the International Building Code, so it benefits from this regulation's smart code features. In addition, South Dakota Codified Law 1-19B-54 deals with exemption of historic properties from health and building codes. This law states that:

> The governing body of any county or municipality, in order to promote the preservation and restoration of historic properties within its jurisdiction, may exempt an historic property from the application of such standards contained in the county or municipal health or building codes, or both, as the governing body, upon recommendation of the local historic preservation commission, shall determine would otherwise prevent or seriously hinder the preservation or restoration of said historic property.

Green building standards are also waived in Section 5-14-34 of the Codified Law. This section states that a waiver of green building requirements may be granted if

> A building is on the national register of historic places and achieving a high-performance green building standard would result in noncompliance with standards for historic preservation as set forth in the secretary of the interior's Standards for the Treatment of Historic Properties in effect as of January 1, 2008.

In short, through its use of the ICC regulations and the special energy and other provisions noted above, South Dakota already incorporates numerous flexibilities in how its building codes govern rehabilitation in existing buildings. At the same time, some of our historic rehabilitation case studies suggest some lingering issues. For example, in one of the South Dakota cases, the developer complained that the "building code was a nightmare. I had to install 10,000 bolts in trusses that stood just fine for 100 years. That cost the project $60,000 that could have been better spent."

We cannot determine whether the "10,000 bolts" mandated by the local building inspector were in fact needed or not. Our point, though, is to encourage South Dakota to continue to monitor how its building codes (and the interpretation of these regulations by local inspectors) affect the climate for historic

rehabilitation. Part of this review might comprise how the smart code provisions of the International Building Code that South Dakota adheres to compares to the state of the art of other smart codes across the United States (Exhibit 7.18).

EXHIBIT 7.17

Overview of Contemporary National Model Building Code Regulation of New Construction and Rehabilitation (2004)

	International Code Council (ICC)		**National Fire Protection Association (NFPA)**
	International Building Code (IBC)	**International Existing Building Code (IEBC)**	**NFPA 5000**
New construction	Applicable to all buildings.	N/A	Applicable to all buildings.
One- and two-family housing and townhouses	Reference to International Residential Code (IRC) that recognizes industry standard for conventional wood frame construction.		Reference to IRC for one- and two-family only; town-houses must be engineered and cannot use conventional construction, but this requirement depends on interpretation.
Multifamily	Compliance with fire safety standards, structural load standards, and materials standards.		Essentially same as IBC, with minor differences in heights and areas, sprinkler and standpipe triggers, etc.
Existing buildings	Chapter 34, applicable to repairs, alterations, additions, and change of use unless IEBC is adopted)	Applicable to all buildings undergoing repairs, alterations, additions, and Based on the Nationally Applicable Recommended Rehabilitation Provisions (NARRP), with added requirements.	Chapter 15, applicable to repairs, alterations, additions, and change of use. Based on NARRP and Code.

N/A = not applicable.

EXHIBIT 7.18
Analysis of Contemporary National-State Model Building Code Regulation of Rehabilitation

	NJ Rehabilitation Subcode	NARRP 1997	IBC Ch. 34 2003	IEBC 2003	NFPA 5000 Ch. 15 2000	Cost Impacts
Applicability	All work in existing buildings.	All work in existing buildings.	All work in existing buildings, unless IEBC is adopted.	All work in existing buildings, if adopted.	All work in existing buildings.	
Format	The bulk of the subcode addresses reconstruction and is organized by occupancy classification.	Chapters organized by rehabilitation category of work.	Small chapter organized into sections.	Chapters organized by rehabilitation category of work.	Sections organized by rehabilitation category of work.	Some argue NJ format more user friendly.
Regulations governing alterations	Alterations divided into three categories, as a function of the extent and nature of the work: •Renovation. • Alteration. • Reconstruction. Requirements increase respectively. At lower end, existing conditions that violate the building code may be continued, but not made worse. Reconstruction triggers specified life safety improvements within the work area, and when the work area exceeds specified percentages, the life safety improvements extend beyond the work area to other parts of the building.	Alterations divided into three categories, as a function of the extent and nature of the work: • Renovation. • Alteration. • Reconstruction. Requirements increase respectively. At lower end, existing conditions that violate the building code may be continued, but not made worse. Reconstruction triggers specified life safety improvements within the work area, and when the work area exceeds specified percentages, the life safety improvements extend beyond the work area to other parts of the building.	Alterations must conform to new construction requirements and not cause building to be in violation of code. Parts of buildings not affected by alteration not required to comply, except "substantial improvements" to buildings in flood plain, which trigger full compliance of building with flood design requirements for new construction. Nonstructural alterations may be made using same materials if no adverse effect on structural member or fire resistance.	Alterations divided into three categories, as a function of the extent and nature of the work (similar, but not identical, to NARRP): • Alterations Level 1. • Alterations Level 2. • Alterations Level 3. Requirements increase respectively. Levels 2 and 3 trigger specified life safety improvements within the work area, and when the work area exceeds specified percentages, the life safety improvements extend beyond the work area to other parts of the building. "Substantial improvements" to buildings in flood plain trigger full compliance of building with flood design requirements for new construction. Extensive structural	Alterations divided into three categories, as a function of the extent and nature of the work: • Renovation. • Modification. • Reconstruction. Requirements increase respectively. At lower end, existing conditions that violate the building code may be continued, but not made worse. Reconstruction triggers specified life safety improvements within the work area, and when the work area exceeds specified percentages, the life safety improvements extend beyond the work area to other parts of the building. Structural provisions "reserved" for the	IBC not predictable; other four are. All but NJ and NARRP apply FEMA's "substantial improvement" trigger, and will have significant cost impact in the flood plain. IEBC has extensive cost impact from its structural damage repair requirements. Some argue the order of growing cost impact as follows: 1. NJ. 2. NARRP. 3. NFPA 5000. 4. IEBC.

				upgrades triggered by structural damage.	most part. "Substantial improvements" to buildings in flood plain trigger full compliance of building with flood design requirements for new construction (Ch. 39).	
Regulations governing additions	Additions must conform to new construction requirements and not create or extend a nonconformity. Existing building plus addition to comply with height and area requirements, with up to an additional 25% for one- and two-story buildings.	Additions must conform to new construction requirements and not create or extend a nonconformity. Existing building plus addition to comply with height and areas requirement, with up to an additional 25% for one- and two-story buildings.	Additions must conform to new construction requirements and not cause building to be in violation of code. Existing building plus addition to comply with height and area requirements.	Additions must conform to new construction requirements and not create or extend a nonconformity. Existing building plus addition to comply with height and area requirements.	Additions must conform to new construction requirements and not create or extend a nonconformity. Existing building plus addition to comply with height and area requirements.	All are essentially the same, except that NJ and NARRP allow up to a 25% increase in allowable area for one- and two- story buildings.
Regulations governing change of use	Use groups categorized into six hazard category tables. Compliance with selective requirements based on specific increases in hazards. Minimal requirements when hazards are equal or reduced in all categories. New construction structural live load must be met when moving to a higher hazard category.	Use groups categorized into four hazard category tables (including seismic). Compliance with selective new construction requirements based on specific increases in hazards. Minimal requirements when hazards are equal or reduced in all categories. New construction struc-tural requirements (wind and snow) must be met when moving to a higher	Buildings must comply with all new construction requirements for the new occupancy. The building official may accept less, provided the new use is less hazardous "based on life and fire risk."	Use groups categorized category tables (not including seismic). Compliance with selective new construction requirements based on specific increases in hazards. Minimal requirements when hazards are equal or reduced in all categories. New construction structural requirements (wind and snow) must be met when moving to a higher importance factor (except when the change is to less than 10% of building area). Seismic	Use groups categorized into three hazard category tables (not including seismic). Compliance with selective new construction requirements based on specific increases in hazards. Minimal requirements when hazards are equal or reduced in all categories. New construction structural requirements (wind and snow) must be met when moving to a higher occupancy category. Seismic	IBC not predictable. The rest are essentially the same.

		importance factor.		requirements similar to NARRP with a few more exceptions.	requirements similar to NARRP.	
Compliance alternatives	Owners may request a variation when compliance would result in practical difficulties.	Equivalent alternatives may be authorized by building official. Other alternatives may be accepted if compliance is infeasible.	Section 3410 provides a safety scoring system for 18 parameters.	Equivalent alternatives may be authorized by building official. Ch. 12 reproduces Section 4310 of the IBC.	Equivalent alternatives may be authorized by building official. Other alternatives may be accepted if compliance is infeasible or would impose undue hardship.	NJ, NARRP, and NFPA allow for "infeasibility" alternatives.
Regulations governing repairs	Repairs may be made using like materials, except for a limited number of plumbing and electrical repairs, and replacement glass must comply with safety glazing requirements.	Repairs may be made using like materials, except for a limited number of plumbing and electrical repairs, and replacement glass must comply with safety glazing requirements.	No specific regulation, except that replacement glass must comply with all new construction requirements.	Repairs may be made using like materials, except for a limited number of plumbing and electrical repairs, and replacement glass must comply with safety glazing requirements. New construction structural requirements are triggered as a function of the extent of repair of structural damage.	Repairs may be made using like materials, except for a limited number of plumbing and electrical repairs, and replacement glass must comply with safety glazing requirements.	IEBC may have significant cost impact for repair of structural damage. Others are essentially the same.
Regulations governing historic buildings	Special variations may be granted to historic buildings when compliance will damage historic fabric.	Alterations and change of use may comply with reduced requirements based on filing a report demonstrating that compliance will damage historic fabric.	Alteration and change of use regulations do not apply if building official judges them "to not constitute a distinct life safety hazard."	Alterations and change of use may comply with reduced requirements based on filing a report demonstrating that compliance will damage historic fabric.	Alterations and change of use may comply with reduced requirements based on filing a report demonstrating that compliance will damage historic fabric.	All are essentially the same technically, but may vary in terms of administrative requirements for submissions.
Retroactive regulations governing all existing buildings	Not in scope of NJ, but recognizes currently existing fire code, housing code, and other retroactive regulations.	Not in scope of NARRP, but recognizes currently existing retroactive regulations.	Compliance with Property Maintenance and Fire Codes.	Compliance with Property Maintenance and Fire Codes.	Section on retroactivity in Ch. 1 is "reserved." Use of Ch. 15 requires building to be legally existing.	All are essentially the same. None are retroactive, but they recognized locally adopted retroactive requirements.

NARRP = Nationally Applicable Recommended Rehabilitation Provisions.
IEBC = International Existing Building Code.
IBC = International Building Code.
NFPA = National Fire Protection Agency.

Coordinating Downtown Improvement Efforts

As detailed in Chapter 5, while there are currently no officially linked National Main Street Center (NMSC) main street programs in South Dakota, there are numerous (about 15) very active downtown improvement associations in the state. We also observe that there is no state-level main street office in South Dakota as there are in other states. For the record, South Dakota had an NMSC-linked main street program in the 1970s, but it did not survive budget cuts and other challenges.

Should South Dakota re-enter the NMSC-linked main street program? That is clearly a policy question for South Dakota to decide. Arguing against linking with the national program is that successful local templates for downtown revitalization are already in place throughout South Dakota – so why not keep the status quo? Yet, there are arguments for South Dakota to join once again with the NMSC. The National Main Street Center provides guidance and advice, helps coordinate Main Streets throughout the nation, and helps Main Street organizations learn from others' experiences. Being part of the program does not mean that independent downtown improvement organizations will lose autonomy; in fact, the national program aims for local organizations to attain self-sufficiency within three to five years. The NMSC is simply meant to provide assistance to local organizations, and provide locals with the tools they need to successfully execute the programs themselves.

A further benefit of NMSC affiliation is that it would encourage the keeping of consistent data regarding the status of downtown improvement. The NMSC metrics for their purpose were shown in part in Chapter 5 and include statistics on dollars invested, and net gains in businesses and jobs. For policy and strategic purposes it would be helpful if the South Dakota downtown improvement associations kept such uniform data on their operations, a goal that would be advanced through NMSC-affiliation. An added bonus is that the NMSC data fields can be entered into the PEIM to quantify the total (direct and multiplier) impacts from downtown improvement operations.

A FINAL WORD

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 nationally and the current investigation adds to our body of knowledge for South Dakotans.

This study has intertwined streams. It is a statewide investigation of the many ways that preservation influences state economies; at the same time, the data and analytic tools developed here have important implications far beyond South Dakota. 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 of their socioeconomic profile and spending patterns. Insight is also afforded by knowing more about downtowns and Main Streets in South Dakota. By bringing these different components together, their interconnectedness can be better appreciated. The current study also begins to consider how the effectiveness of historic preservation policies can be improved.

The present investigation also brings forth a powerful economic tool in the form of the Preservation Economic Impact Model (PEIM) input–output model. Preservationists should be more aware of input–output analysis, and the PEIM is one of the better applications in this regard, especially when calibrated with the preservation-specific data developed herein.

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

APPENDIX A – I-O MODEL

This appendix discusses the history and application of input-output analysis and details the input-output model, called the R/Econ™ I-O model, developed by Rutgers University and used in the current investigation in South Dakota. This model offers significant advantages in detailing the total economic effects of an activity (such as historic rehabilitation and heritage tourism), including multiplier effects.

ESTIMATING MULTIPLIERS

The fundamental issue determining the size of the multiplier effect is the "openness" of regional economies. Regions that are more "open" are those that import their required inputs from other regions. Imports can be thought of as substitutes for local production. Thus, the more a region depends on imported goods and services instead of its own production, the more economic activity leaks away from the local economy. Businessmen noted this phenomenon and formed local chambers of commerce with the explicit goal of stopping such leakage by instituting a "buy local" policy among their membership. In addition, during the 1970s, as an import invasion was under way, businessmen and union leaders announced a "buy American" policy in the hope of regaining ground lost to international economic competition. Therefore, one of the main goals of regional economic multiplier research has been to discover better ways to estimate the leakage of purchases out of a region, a measure of the region's self-sufficiency.

The earliest attempts to systematize the procedure for estimating multiplier effects used the economic base model, still in use in many econometric models today. This approach assumes that all economic activities in a region can be divided into two categories: "basic" activities that produce exclusively for export, and region-serving or "local" activities that produce strictly for internal regional consumption. Since this approach is simpler but similar to the approach used by regional input-output analysis, a brief explanation of how multiplier effects are estimated using the economic base approach is provided below. If we let **x** be export employment, **l** be local employment, and **t** be total employment, then

$$\boldsymbol{t = x + 1}$$

For simplification, we create the ratio **a** as

$$\boldsymbol{a = \frac{l}{t}}$$

so that

$$\boldsymbol{l = at}$$

then substituting into the first equation, we obtain

$$\boldsymbol{t = x + at}$$

By bringing all of the terms with t to one side of the equation, we get

$$\boldsymbol{t - at = x} \text{ or } \boldsymbol{t(1 - a) = x}$$

Solving for **t,** we get

$$\boldsymbol{t = x/(1 - a)}$$

Thus, if we know the amount of export-oriented employment, **x,** and the ratio of local to total employment, **a**, we can readily calculate total employment by applying the economic base multiplier, 1/(1-**a**), which is embedded in the above formula. Thus, if 40 percent of all regional employment is used to produce exports, the regional multiplier would be 2.5. The assumption behind this multiplier is that all remaining regional employment is required to support the export employment. Thus, the 2.5 can be decomposed into two parts: the direct effect of the exports, which is always 1.0, and the indirect and induced effects, which is the remainder—in this case 1.5. Hence, the multiplier can be read as telling us that for each export-oriented job another 1.5 jobs are needed to support it.

This notion of the multiplier has been extended so that **x** is understood to represent an economic change demanded by an organization or institution outside of an economy—so-called final demand. Such changes can be those affected by government, households, or even by an outside firm. Changes in the economy can therefore be calculated by a minor alteration in the multiplier formula:

$$\boldsymbol{\Delta t = \Delta x/(1 - a)}$$

The high level of industry aggregation and the rigidity of the economic assumptions that permit the application of the economic base multiplier have caused this approach to be subject to extensive criticism. Most of the discussion has focused on the estimation of the parameter **a**. Estimating this parameter requires that one be able to distinguish those parts of the economy that produce for local consumption from those that do not. Indeed, virtually all industries, even services, sell to customers both inside and outside the region. As a result, regional economists devised an approach by which to measure the *degree* to which each industry is involved in the nonbase activities of the region, better known as the industry's *regional purchase coefficient*. Thus, they expanded the above formulations by calculating for each ***i*** industry

$$\mathbf{l}_i = \mathbf{r}_i\mathbf{d}_i$$

and

$$\mathbf{x}_i = t_i - \mathbf{r}_i\mathbf{d}_i$$

given that $\mathbf{d}_i$ is the total regional demand for industry ***i***'s product. Given the above formulae and data on regional demands by industry, one can calculate an accurate traditional aggregate economic base parameter by the following:

$$\mathbf{a = l/t = \Sigma l_{ii}/\Sigma t_i}$$

Although accurate, this approach only facilitates the calculation of an aggregate multiplier for the entire region. That is, we cannot determine from this approach what the effects are on the various sectors of an economy. This is despite the fact that one must painstakingly calculate the regional demand as well as the degree to which they each industry is involved in nonbase activity in the region.

As a result, a different approach to multiplier estimation that takes advantage of the detailed demand and trade data was developed. This approach is called input-output analysis.

A BRIEF HISTORY OF INPUT-OUTPUT ANALYSIS

The basic framework for input-output analysis originated nearly 250 years ago when François Quesenay published *Tableau Economique* in 1758. Quesenay's "tableau" graphically and numerically portrayed the relationships between sales and purchases of the various industries of an economy. More than a century later, his description was adapted by a fellow Frenchman, Léon Walras, who advanced input-output modeling by providing a concise theoretical formulation of an economic system (including consumer purchases and the economic representation of "technology").

It was not until the twentieth century, however, that economists advanced and tested Walras's work. Wassily Leontief greatly simplified Walras's theoretical formulation by applying the Nobel prize–winning assumptions that both technology and trading patterns were fixed over time. These two assumptions meant that the pattern of flows among industries in an area could be considered stable. These assumptions permitted Walras's formulation to use data from a single time period, which generated a great reduction in data requirements.

Although Leontief won the Nobel Prize in 1973, he first used his approach in 1936 when he developed a model of the 1919 and 1929 U.S. economies to estimate the effects of the end of World War I on national employment. Recognition of his work in terms of its wider acceptance and use meant development of a standardized procedure for compiling the requisite data (today's national economic census of industries) and enhanced capability for calculations (i.e., the computer).

The federal government immediately recognized the importance of Leontief's development and has been publishing input-output tables of the U.S. economy since 1939. The most recently published tables are those for 1987. Other nations followed suit. Indeed, the United Nations maintains a bank of tables from most member nations with a uniform accounting scheme.

FRAMEWORK OF ANALYSIS

Input-output modeling focuses on the interrelationships of sales and purchases among sectors of the economy. Input-output is best understood through its most basic form, the *interindustry transactions table* or matrix. In this table (see Exhibit A.1 for an example), the column industries are consuming sectors (or markets) and the row industries are producing sectors. The content of a matrix cell is the value of shipments that the row industry delivers to the column industry. Conversely, it is the value of shipments that the column industry receives from the row industry. Hence, the interindustry transactions table is a detailed accounting of the disposition of the value of shipments in an economy. Indeed, the detailed accounting of the interindustry transactions at the national level is performed not so much to facilitate calculation of national economic impacts as it is to back out an estimate of the nation's gross domestic product.

EXHIBIT A.1
Interindustry Transactions Matrix (Values)

	Agriculture	Manufacturing	Services	Other	Final Demand	Total Output
Agriculture	10	65	10	5	10	$100
Manufacturing	40	25	35	75	25	$200
Services	15	5	5	5	90	$120
Other	15	10	50	50	100	$225
Value Added	20	95	20	90		
Total Input	100	200	120	225		

For example, in Exhibit A.1, agriculture, as a producing industry sector, is depicted as selling $65 million of goods to manufacturing. Conversely, the table depicts that the manufacturing industry purchased $65 million of agricultural production. The sum across columns of the interindustry transaction matrix is called the *intermediate outputs vector*. The sum across rows is called the *intermediate inputs vector*.

A single *final demand* column is also included in Exhibit A.1. Final demand, which is outside the square interindustry matrix, includes imports, exports, government purchases, changes in inventory, private investment, and sometimes household purchases.

The *value added* row, which is also outside the square interindustry matrix, includes wages and salaries, profit-type income, interest, dividends, rents, royalties, capital consumption allowances, and taxes. It is called value added because it is the difference between the total value of the industry's production and the value of the goods and nonlabor services that it requires to produce. Thus, it is the *value* that an industry *adds* to the goods and services it uses as inputs in order to produce output.

The value added row measures each industry's contribution to wealth accumulation. In a national model, therefore, its sum is better known as the gross domestic product (GDP). At the state level, this is known as the gross state product—a series produced by the U.S. Bureau of Economic Analysis and published in the Regional Economic Information System. Below the state level, it is known simply as the regional equivalent of the GDP—the gross regional product.

Input-output economic impact modelers now tend to include the household industry within the square interindustry matrix. In this case, the "consuming industry" is the household itself. Its spending is extracted from the final demand column and is appended as a separate column in the interindustry matrix. To maintain a balance, the income of households must be appended as a

row. The main income of households is labor income, which is extracted from the value-added row. Modelers tend not to include other sources of household income in the household industry's row. This is not because such income is not attributed to households but rather because much of this other income derives from sources outside of the economy that is being modeled.

The next step in producing input-output multipliers is to calculate the *direct requirements matrix*, which is also called the technology matrix. The calculations are based entirely on data from Exhibit A.1. As shown in Exhibit A.2, the values of the cells in the direct requirements matrix are derived by dividing each cell in a column of Exhibit A.1, the interindustry transactions matrix, by its column total. For example, the cell for manufacturing's purchases from agriculture is 65/200 = .33. Each cell in a column of the direct requirements matrix shows how many cents of each producing industry's goods and/or services are required to produce one dollar of the consuming industry's production and are called *technical coefficients*. The use of the terms "technology" and "technical" derive from the fact that a column of this matrix represents a recipe for a unit of an industry's production. It, therefore, shows the needs of each industry's production process or "technology."

EXHIBIT A.2
Direct Requirements Matrix

	Agriculture	Manufacturing	Services	Other
Agriculture	.10	.33	.08	.02
Manufacturing	.40	.13	.29	.33
Services	.15	.03	.04	.02
Other	.15	.05	.42	.22

Next in the process of producing input-output multipliers, the *Leontief Inverse* is calculated. To explain what the Leontief Inverse is, let us temporarily turn to equations. Now, from Exhibit A.1 we know that the sum across both the rows of the square interindustry transactions matrix (**Z**) and the final demand vector (**y**) is equal to vector of production by industry (**x**). That is,

$$\mathbf{x} = \mathbf{Zi} + \mathbf{y}$$

where **i** is a summation vector of ones. Now, we calculate the direct requirements matrix (**A**) by dividing the interindustry transactions matrix by the production vector or

$$\mathbf{A} = \mathbf{ZX}^{-1}$$

where $\mathbf{X}^{-1}$ is a square matrix with inverse of each element in the vector **x** on the diagonal and the rest of the elements equal to zero. Rearranging the above equation yields

$$\mathbf{Z} = \mathbf{AX}$$

where **X** is a square matrix with the elements of the vector **x** on the diagonal and zeros elsewhere. Thus,

$$\mathbf{x} = (\mathbf{AX})\mathbf{i} + \mathbf{y}$$

or, alternatively,

$$\mathbf{x} = \mathbf{Ax} + \mathbf{y}$$

solving this equation for x yields

$$\mathbf{x} = (\mathbf{I}-\mathbf{A})^{-1} \mathbf{y}$$

Total = Total * Final

Output Requirements Demand

The Leontief Inverse is the matrix $(\mathbf{I}-\mathbf{A})^{-1}$. It portrays the relationships between final demand and production. This set of relationships is exactly what is needed to identify the economic impacts of an event external to an economy.

Because it does translate the direct economic effects of an event into the total economic effects on the modeled economy, the Leontief Inverse is also called the *total requirements matrix.* The total requirements matrix resulting from the direct requirements matrix in the example is shown in Exhibit A.3.

EXHIBIT A.3
Total Requirements Matrix

	Agriculture	Manufacturing	Services	Other
Agriculture	1.5	.6	.4	.3
Manufacturing	1.0	1.6	.9	.7
Services	.3	.1	1.2	.1
Other	.5	.3	.8	1.4
Industry Multipliers	.33	2.6	3.3	2.5

In the direct or technical requirements matrix in Exhibit A.2, the technical coefficient for the manufacturing sector's purchase from the agricultural sector was .33, indicating that 33 cents of agricultural products must be directly purchased to produce a dollar's worth of manufacturing products. The same "cell" in Exhibit A.3 has a value of .6. This indicates that for every dollar's worth of product that manufacturing ships out of the economy (i.e., to the government or for export), agriculture will end up increasing its production by 60 cents. The sum of each column in the total requirements matrix is the *output multiplier* for that industry.

Multipliers

A *multiplier* is defined as the system of economic transactions that follow a disturbance in an economy. Any economic disturbance affects an economy in the same way as does a drop of water in a still pond. It creates a large primary "ripple" by causing a *direct* change in the purchasing patterns of affected firms and institutions. The suppliers of the affected firms and institutions must change their purchasing patterns to meet the demands placed upon them by the firms originally affected by the economic disturbance, thereby creating a smaller secondary "ripple." In turn, those who meet the needs of the suppliers must change their purchasing patterns to meet the demands placed upon them by the suppliers of the original firms, and so on; thus, a number of subsequent "ripples" are created in the economy.

The multiplier effect has three components—direct, indirect, and induced effects. Because of the pond analogy, it is also sometimes referred to as the *ripple effect*.

- A *direct effect* (the initial drop causing the ripple effects) is the change in purchases due to a change in economic activity.
- An *indirect effect* is the change in the purchases of suppliers to those economic activities directly experiencing change.
- An *induced effect* is the change in consumer spending that is generated by changes in labor income within the region as a result of the direct and indirect effects of the economic activity. Including households as a column and row in the interindustry matrix allows this effect to be captured.

Extending the Leontief Inverse to pertain not only to relationships between *total* production and final demand of the economy but also to *change*s in each permits its multipliers to be applied to many types of economic impacts. Indeed, in impact analysis the Leontief Inverse lends itself to the drop-in-a-pond analogy discussed earlier. This is because the Leontief Inverse multiplied by a change in final demand can be estimated by a power series. That is,

$$(\mathbf{I}-\mathbf{A})^{-1}\,\Delta\mathbf{y} = \Delta\mathbf{y} + \mathbf{A}\,\Delta\mathbf{y} + \mathbf{A}(\mathbf{A}\,\Delta\mathbf{y}) + \mathbf{A}(\mathbf{A}(\mathbf{A}\,\Delta\mathbf{y})) + \mathbf{A}(\mathbf{A}(\mathbf{A}(\mathbf{A}\,\Delta\mathbf{y}))) + \ldots$$

Assuming that $\Delta\mathbf{y}$—the change in final demand—is the "drop in the pond," then succeeding terms are the ripples. Each "ripple" term is calculated as the previous "pond disturbance" multiplied by the direct requirements matrix. Thus, since each element in the direct requirements

matrix is less than one, each ripple term is smaller than its predecessor. Indeed, it has been shown that after calculating about seven of these ripple terms that the power series approximation of impacts very closely estimates those produced by the Leontief Inverse directly.

In impacts analysis practice, $\Delta\mathbf{y}$ is a single column of expenditures with the same number of elements as there are rows or columns in the direct or technical requirements matrix. This set of elements is called an *impact vector*. This term is used because it is the *vector* of numbers that is used to estimate the *economic impacts* of the investment.

There are two types of changes in investments, and consequently economic impacts, generally associated with projects—*one-time impacts* and *recurring impacts*. One-time impacts are impacts that are attributable to an expenditure that occurs once over a limited period of time. For example, the impacts resulting from the construction of a project are one-time impacts. Recurring impacts are impacts that continue permanently as a result of new or expanded ongoing expenditures. The ongoing operation of a new train station, for example, generates recurring impacts to the economy. Examples of changes in economic activity are investments in the preservation of old homes, tourist expenditures, or the expenditures required to run a historical site. Such activities are considered changes in final demand and can be either positive or negative. When the activity is not made in an industry, it is generally not well represented by the input-output model. Nonetheless, the activity can be represented by a special set of elements that are similar to a column of the transactions matrix. This set of elements is called an economic disturbance or impact vector. The latter term is used because it is the vector of numbers that is used to estimate the impacts. In this study, the impact vector is estimated by multiplying one or more economic *translators* by a dollar figure that represents an investment in one or more projects. The term translator is derived from the fact that such a vector *translates* a dollar amount of an activity into its constituent purchases by industry.

One example of an industry multiplier is shown in Exhibit A.4. In this example, the activity is the preservation of a historic home. The *direct impact* component consists of purchases made specifically for the construction project from the producing industries. The *indirect impact* component consists of expenditures made by producing industries to support the purchases made for this project. Finally, the *induced impact* component focuses on the expenditures made by workers involved in the activity on-site and in the supplying industries.

EXHIBIT A.4
Components of the Multiplier for the
Historic Rehabilitation of a Single-Family Residence

DIRECT IMPACT	INDIRECT IMPACT	INDUCED IMPACT
Excavation/Construction Labor Concrete Wood	Production Labor Steel Fabrication Concrete Mixing	Expenditures by wage earners on-site and in the supplying industries for food, clothing, durable goods, entertainment

Bricks Equipment Finance and Insurance	Factory and Office Expenses Equipment Components	

REGIONAL INPUT-OUTPUT ANALYSIS

Because of data limitations, regional input-output analysis has some considerations beyond those for the nation. The main considerations concern the depiction of regional technology and the adjustment of the technology to account for interregional trade by industry.

In the regional setting, local technology matrices are not readily available. An accurate region-specific technology matrix requires a survey of a representative sample of organizations for each industry to be depicted in the model. Such surveys are extremely expensive.[30] Because of the expense, regional analysts have tended to use national technology as a surrogate for regional technology. This substitution does not affect the accuracy of the model as long as local industry technology does not vary widely from the nation's average.[31]

Even when local technology varies widely from the nation's average for one or more industries, model accuracy may not be affected much. This is because interregional trade may mitigate the error that would be induced by the technology. That is, in estimating economic impacts via a regional input-output model, national technology must be regionalized by a vector of regional purchase coefficients,[32] **r**, in the following manner:

$$(\mathbf{I}-\mathbf{rA})^{-1}\,\mathbf{r}\cdot\Delta\mathbf{y}$$

or

$$\mathbf{r}\cdot\Delta\mathbf{y} + \mathbf{rA}\,(\mathbf{r}\cdot\Delta\mathbf{y}) + \mathbf{rA}(\mathbf{rA}\,(\mathbf{r}\cdot\Delta\mathbf{y})) + \mathbf{rA}(\mathbf{rA}(\mathbf{rA}\,(\mathbf{r}\cdot\Delta\mathbf{y}))) + \ldots$$

where the vector-matrix product **rA** is an estimate of the region's direct requirements matrix. Thus, if national technology coefficients—which vary widely from their local equivalents—are multiplied by small RPCs, the error transferred to the direct requirements matrices will be relatively small. Indeed, since most manufacturing industries have small RPCs and since technology differences tend to arise due to substitution in the use of manufactured goods,

[30]The most recent statewide survey-based model was developed for the State of [South Dakota] in 1986 and cost on the order of $60,000 (in 1990 dollars). The development of this model, however, leaned heavily on work done in 1965 for the same state. In addition the model was aggregated to the 35-sector level, making it inappropriate for many possible applications since the industries in the model do not represent the very detailed sectors that are generally analyzed.

[31]Only recently have researchers studied the validity of this assumption. They have found that large urban areas may have technology in some manufacturing industries that differs in a statistically significant way from the national average. As will be discussed in a subsequent paragraph, such differences may be unimportant after accounting for trade patterns.

[32]A regional purchase coefficient (RPC) for an industry is the proportion of the region's demand for a good or service that is fulfilled by local production. Thus, each industry's RPC varies between zero (0) and one (1), with one implying that all local demand is fulfilled by local suppliers. As a general rule, agriculture, mining, and manufacturing industries tend to have low RPCs, and both service and construction industries tend to have high RPCs.

technology differences have generally been found to be minor source error in economic impact measurement. Instead, RPCs and their measurement error due to industry aggregation have been the focus of research on regional input-output model accuracy.

COMPARING REGIONAL ECONOMIC IMPACT MODELS

In the United States there are three major vendors of regional input-output models. They are U.S. Bureau of Economic Analysis's (BEA) RIMS II multipliers, Minnesota IMPLAN Group Inc.'s (MIG) IMPLAN Pro model, and Rutgers University's own R/Econ™ I–O model. Rutgers University has had the privilege of using them all. (R/Econ™ I–O builds from the PC I–O model produced by the Regional Science Research Corporation's (RSRC).)

Although the three systems have important similarities, there are also significant differences that should be considered before deciding which system to use in a particular study. This document compares the features of the three systems. Further discussion can be found in Brucker, Hastings, and Latham's article in the Summer 1987 issue of *The Review of Regional Studies* entitled "Regional Input-Output Analysis: A Comparison of Five Ready-Made Model Systems." Since that date, Rutgers University and MIG have added a significant number of new features to PC I–O (now, R/Econ™ I–O) and IMPLAN, respectively.

Model Accuracy

RIMS II, IMPLAN, and RECON™ I–O all employ input-output (I–O) models for estimating impacts. All three regionalized the U.S. national I–O technology coefficients table at the highest levels of disaggregation (more than 500 industries). Since aggregation of sectors has been shown to be an important source of error in the calculation of impact multipliers, the retention of maximum industrial detail in these regional systems is a positive feature that they share. The systems diverge in their regionalization approaches, however. The difference is in the manner that they estimate regional purchase coefficients (RPCs), which are used to regionalize the technology matrix. An RPC is the proportion of the region's demand for a good or service that is fulfilled by the region's own producers rather than by imports from producers in other areas. Thus, it expresses the proportion of the purchases of the good or service that do not leak out of the region, but rather feed back to its economy, with corresponding multiplier effects. Thus, the accuracy of the RPC is crucial to the accuracy of a regional I–O model, since the regional multiplier effects of a sector vary directly with its RPC.

The techniques for estimating the RPCs used by Rutgers University and MIG in their models are theoretically more appealing than the location quotient (LQ) approach used in RIMS II. This is because the former two allow for crosshauling of a good or service among regions and the latter does not. Since crosshauling of the same general class of goods or services among regions is quite common, the Rutgers University-MIG approach should provide better estimates of regional imports and exports. Statistical results reported in Stevens, Treyz, and Lahr (1989) confirm that LQ methods tend to overestimate RPCs. By extension, inaccurate RPCs may lead to inaccurately estimated impact estimates.

Further, the estimating equation used by Rutgers University to produce RPCs should be more accurate than that used by MIG. The difference between the two approaches is that MIG estimates RPCs at a more aggregated level (two-digit SICs, or about 86 industries) and applies them at a desegregate level (over 500 industries). Rutgers University both estimates and applies the RPCs at the most detailed industry level. The application of aggregate RPCs can induce as much as 50 percent error in impact estimates (Lahr and Stevens, 2002).

Although both RECON™ I–O and IMPLAN use an RPC-estimating technique that is theoretically sound and update it using the most recent economic data, some practitioners question their accuracy. The reasons for doing so are three-fold. First, the observations currently used to estimate their implemented RPCs are based on 20-years old trade relationships—the Commodity Transportation Survey (CTS) from the 1977 Census of Transportation. Second, the CTS observations are at the state level. Therefore, RPCs estimated for sub-state areas are extrapolated. Hence, there is the potential that RPCs for counties and metropolitan areas are not as accurate as might be expected. Third, the observed CTS RPCs are only for shipments of goods. The interstate provision of services is unmeasured by the CTS. IMPLAN relies on relationships from the 1977 U.S. Multiregional Input-Output Model that are not clearly documented. RECON™ I–O relies on the same econometric relationships that it does for manufacturing industries but employs expert judgment to construct weight/value ratios (a critical variable in the RPC-estimating equation) for the nonmanufacturing industries.

The fact that BEA creates the RIMS II multipliers gives it the advantage of being constructed from the full set of the most recent regional earnings data available. BEA is the main federal government purveyor of employment and earnings data by detailed industry. It therefore has access to the fully disclosed and disaggregated versions of these data. The other two model systems rely on older data from *County Business Patterns* and Bureau of Labor [Statistic's] ES202 forms, which have been "improved" by filling-in for any industries that have disclosure problems (this occurs when three or fewer firms exist in an industry or a region).

Model Flexibility

For the typical user, the most apparent differences among the three modeling systems are the level of flexibility they enable and the type of results that they yield. R/Econ™ I–O allows the user to make changes in individual cells of the 515-by-515 technology matrix as well as in the 11 515-sector vectors of region-specific data that are used to produce the regionalized model. The 11 sectors are: output, demand, employment per unit output, labor income per unit output, total value added per unit of output, taxes per unit of output (state and local), nontax value added per unit output, administrative and auxiliary output per unit output, household consumption per unit of labor income, and the RPCs. The PC I–O model tends to be simple to use. Its User's Guide is straightforward and concise, providing instruction about the proper implementation of the model as well as the interpretation of the model's results.

The software for IMPLAN Pro is Windows-based, and its User's Guide is more formalized. Of the three modeling systems, it is the most user-friendly. The Windows orientation has enabled MIG to provide many more options in IMPLAN without increasing the complexity of use. Like R/Econ™ I–O, IMPLAN's regional data on RPCs, output, labor compensation, industry average margins, and employment can be revised. It does not have complete

information on tax revenues other than those from indirect business taxes (excise and sales taxes), and those cannot be altered. Also like R/Econ™, IMPLAN allows users to modify the cells of the 538-by-538 technology matrix. It also permits the user to change and apply price deflators so that dollar figures can be updated from the default year, which may be as many as four years prior to the current year. The plethora of options, which are advantageous to the advanced user, can be extremely confusing to the novice. Although default values are provided for most of the options, the accompanying documentation does not clearly point out which items should get the most attention. Further, the calculations needed to make any requisite changes can be more complex than those needed for the R/Econ™ I–O model. Much of the documentation for the model dwells on technical issues regarding the guts of the model. For example, while one can aggregate the 538-sector impacts to the one- and two-digit SIC level, the current documentation does not discuss that possibility. Instead, the user is advised by the User's Guide to produce an aggregate model to achieve this end. Such a model, as was discussed earlier, is likely to be error ridden.

For a region, RIMS II typically delivers a set of 38-by-471 tables of multipliers for output, earnings, and employment; supplementary multipliers for taxes are available at additional cost. Although the model's documentation is generally excellent, use of RIMS II alone will not provide proper estimates of a region's economic impacts from a change in regional demand. This is because no RPC estimates are supplied with the model. For example, in order to estimate the impacts of rehabilitation, one not only needs to be able to convert the engineering cost estimates into demands for labor as well as for materials and services by industry, but must also be able to estimate the percentage of the labor income, materials, and services which will be provided by the region's households and industries (the RPCs for the demanded goods and services). In most cases, such percentages are difficult to ascertain; however, they are provided in the R/Econ™ I–O and IMPLAN models with simple triggering of an option. This model ought not to be used for evaluating any project or event where superior data are available or where the evaluation is for a change in regional demand (a construction project or an event) as opposed to a change in regional supply (the operation of a new establishment).

Model Results

Detailed total economic impacts for about 500 industries can be calculated for jobs, labor income, and output from R/Econ™ I–O and IMPLAN only. These two modeling systems can also provide total impacts as well as impacts at the one- and two-digit industry levels. RIMS II provides total impacts and impacts on only 38 industries for these same three measures. Only the manual for R/Econ™ I–O warns about the problems of interpreting and comparing multipliers and any measures of output, also known as the value of shipments.

As an alternative to the conventional measures and their multipliers, R/Econ™ I–O and IMPLAN provide results on a measure known as "value added." It is the region's contribution to the nation's gross domestic product (GDP) and consists of labor income, nonmonetary labor compensation, proprietors' income, profit-type income, dividends, interest, rents, capital consumption allowances, and taxes paid. It is, thus, the region's production of wealth and is the single best economic measure of the total economic impacts of an economic disturbance.

In addition to impacts in terms of jobs, employee compensation, output, and value added, IMPLAN provides information on impacts in terms of personal income, proprietor income, other property-type income, and indirect business taxes. R/Econ™ I–O breaks out impacts into taxes collected by the local, state, and federal governments. It also provides the jobs impacts in terms of either about 90 or 400 occupations at the request of the user. It goes a step further by also providing a return-on-investment-type multiplier measure, which compares the total impacts on all of the main measures to the total original expenditure that caused the impacts. Although these latter can be readily calculated by the user using results of the other two modeling systems, they are rarely used in impact analysis despite their obvious value.

In terms of the format of the results, both R/Econ™ I–O and IMPLAN are flexible. On request, they print the results directly or into a file (Excel® 4.0, Lotus 123®, Word® 6.0, tab delimited, or ASCII text). It can also permit previewing of the results on the computer's monitor. Both now offer the option of printing out the job impacts in either or both levels of occupational detail.

RSRC Equation

The equation currently used by RSRC in estimating RPCs is reported in Treyz and Stevens (1985). In this paper, the authors show that they estimated the RPC from the 1977 CTS data by estimating the demands for an industry's production of goods or services that are fulfilled by local suppliers (*LS*) as

$$LS = D^{e(-1/x)}$$

and where for a given industry

$x = k\, Z_1^{a1} Z_2^{a2}\, P_j\, Z_j^{aj}$ and D is its total local demand.

Since for a given industry RPC = LS/D then

$$\ln\{-1/[\ln(\ln LS/\ln D)]\} = \ln k + a_1 \ln Z_1 + a_2 \ln Z_2 + S_j\, a_j \ln Z_j$$

which was the equation that was estimated for each industry.

This odd nonlinear form not only yielded high correlations between the estimated and actual values of the RPCs, it also assured that the RPC value ranges strictly between 0 and 1. The results of the empirical implementation of this equation are shown in Treyz and Stevens (1985, table 1). The table shows that total local industry demand (Z_1), the supply/demand ratio (Z_2), the

weight/value ratio of the good (Z_3), the region's size in square miles (Z_4), and the region's average establishment size in terms of employees for the industry compared to the nation's (Z_5) are the variables that influence the value of the RPC across all regions and industries. The latter of these maintain the least leverage on RPC values.

Because the CTS data are at the state level only, it is important for the purposes of this study that the local industry demand, the supply/demand ratio, and the region's size in square miles are included in the equation. They allow the equation to extrapolate the estimation of RPCs for areas smaller than states. It should also be noted here that the CTS data only cover manufactured goods. Thus, although calculated effectively making them equal to unity via the above equation, RPC estimates for services drop on the weight/value ratios. A very high weight/value ratio like this forces the industry to meet this demand through local production. Hence, it is no surprise that a region's RPC for this sector is often very high (0.89). Similarly, hotels and motels tend to be used by visitors from outside the area. Thus, a weight/value ratio on the order of that for industry production would be expected. Hence, an RPC for this sector is often about 0.25.

The accuracy of Rutgers University's estimating approach is exemplified best by this last example. Ordinary location quotient approaches would show hotel and motel services serving local residents. Similarly, IMPLAN RPCs are built from data that combine this industry with eating and drinking establishments (among others). The results of such an aggregation process are an RPC that represents neither industry (a value of about 0.50) but which is applied to both. In the end, not only is Rutgers University's RPC-estimating approach the most sound, but it is also widely acknowledged by researchers in the field as being state of the art.

ADVANTAGES AND LIMITATIONS OF INPUT-OUTPUT ANALYSIS

Input-output modeling is one of the most accepted means for estimating economic impacts. This is because it provides a concise and accurate means for articulating the interrelationships among industries. The models can be quite detailed. For example, the current U.S. model currently has more than 500 industries representing many six-digit North American Industrial Classification System (NAICS) codes. The Rutgers University model used in this study has 517 sectors. Further, the industry detail of input-output models provides not only a consistent and systematic approach but also more accurately assesses multiplier effects of changes in economic activity. Research has shown that results from more aggregated economic models can have as much as 50 percent error inherent in them. Such large errors are generally attributed to poor estimation of regional trade flows resulting from the aggregation process.

Input-output models also can be set up to capture the flows among economic regions. For example, the model used in this study can calculate impacts for a county as well as the total Ohio state economy.

The limitations of input-output modeling should also be recognized. The approach makes several key assumptions. First, the input-output model approach assumes that there are no economies of scale to production in an industry; that is, the proportion of inputs used in an industry's production process does not change regardless of the level of production. This assumption will not work if the technology matrix depicts an economy of a recessional economy (e.g., 1982) and

the analyst is attempting to model activity in a peak economic year (e.g., 1989). In a recession year, the labor-to-output ratio tends to be excessive because firms are generally reluctant to lay off workers when they believe an economic turnaround is about to occur.

A less-restrictive assumption of the input-output approach is that technology is not permitted to change over time. It is less restrictive because the technology matrix in the United States is updated frequently and, in general, production technology does not radically change over short time periods.

Finally, the technical coefficients used in most regional models are based on the assumption that production processes are spatially invariant and are well represented by the nation's average technology. In a region as large as an entire state, this assumption is likely to hold true.

APPENDIX B – HISTORIC PRESERVATION BIBLIOGRAPHY

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