

Annual Report on the Economic Impact of the Federal Historic Tax Credits for Fiscal Year 2021



RUTGERS

Edward J. Bloustein School
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National Park Service

U.S. Department of the Interior
Technical Preservation Services

A Message from the National Park Service

Beyond the National Park System, the National Park Service (NPS) through its Cultural Resources, Partnerships, and Science programs is part of a national preservation partnership working to promote the preservation of historic resources in communities small and large throughout the country. For the past 44 years the NPS, in partnership with the State Historic Preservation Offices, has administered the Federal Historic Preservation Tax Incentives Program. The program provides a 20% Federal tax credit to property owners who undertake a substantial rehabilitation of a historic building in a business or income-producing use while maintaining its historic character.

Commonly referred to as the Historic Tax Credit (HTC), the HTC is designed not only to preserve and rehabilitate historic buildings, but also to promote the economic revitalization of older communities in the nation's cities and towns, along Main Streets, and in rural areas. Since the program's inception in 1976, the NPS has certified the rehabilitation of more than 47,000 historic properties throughout the United States, with the HTC leveraging over \$199.1 billion in private investment in historic rehabilitation and generating over 3 million jobs.

In Fiscal Year (FY) 2021, the NPS certified 1,063 completed historic rehabilitation projects, representing \$7.2 billion in estimated rehabilitation costs that qualify for the 20% Federal tax credit. Another 1,098 proposed projects were also approved in FY 2021. Many of these projects involved buildings that were abandoned or underutilized and in need of substantial rehabilitation to return them to, or for their continued, economic viability. The HTC program also is an important tool in helping to revitalize older, economically depressed communities. Based on project data provided by the NPS, PolicyMap determined that 44% of the certified rehabilitation projects in FY 2021 were located in low- and moderate- income census tracts and 78% were located in economically distressed areas.

A common misconception about the HTC program is that it only supports large projects and projects in large cities. Almost half (47%) of all projects in FY 2021 were under \$1 million, and 18% were under \$250,000. PolicyMap determined that 30% of all certified rehabilitation projects in FY 2021 were located in communities with under 50,000 in population and 19% in communities with under 25,000 in population. The NPS issues annual reports on the HTC program quantifying the number of historic rehabilitations certified each year, their reported costs, and other statistical information on the program. The annual report is available on the NPS Technical Preservation Services website at <http://www.nps.gov/tps/tax-incentives.htm>, along with information on the HTC program in general.

For FY 2021, the NPS also turned to the Rutgers University Center for Urban Policy Research, through a cooperative agreement, to undertake and report on the economic impacts of the HTC for the fiscal year ending September 30, 2021. This report highlights its main findings. An economic model originally developed by the Center under a series of grants from the NPS was utilized in the preparation of this report. The economic model was utilized by the Center for their prior reports on the Federal HTC, as well as for a number of other economic reports for state governments and others.

As the Center's report identifies, the level and breadth of the positive economic impacts resulting from the Federal HTCs in FY 2021 are quite significant. The report also includes information on the cumulative economic impact of the Federal HTCs for the past 44 years, starting in 1977–78 with the first completed rehabilitation project to be certified by the NPS under the program. Lastly, the report includes several case studies of HTC projects certified in FY 2021. The program remains the Federal government's largest and most effective program supporting historic preservation and community revitalization.

Technical Preservation Services, National Park Service

September 2022



Executive Summary

Cook County Hospital Administration Building, terra-cotta cleaning before (left) and after (right) rehabilitation.
Photo: Torque

Overview of the Rutgers Economic Analysis

The Federal Historic Tax Credit (HTC) is a Federal income tax credit that promotes the rehabilitation of income-producing historic properties. This study examines the economic impacts of the HTC (a 20% credit since 1986) by analyzing the economic consequences of the projects it supports. This analysis focuses on the economic effects of these projects during construction, quantifying the total economic impacts (i.e., direct as well as multiplier, or secondary, economic consequences) for the Fiscal Year 2021, beginning October 1, 2020, and ending September 30, 2021, and for the period since the program's inception (beginning in FY 1978, with the certification of the first completed rehabilitation project under the program). The study utilizes the Preservation Economic Impact Model (PEIM), a comprehensive economic model developed by Rutgers University Center for Urban Policy Research for the National Park Service.

The current analysis applies the PEIM to both cumulative (FY 1978 through FY 2021) HTC-related historic rehabilitation investment (about \$199.1 billion in inflation-adjusted 2021 dollars) and single-year (FY 2021) HTC-related rehabilitation investment (about \$8.0 billion). It considers the effects of the cumulative \$199.1 billion rehabilitation investment as if it applied to one year (2021), rather than backdating the PEIM for each of the 44 years in the study period. It also considers the full rehabilitation investment associated with the HTC (e.g., \$8.0 billion in FY 2021), and not the somewhat lower amount reported by the National Park Service based on estimated qualified rehabilitation costs indicated by property owners requesting certification of rehabilitation for purposes of the tax credit (e.g., \$7.2 billion in FY 2021).¹

PEIM results include many fields of data. The fields most relevant to this study include:

JOBS	Employment; both part- and full-time, by place of work, estimated using the typical job characteristics of each industry.
INCOME	"Earned" or labor income; specifically, wages, salaries, and proprietor income.
WEALTH	Value-added; the sub-national equivalent of gross domestic product (GDP).
OUTPUT	The value of shipments; as reported in the Economic Census.
TAXES	Tax revenues generated by the activity; including taxes to the Federal government and to state and local governments.

¹ The HTC has a multi-step application process, encompassing Part 1 (evaluation of the historic significance of the property), Part 2 (description of the proposed rehabilitation work), and Part 3 (request for certification of completed work). Both Part 2 and Part 3 rehabilitation statistics include only costs considered "eligible" or "qualified" for the tax credit under the Internal Revenue Code (Qualified Rehabilitation Expenditures, or QREs), as opposed to "ineligible" or "nonqualified" costs. While the ineligible/nonqualified expenses do not count for tax credit purposes, they are a component of the total rehabilitation investment or cost borne by the HTC property owner. In practical terms, the total rehabilitation investment, including ineligible/nonqualified costs, helps pump prime the economy. For example, in FY 2021, the certified rehabilitation (Part 3) qualified rehabilitation expenditures amounted to about \$7.2 billion, while the total rehabilitation outlay associated with the HTC was an estimated \$8.0 billion.

National Economic Impacts

The following table summarizes the impacts of the HTC in inflation-adjusted 2021 dollars for each of these economic measures for the cumulative period FY 1978–2021 and for FY 2021.

National Total Impacts 2021 \$ billion	FEDERAL HTC-ASSISTED REHABILITATION	
	\$199.1 billion CUMULATIVE (FY 1978–2021)² historic rehabilitation expenditures results in:	\$8.0 billion ANNUAL FY 2021 historic rehabilitation expenditures results in:
Jobs (person-years, in thousands)	3,042	135
Income (\$ billion)	\$157.3	\$5.6
Output (\$ billion)	\$428.4	\$15.0
GDP (\$ billion)	\$213.8	\$7.7
Taxes (\$ billion)	\$60.7	\$2.1
Federal (\$ billion)	\$42.9	\$1.3
State (\$ billion)	\$8.8	\$0.3
Local (\$ billion)	\$9.0	\$0.4

The benefits of investment in HTC-related historic rehabilitation projects are extensive, increasing payrolls and production in nearly all sectors of the nation's economy. The cumulative effects for the period of FY 1978 through FY 2021 are illustrative. During that period, \$199.1 billion in HTC-related rehabilitation investment created 3,042,000 jobs and \$213.8 billion in GDP, about 30% of which (940,000 jobs and \$63.6 billion in GDP) was in the construction sector. This is as one would expect, given the share of such projects that require the employment of building contractors and trades. Other major beneficiaries were the service sector (550,000 jobs, \$28.4 billion in GDP), the manufacturing sector (642,000 jobs, \$56.7 billion in GDP), and the retail trade sector (427,000 jobs, \$15.1 billion in GDP). As a result of both direct and multiplier effects, and due to the interconnectedness of the national economy, sectors not immediately associated with historic rehabilitation, such as agriculture, mining, transportation, and public utilities, benefit as well. (see Exhibit 3.1).

The most recent economic benefits of the Federal HTC are also impressive. In FY 2021, HTC-related investments generated approximately 135,000 jobs, including 48,000 in construction and 30,000 in manufacturing, and were responsible for \$7.7 billion in GDP, including \$2.5 billion in construction and \$2.2 billion in manufacturing. HTC-related activity in FY 2021 generated \$5.6 billion in income, with construction (\$2.1 billion) and manufacturing (\$1.3 billion) reaping major shares. (See Exhibit 3.2)

² Changes in the official annual reported rates of inflation caused the Rutgers research team to make various changes in the calculations concerning the economic impacts of the HTC over time. The changes are particularly notable over the past few years when job counts ensuing from the HTC had to be adjusted.



Coca-Cola Bottling Plant, Shipping Department after rehabilitation. Photo: Susan Fleck

The HTC National and State Economic Impacts

A breakdown by state of the national economic benefits, both for FY 2021 and cumulatively for the last five fiscal years (FY 2017–2021), shows the benefits of the program on the national economy. (See Exhibits 2.1 and 2.2)

HTC-related historic rehabilitation investment benefits state economies as well as the national economy. For example, in Virginia in FY 2021, Federal HTC-related rehabilitation activity totaled about \$290.3 million. The national impacts of that investment included 4,886 jobs, an additional \$553.1 million in output, \$207.7 million in income, \$280.8 million in GDP, \$49.7 million in Federal taxes, and \$67.0 million in total taxes. In Virginia alone, the same \$290.3 million in HTC-related spending resulted in 2,834 jobs, \$290.3 million in output, \$128.9 million in income, \$158.9 million in gross state product (GSP), and \$32.8 million in total taxes.

HTC Impacts Compared with those of Non-Preservation Investments

How does HTC-related historic rehabilitation perform as an economic pump primer compared with other, non-preservation investments? In short, quite well. Numerous studies conducted by Rutgers University have shown that in many parts of the country, a \$1 million investment in historic rehabilitation yields markedly better effects on employment, income, GDP, and state and local taxes than an equal investment in new construction or many other economic activities (e.g., manufacturing or services). These findings demonstrate that historic rehabilitation, combined holistically with the many activities of the broader economy, delivers a commendably strong “bang for the buck.”

The Cost of the HTC

The HTC is a tax expenditure and has a public cost. In the simplest terms, the Federal cost of the HTC is equal to the credit percent (20% since 1986) applied to the Part 3 (qualified for tax credit) estimated investment.³ Applying that calculation, the Federal HTC costs the U.S. Treasury approximately \$37.6 billion (in inflation-adjusted 2021 dollars) over the period of FY 1978 through FY 2021, while the cost for projects certified by the National Park Service in FY 2021 alone was about \$1.43 billion.⁴ Weighing against these costs are the significant economic impacts (i.e., jobs, income, GDP, and output) and tax revenue (Federal, state, and local) generated by HTC-aided rehabilitations and documented in this study. An important finding is that the HTC yields a net benefit to the U.S. Treasury, generating \$42.9 billion in Federal tax receipts over the life of the program, compared with \$37.6 billion in credits allocated. (See Exhibit 1)

³See footnote 1, on page 1.

⁴These estimates are based on the full utilization of the credits in cases of certified rehabilitation and calculates the 20% tax credit as taken in one-year and not over five-years. For various reasons, not all completed projects certified by the National Park Service may ultimately utilize the credit. Their economic impact, nevertheless, remains.

Fiscal Year 2021 Highlights

\$8.0 billion

Total in rehabilitation investment

2021 POSITIVE IMPACTS
on the national economy:

\$15.0 billion in output,
\$7.7 billion in GDP,
\$5.6 billion in income, and
\$2.1 billion in taxes, including
\$1.3 billion in Federal tax receipts.

135,000

NEW JOBS created and billions
of dollars in total (direct and
secondary) economic gains

44%

Projects in low- and moderate-
income census tracts*

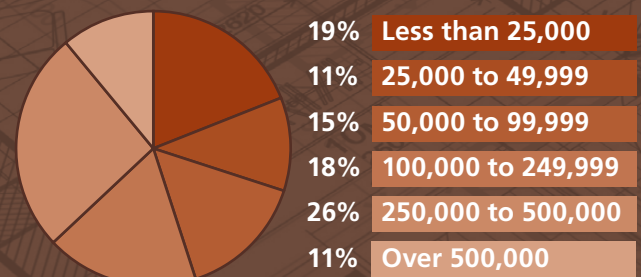
78%

Projects in economically
distressed areas*

30%

Projects in communities of
less than 50,000 people*

Projects by Community Size (Population)*



*Courtesy of PolicyMap (Count of Population, 2020. United States Census Bureau Decennial Redistricting File (PL 94-171). New Markets Tax Credit (NMTC) Eligibility Status for 2019 using 2011-2015 eligibility data. United States Department of the Treasury, CDFI Fund)

Fiscal Year 1978 — Fiscal Year 2021 Cumulative HTC Impacts

\$199.1 billion

in cumulative rehabilitation investment

An inflation-adjusted (2021 dollars) \$37.6 billion
HTC cost encouraged a five times greater amount
of historic rehabilitation, \$199.1 billion.

3.0 million

NEW JOBS created and billions
of dollars in total (direct and
secondary) economic gains

CUMULATIVE POSITIVE IMPACTS
on the national economy:

\$428.4 billion in output,
\$213.8 billion in GDP,
\$157.3 billion in income, and
\$60.7 billion in taxes, including
\$42.9 billion in Federal tax receipts.

These leverage and multiplier effects
support the economic argument
that the **Federal HTC is a strategic
investment that works.**

Exhibit 1

Summary of Federal Historic Tax Credit Statistics

Dollar amounts are expressed in billions				
Investment/Tax Credit Component ^a	FY 1978–2021			
	Nominal \$ ^d		Real \$ ^e	
	Total	Annual Average	Total	Annual Average
Approved proposed (for tax credit) rehabilitation (Part 2)	\$140.7	\$3.20	\$234.7	\$5.33
Certified (for tax credit) rehabilitation (Part 3)	\$105.8	\$2.40	\$179.2	\$4.07
Total rehabilitation cost ^b	\$117.5	\$2.67	\$199.1	\$4.53
Federal tax credit ^c	\$21.6	\$0.49	\$37.6	\$0.85

Dollar amounts are expressed in billions		
Economic Impacts (See Exhibit 3.1 for details)	FY 1978–2021 ^e	
	Total	Annual Average
Jobs (in thousands)	3,042	69
Income	\$157.3	\$3.58
Gross Domestic Product	\$213.8	\$4.86
Output	\$428.4	\$9.74
Taxes-All Government	\$60.7	\$1.38
Taxes-Federal Government	\$42.9	\$0.98
Taxes-State Government	\$8.8	\$0.20
Taxes-Local Government	\$9.0	\$0.20

Technical Background: The HTC has a multi-step application process encompassing Part 1 (evaluation of the historic significance of the property), Part 2 (description of the rehabilitation work), and Part 3 (request for certification of completed work). With respect to the HTC's dollar magnitude, the most complete data is for the approved proposed (for tax credit) rehabilitation investment (Part 2). We do not have as good data on the year-by-year certified (for tax credit) rehabilitation (Part 3) volume over the full FY 1978–2021 period. (Only a portion of the Part 2 rehabilitation is ultimately certified as Part 3.) Further, we do not have specific data on the total rehabilitation investment associated with the HTC. By way of background, both Part 2 and Part 3 rehabilitation statistics include only what are termed “eligible” or “qualified” costs (or Qualified Rehabilitation Expenditures—QREs) for the tax credit as opposed to what are called “ineligible” or “non-qualified” costs. Examples of eligible/qualified costs include outlays for renovation (walls, floors, and ceilings, etc.), construction-period interest and taxes, and architect fees; examples of ineligible/non-qualified costs include landscaping, financing and leasing fees, and various other outlays (e.g., for fencing, paving, sidewalks and parking lots). While the ineligible/non-qualified expenses do not count for tax credit purposes, they are a component of the total rehabilitation investment borne by the HTC-oriented developer and in fact, the total rehabilitation investment (including ineligible/non-qualified costs) help pump prime the economy. Based on the best published data and through additional case studies conducted specifically for the purposes of the current investigation, Rutgers University estimates some of the “missing information” noted above regarding the cumulative HTC investment over FY 1978–2021.

^a Data estimated from best available information.

^b Equals all rehabilitation outlays—both eligible/qualified expenses and ineligible/non-qualified costs. The total rehabilitation cost is estimated by dividing the Part 3 investment by 0.9. Case study investigation suggests that the Part 3 amount is closer to 85% of the total rehabilitation cost. However, we elected to apply the 0.9 factor to be conservative, that is, to derive a lower rather than a higher estimate of the total rehabilitation expense.

^c Assumes a 25% HTC in FY 1978–FY 1986 and a 20% HTC in FY 1987–FY 2021. These percents are applied to the certified rehabilitation (Part 3) qualified rehabilitation expenditures.

^d In indicated year dollars—not adjusted for inflation.

^e In inflation-adjusted 2021 dollars.

SOURCES: Technical Preservation Services, National Park Service. Calculations by Rutgers University.

Exhibit 2.1 Fiscal Year 2021 National Economic and Tax Impacts of Federal HTC-Related Investment by State

State	Total Rehabilitation Costs in 2021 \$ millions	National Economic Impacts				Tax Impacts			
		Employment jobs	in 2021 \$ millions		Output	in 2021 \$ millions			
			Income	GDP		Local	State	Federal	Total
Alabama	\$102.4	1,891	\$64.9	\$122.1	\$168.1	\$1.8	\$2.7	\$15.6	\$20.1
Alaska	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arizona	1.3	23	0.8	1.0	2.6	1.3	0.8	0.2	2.3
Arkansas	10.7	221	7.4	11.1	19.7	0.2	0.4	1.8	2.4
California	138.0	2,058	100.0	130.6	269.9	3.5	5.6	25.3	34.4
Colorado	31.4	2,015	22.1	30.7	59.1	0.8	1.0	5.2	7.1
Connecticut	234.4	3,356	163.2	226.9	428.9	12.3	10.5	37.6	60.4
Delaware	23.0	364	16.3	22.1	42.9	1.1	1.1	3.6	5.8
District of Columbia	45.0	655	30.4	41.1	79.3	3.0	1.2	6.2	10.4
Florida	120.5	2,100	85.1	115.3	225.6	6.2	3.8	20.3	30.3
Georgia	263.0	5,193	182.5	268.4	481.5	12.4	12.0	44.5	68.9
Hawaii	5.4	78	3.7	5.2	9.6	0.2	0.2	0.8	1.2
Idaho	2.2	42	1.5	2.2	4.0	0.1	0.1	0.3	0.4
Illinois	379.6	5,596	276.3	356.6	741.3	12.0	10.9	66.5	89.4
Indiana	193.0	3,382	137.9	185.6	368.3	63.6	42.4	32.8	138.8
Iowa	254.2	4,593	172.1	256.9	447.2	8.5	7.6	39.9	55.9
Kansas	46.8	849	32.7	45.3	86.7	11.0	7.7	7.5	26.2
Kentucky	88.3	1,691	61.2	86.4	161.8	8.8	7.0	14.1	30.0
Louisiana	281.4	4,971	200.6	262.8	533.1	9.8	10.2	46.2	66.2
Maine	19.8	301	11.7	17.5	38.0	0.9	0.8	3.1	4.9
Maryland	47.6	736	33.4	45.0	88.4	1.5	1.4	7.6	10.6
Massachusetts	250.2	3,251	175.6	235.6	465.9	6.7	8.1	40.4	55.1
Michigan	255.7	4,062	181.1	242.6	482.3	7.6	9.2	42.2	59.0
Minnesota	171.0	2,693	120.1	161.7	319.3	6.0	6.8	27.6	40.4
Mississippi	86.7	1,805	60.3	85.6	159.6	6.6	5.2	14.0	25.8
Missouri	523.5	8,969	373.4	494.7	995.4	14.5	16.5	86.7	117.7
Montana	0.1	1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Nebraska	96.8	1,854	66.1	95.7	173.1	20.0	13.7	15.0	48.6
Nevada	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Hampshire	20.3	312	14.1	19.7	37.6	0.8	0.3	3.2	4.3
New Jersey	302.1	4,336	214.3	282.0	573.8	5.9	8.9	49.4	64.3
New Mexico	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New York	562.2	9,301	400.6	535.0	1,058.0	36.4	30.9	96.6	163.9
North Carolina	194.0	3,634	136.6	194.3	363.3	4.7	6.8	33.2	44.6
North Dakota	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ohio	574.2	10,315	408.9	565.8	1,090.5	24.9	21.0	99.6	145.5
Oklahoma	77.7	1,532	55.3	77.6	148.4	1.9	2.7	13.3	17.9
Oregon	85.7	1,517	62.2	81.6	166.9	2.2	3.0	14.9	20.2
Pennsylvania	526.6	8,560	382.3	506.8	1,027.0	17.6	14.9	92.7	125.2
Rhode Island	118.7	1,810	80.9	121.5	213.4	4.3	3.8	18.5	26.6
South Carolina	94.5	1,767	65.6	95.9	172.7	2.7	3.0	15.7	21.5
South Dakota	11.1	222	7.8	10.1	20.7	0.4	0.2	1.7	2.2
Tennessee	93.9	1,661	65.8	91.1	175.0	2.7	2.0	15.3	20.0
Texas	839.5	13,563	608.2	795.4	1,644.4	29.0	16.7	149.8	195.5
Utah	6.1	112	4.2	5.9	11.2	0.2	0.2	1.0	1.4
Vermont	35.3	626	25.5	33.5	67.7	1.4	1.7	5.7	8.9
Virginia	290.3	4,886	207.7	280.8	553.1	7.5	9.8	49.7	67.0
Washington	65.9	1,057	47.3	64.1	126.7	3.0	2.4	11.4	16.8
West Virginia	39.7	759	27.4	39.8	72.3	1.2	1.4	6.4	9.0
Wisconsin	348.2	6,061	246.7	339.2	654.2	12.3	14.0	58.7	85.0
Wyoming	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals	\$7,958.1	134,780	\$5,642.3	\$7,688.8	\$15,028.3	\$379.4	\$330.5	\$1,342.2	\$2,052.1

SOURCE: Technical Preservation Services, National Park Service. Calculations by Rutgers University.

Exhibit 2.2 Cumulative Fiscal Years 2017–2021

National Economic and Tax Impacts of Federal HTC-Related Investment by State

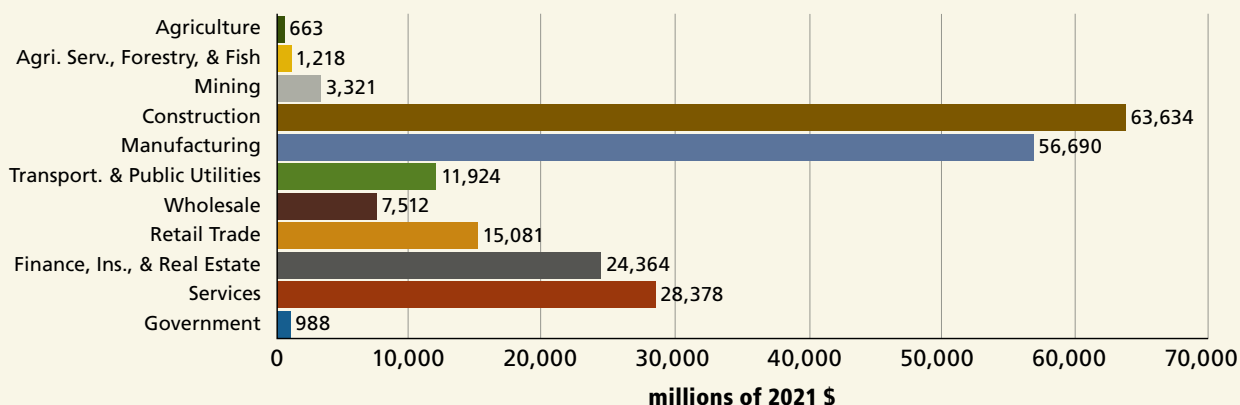
State	Total Rehabilitation Costs in 2021 \$ millions	Employment jobs	National Economic Impacts in 2021 \$ millions			Tax Impacts in 2021 \$ millions			
			Income	GDP	Output	Local	State	Federal	Total
Alabama	\$317.7	5,490	\$201.3	\$378.7	\$521.4	\$5.7	\$8.4	\$48.4	\$62.4
Alaska	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arizona	90.4	1,422	53.4	68.8	173.9	85.5	55.3	15.2	155.8
Arkansas	258.1	5,049	179.6	268.1	477.1	5.1	9.4	43.2	57.7
California	687.9	9,589	498.6	651.1	1,345.5	17.3	27.7	126.3	171.4
Colorado	122.2	7,605	86.1	119.6	230.1	3.0	4.0	20.3	27.5
Connecticut	598.2	8,140	416.4	578.9	1,094.3	31.4	26.8	95.8	154.1
Delaware	72.1	1,084	51.0	69.3	134.5	3.3	3.5	11.4	18.1
District of Columbia	635.8	8,455	428.8	579.9	1,119.4	42.6	17.2	86.9	146.8
Florida	184.3	3,120	130.3	176.4	345.2	9.5	5.8	31.1	46.4
Georgia	771.3	14,518	535.1	787.0	1,411.7	36.3	35.3	130.5	202.1
Hawaii	13.7	183	9.3	13.2	24.2	41.6	49.0	180.2	270.8
Idaho	29.1	521	19.7	28.4	52.4	0.7	0.7	4.3	5.7
Illinois	2,419.1	34,322	1,761.0	2,272.7	4,724.3	76.6	69.7	423.7	569.9
Indiana	455.7	7,671	325.5	438.1	869.4	150.2	100.1	77.5	327.7
Iowa	1,034.8	17,479	700.7	1,045.9	1,820.4	34.6	30.8	162.4	227.7
Kansas	298.7	5,082	208.9	289.3	553.8	70.5	49.0	48.0	167.5
Kentucky	453.6	8,084	314.1	443.5	830.7	45.4	36.1	72.3	153.9
Louisiana	1,604.3	26,369	1,143.5	1,498.1	3,039.0	56.0	58.3	263.2	377.4
Maine	190.4	2,652	111.9	168.2	365.0	8.6	8.0	30.2	46.9
Maryland	590.1	8,621	414.4	557.3	1,095.1	19.1	17.3	94.4	131.0
Massachusetts	1,721.2	20,819	1,207.8	1,620.4	3,205.1	46.0	55.5	277.9	379.1
Michigan	1,279.2	19,078	906.2	1,213.9	2,413.0	37.9	46.0	211.3	295.4
Minnesota	876.3	12,735	615.3	828.8	1,636.4	30.9	34.7	141.3	207.0
Mississippi	180.4	3,661	125.5	178.2	332.1	13.8	10.8	29.1	53.8
Missouri	1,977.4	36,965	1,616.7	2,141.8	4,310.0	62.6	71.6	375.4	509.7
Montana	11.2	215	7.8	11.0	20.4	0.4	0.4	1.8	2.5
Nebraska	203.5	3,717	139.0	201.2	364.1	42.0	28.7	31.6	102.2
Nevada	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Hampshire	114.5	1,681	79.7	111.0	212.1	4.5	1.6	18.3	24.4
New Jersey	568.8	7,927	403.6	531.0	1,080.4	11.1	16.8	93.1	121.1
New Mexico	6.5	112	4.6	6.3	12.3	0.3	0.3	1.1	1.6
New York	4,518.6	69,769	3,219.7	4,300.1	8,503.1	292.8	248.1	776.8	1,317.6
North Carolina	1,080.5	19,191	761.1	1,082.3	2,024.0	26.2	37.8	184.8	248.6
North Dakota	21.9	363	15.4	20.3	40.5	0.8	0.6	3.2	4.5
Ohio	3,101.2	52,088	2,208.3	3,055.6	5,889.4	134.7	113.5	537.9	785.9
Oklahoma	349.2	6,538	248.8	348.8	666.8	8.5	12.2	59.9	80.4
Oregon	311.8	5,252	226.4	296.9	607.3	8.1	10.9	54.3	73.5
Pennsylvania	2,481.0	37,894	1,801.1	2,387.4	4,838.0	82.8	70.2	436.8	589.7
Rhode Island	620.7	8,944	423.3	635.6	1,116.5	51.9	20.5	77.3	117.2
South Carolina	338.5	8,998	359.7	525.9	947.5	14.9	16.5	86.2	117.8
South Dakota	32.7	592	21.3	27.7	56.4	1.1	0.5	4.6	6.0
Tennessee	603.2	9,797	422.9	585.0	1,124.0	17.1	12.9	98.4	128.3
Texas	2,496.7	38,450	1,808.7	2,365.3	4,890.1	86.3	49.6	445.6	581.4
Utah	58.1	1,032	40.7	57.0	107.8	1.6	1.9	9.5	13.0
Vermont	78.8	1,342	57.0	74.8	151.1	2.4	3.8	12.8	19.9
Virginia	1,834.3	28,813	1,312.7	1,774.3	3,495.1	47.5	61.7	314.2	423.3
Washington	487.5	7,527	349.7	473.8	936.8	22.4	17.6	84.1	124.4
West Virginia	108.5	1,959	75.1	108.8	197.9	3.3	3.9	17.5	24.6
Wisconsin	1,217.1	20,180	862.3	1,185.6	2,286.8	42.9	48.9	205.2	297.3
Wyoming	1.4	28	1.1	1.6	2.9	0.1	0.0	0.3	0.5
Totals	\$37,508.2	601,128	\$26,910.9	\$36,582.9	\$71,695.3	\$1,837.6	\$1,610.0	\$6,555.6	\$9,971.6

SOURCE: Technical Preservation Services, National Park Service. Calculations by Rutgers University.

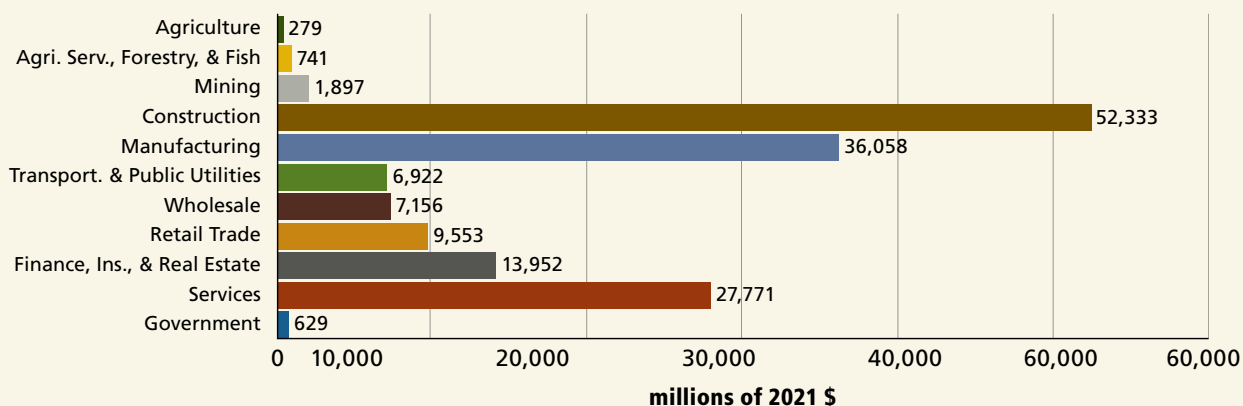
Exhibit 3.1

National Economic and Tax Impacts of Federal HTC-Related Activity FY 1978 through FY 2021 (HTC Investment: \$199.1 billion)

Gross Domestic Product by Sector from Federal Historic Preservation Investment \$213,776 million cumulative, FY 1978–2021



Income Created by Sector from Federal Historic Preservation Investment \$157,297 million cumulative, FY 1978–2021



Jobs Created by Sector from Federal Historic Preservation Investment 3,042,301 jobs cumulative, FY 1978–2021

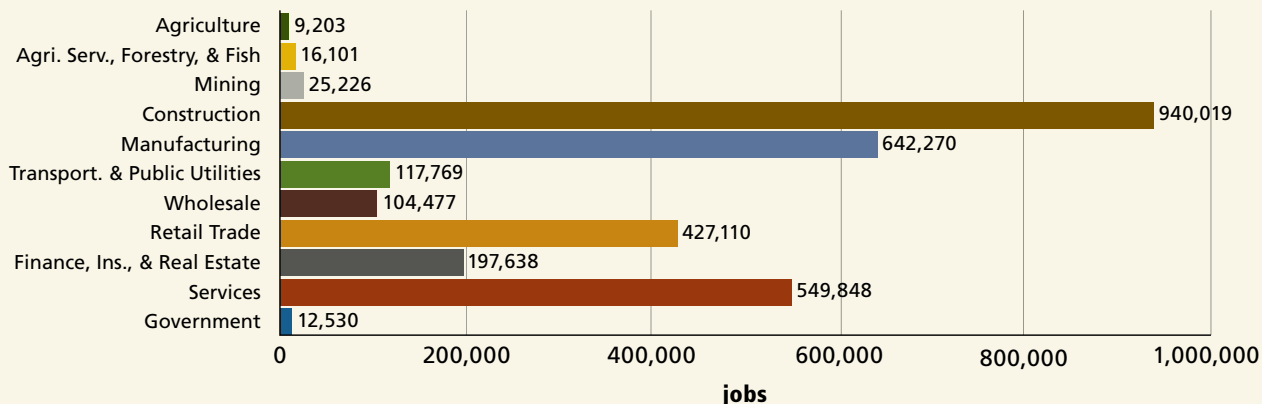
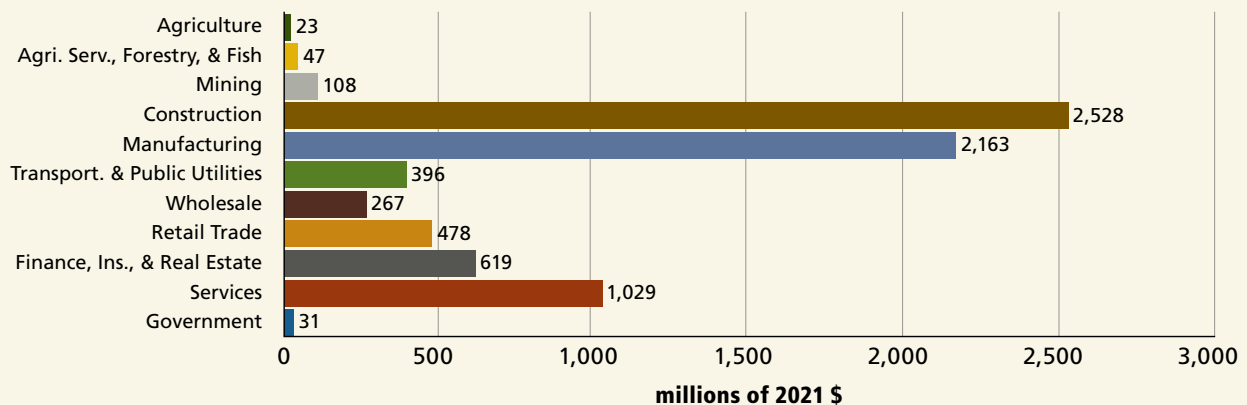


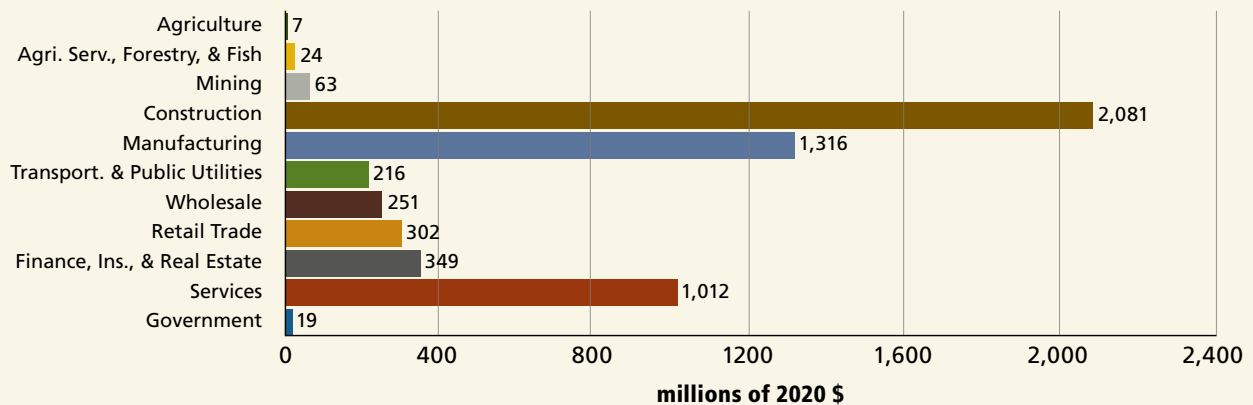
Exhibit 3.2

National Economic and Tax Impacts of Federal HTC-Related Activity FY 2021 (HTC Investment: \$8 billion)

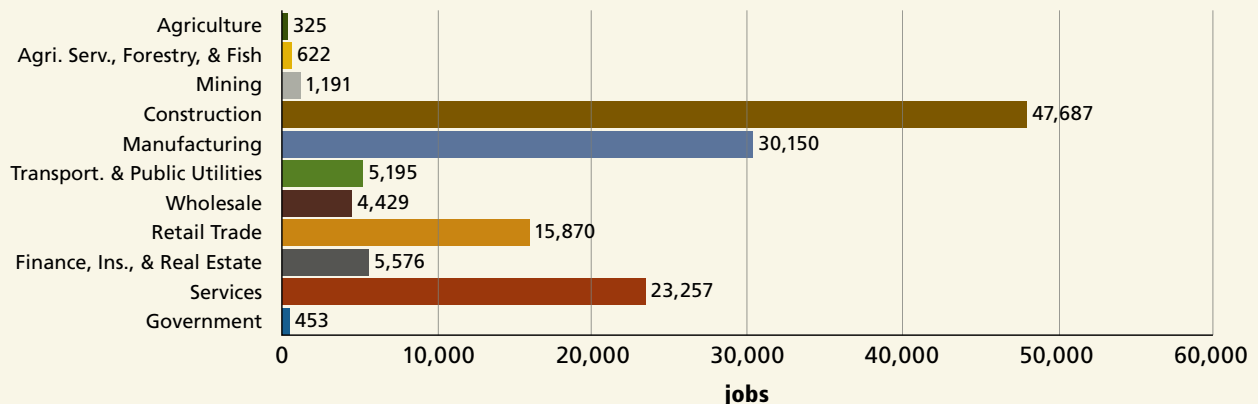
Gross Domestic Product by Sector from Federal Historic Preservation Investment \$7,689 million, FY 2021



Income Created by Sector from Federal Historic Preservation Investment \$5,642 million, FY 2021



Jobs Created by Sector from Federal Historic Preservation Investment 134,780 jobs, FY 2021



CASE STUDY #1

Beloit Water, Gas & Electric Company Powerhouse/Blackhawk Generating Station



Historic photos of the interior of the Powerhouse. Courtesy: Alliant Energy

The Powerhouse, Beloit College's student center for recreation and health, stands at the east bank of the Rock River in Beloit, Wisconsin. The historic building assemblage is composed of multiple sections, some of red-brick load-bearing masonry with timber beams steel trusses, and some of steel-reinforced concrete construction finished with Wisconsin's well-known Cream City brick. Erected between 1907 and 1949, the power plant was a combination of the Beloit Water, Gas & Electric Company Powerhouse and the Blackhawk Generating Station.

The Powerhouse's location adjacent to the Beloit College campus made it an attractive rehabilitation option for the school. The College, The Alexander Company, and Studio Gang Architects seized the opportunity to turn the 120,000 square-foot historic power plant into a mission-driven student center combining health, recreation, and healthy food options. The new design respects the historic character of the spaces by retaining architectural features and industrial equipment from the original structure while incorporating new sustainable practices and lively gathering spaces that encourage students to mix with each other and the larger Beloit community. The interior features a suspended running track, an eight-lane competition pool, a recreational gym, an auditorium, and student lounges and club rooms. The Studio Gang-designed addition is a polycarbonate-clad indoor turf field house that provides natural light throughout the day and can be transformed into an open-air pavilion in the summer. A Federal and state river walk grant opened the river's edge in front of the Powerhouse to create paths and parks on a key stretch of riverfront that had been closed to the public for nearly 100 years.

The Alexander Company assisted Beloit College in bringing this project to fruition as the consulting developer, which entailed the preparation of the applications for the Historic Tax Credit and New Markets Tax Credit, providing financial modeling and arranging financing, as well as overseeing the construction draw process, financial reporting, and compliance.

The project has won many design awards, and according to Beloit College's website, "The Powerhouse is a first-of-its-kind facility in the country—preserving a historical building while combining student life spaces and recreational facilities."

PROJECT PROFILE

Historic Name: Beloit Water, Gas & Electric Company Powerhouse/Blackhawk Generating Station

Current Name: The Powerhouse, Beloit College Student Union and Athletic Center

Year Built: 1907–1949

Rehabilitation Completed: 2021

Original Use: Coal-burning power plant

New Use: Student center for recreation and health

Estimated Qualified Rehabilitation Expenditures: \$40,620,000

Estimated Total Project Cost: \$46,209,409

Before photos: Tom Harris, Studio Gang Architects and Zane Williams

After rehabilitation photos: Studio Gang Architects

Courtesy Beloit College



AFTER

CASE STUDY #1—Continued

Beloit Water, Gas & Electric Company Powerhouse/Blackhawk Generating Station

Beloit, Wisconsin

BEFORE



BEFORE



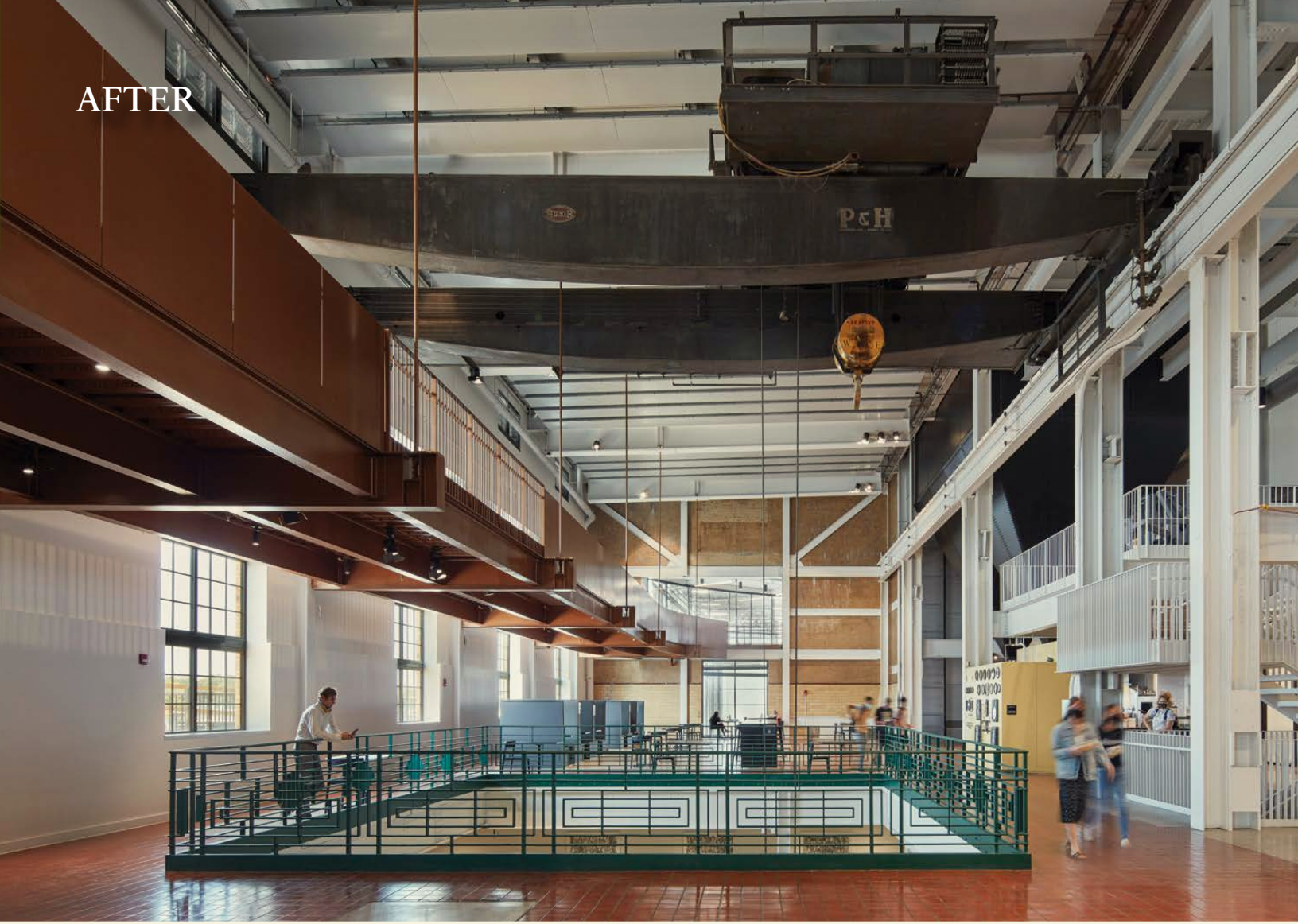
BEFORE



AFTER



AFTER





CASE STUDY #2

Coca-Cola Bottling Plant Indianapolis, Indiana

PROJECT PROFILE

Historic Name: Coca-Cola Bottling Plant

Current Name: Bottleworks District

Year Built: 1931–1954

Rehabilitation Completed: 2021

Original Use: Industrial bottling plant

New Use: Hotel + mixed use including retail, entertainment, food hall, office space

Estimated Qualified

Rehabilitation Expenditures: \$78,800,000

Estimated Total Project Cost: \$129,200,000

Perched on an 11-acre site at the east end of Indianapolis' Massachusetts Avenue Commercial Historic District, the Coca-Cola Bottling Plant is a shining showpiece of high-style Art Deco design.

The main building of the complex comes to a focal point at the corner of Carrollton Ave and Massachusetts Avenue, where the primary façade fronts Massachusetts Avenue, the northeastern of Indianapolis' four radiating diagonal avenues. The façade is clad in white glazed terra-cotta featuring rich Art Deco ornament. The site features three other low-profile, functionally related buildings that are unified by their terra-cotta facades and consistent architectural character, thanks to a continuity of design leadership over the more than 25 years of development at the site.

The plant was developed in phases between 1930 and the early 1950s. The first phases of the complex were designed by the prominent Indianapolis architecture firm of Rubush & Hunter, responsible for some of Indianapolis' most lavish projects of the 1920s. Philip A. Weisenburgh served as chief draftsman for Rubush & Hunter from 1925 and was noted as the firm's master of ornamentation. Weisenburgh succeeded the firm upon the partners' retirement in 1940 and designed additions and renovations at the site into the 1950s.



Historic photo of the Tasting Room (above left) and of the Main Building (above right). Courtesy RATIO Design and Hendricks Commercial Properties
Former Tasting Room, now the hotel lobby (left). Main Building after rehabilitation (right). Photos: Susan Fleck

Recently brought back to its former glory by Hendricks Commercial Properties and Ratio Architects, LLC, the project team did more than restore thousands of exterior white terra-cotta tiles accented by hand-lettered gold leaf. They preserved the lavish interior's intricate balustrades, glazed tile mosaics, and vaulted ceilings found throughout the main building and garages while reinventing the site by connecting it to the community and creating a boutique hotel. Surrounding streets and sidewalks were rejoined to the city grid, improving vehicle circulation and pedestrian access. The new Bottleworks District and hotel lie along the Indianapolis Cultural Trail, a multi-modal urban trail that connects Indianapolis' downtown with surrounding cultural and historic districts, regional greenways and bicycle routes.

As one of the largest private investment projects in Indiana, the Bottleworks District project highlights how private and public partners, with the right mix of resources, can turn brownfield liabilities into a remarkable redevelopment success story. The total investment included City funding to assist with the purchase of the land and the environmental remediation, Indiana Economic Development Corporation Industrial Recovery/DINO Program funding, as well as traditional lender debt and owner equity.



CASE STUDY #3

Cook County Hospital Administration Building

Chicago, Illinois

PROJECT PROFILE

Historic Name: Cook County Hospital Administration Building

Current Name: Hyatt House/Hyatt Place Chicago, Dr. Murphy's Food Hall

Year Built: 1912–1914

Rehabilitation Completed: 2021

Original Use: Hospital

New Use: Hotels, offices, retail

Estimated Qualified Rehabilitation Expenditures: \$129,000,000

Estimated Total Project Cost: \$140,000,000

Developer John T. Murphy of Murphy Development Group has a special connection to the former Cook County Administration Building—his father and grandfather did their medical residencies in the hospital, and he named the food hall in the recently-rehabilitated building after his uncle, noted Chicago surgeon John B. Murphy.

According to the City of Chicago Landmark Designation Report, **“The Cook County Hospital Administration Building is one of Chicago’s grandest public buildings and exemplifies the importance of local Cook County government in the care and welfare of its citizens . . . regardless of their ability to pay.”** The National Register nomination for the building suggests that it may be the only building of its kind in the nation—a monumental Beaux Arts structure built as a public charity hospital.

The Cook County Hospital served Chicago’s indigent and underserved populations until its closure in 2002. The county had constructed a new hospital nearby to replace it and planned to demolish the old structure. Several wings and connectors on the south side of the building were demolished in 2005, but the county commissioners did not approve demolition of the Administration Building. Preservationists worked for the following two decades to promote the preservation and reuse of the imposing, block-long structure. A design charrette led by the Cook County Board President and a subsequent RFP process resulted in a winning bid by the Murphy Development Group to rehabilitate the building.



Historic entrance to the Cook County Hospital (left). Atrium before rehabilitation (above left). Terra-cotta detail (above right). Atrium after rehabilitation (below left and right). Photos: Torque

Highlights of the rehabilitation included the preservation and repair of the exterior masonry, including replacing 4,500 pieces of damaged terra-cotta details. The interior had been changed significantly over time as medical requirements changed. Remaining historic spaces, including the main lobby, a second-floor lobby/lounge, and plaster barrel-vaulted corridors were restored. Two operating theaters were mothballed for future reuse.

The Cook County Hospital Administration Building now houses two hotels, medical offices, retail spaces, and a food hall, and it is a significant, active component of the surrounding Illinois Medical District. Landmarks Illinois awarded the project a 2020 Richard H. Driehaus Foundation Preservation Award for Adaptive Use. Local leaders hope that the important project will continue to catalyze further development of Chicago's Near West Side.

PROJECT BUDGET

SOURCES OF FUNDS	\$ AMOUNT	% OF TOTAL
Construction Loan	\$66,500,000	47.5%
Mezz Loan	\$25,000,000	17.9%
Bridge Loan (on federal tax credit equity)	\$15,500,000	11.1%
Federal Tax Credit Equity	\$6,700,000	4.8%
State Tax Credit Equity	\$2,200,000	1.6%
Key Money	\$1,300,000	0.9%
Equity	\$22,800,000	16.3%
Total Sources	\$140,000,000	100.0%
USES OF FUNDS	\$ AMOUNT	% OF TOTAL
Total Acquisition Costs	\$400,000	0.3%
Hard Costs	105,800,000	75.6%
Soft Costs	11,000,000	7.9%
Hotel Specific Costs	5,300,000	3.8%
Retail Specific Costs	3,300,000	2.4%
Office Specific Costs	4,200,000	3.0%
Financing Costs	10,000,000	7.1%
TOTAL USES	\$140,000,000	100.0%

This report is based on the findings of a National Park Service funded study undertaken through a cooperative agreement with Rutgers University's Center for Urban Policy Research. Rutgers University is responsible for the content of the study. Some additional demographic analysis was provided courtesy of PolicyMap.

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**Cover Image: Cook County
Hospital Administration
Building, Chicago, Illinois**
Photo: Dave Burk, SOM

