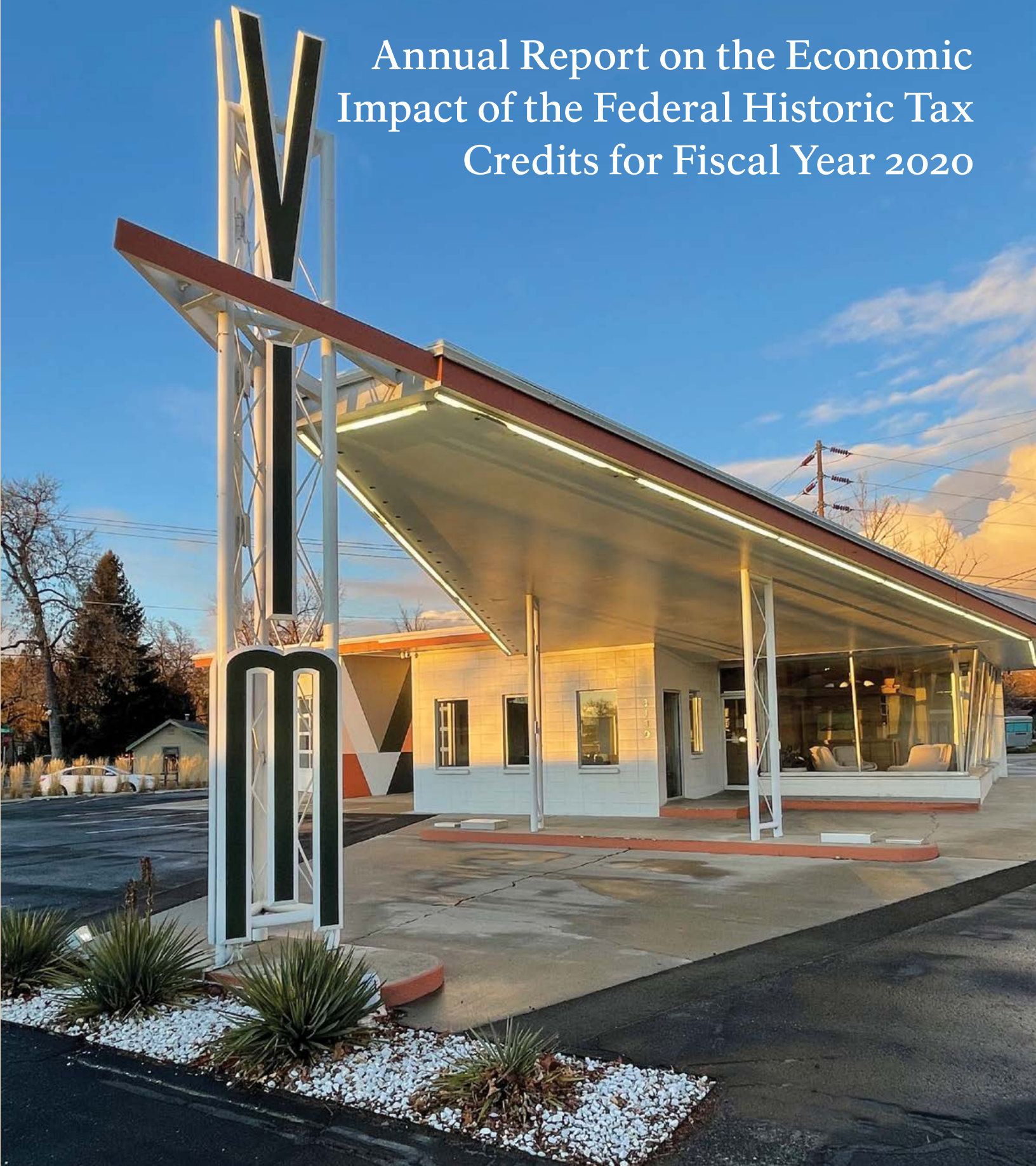


Annual Report on the Economic Impact of the Federal Historic Tax Credits for Fiscal Year 2020



RUTGERS

Edward J. Bloustein School
of Planning and Public Policy



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 43 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 to not only preserve and rehabilitate historic buildings, but to also 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 46,000 historic properties throughout the United States, with the HTC leveraging over \$181.0 billion in private investment in historic rehabilitation and generating over 2.9 million jobs.

In Fiscal Year (FY) 2020, the NPS certified 989 completed historic rehabilitation projects, representing \$6.5 billion in estimated rehabilitation costs that qualify for the 20% Federal tax credit. Another 1,282 proposed projects were also approved in FY 2020. 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 51% of the certified rehabilitation projects in FY 2020 were located in low- and moderate- income census tracts and 75% 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 (46%) of all projects in FY 2020 were under \$1 million, and 19% were under \$250,000. PolicyMap determined that 29% of all certified rehabilitation projects in FY 2020 were located in communities with under 50,000 in population and 17% 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 2020, 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, 2020. 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 2020 are quite significant. The report also includes information on the cumulative economic impact of the Federal HTCs for the past 43 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 2020. The program remains the Federal government's largest and most effective program supporting historic preservation and community revitalization.

Technical Preservation Services, National Park Service

November 2021



Executive Summary

West Pullman Elementary School after rehabilitation. Left: Corridor looking toward open stairwell. Right: Historic school cabinets in a new apartment.
Photos: MacRostie Historic Advisors

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 2020, beginning October 1, 2019, and ending September 30, 2020, 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 2020) HTC-related historic rehabilitation investment (about \$181.0 billion in inflation-adjusted 2020 dollars) and single-year (FY 2020) HTC-related rehabilitation investment (about \$7.3 billion). It considers the effects of the cumulative \$181.0 billion rehabilitation investment as if it applied to one year (2020), rather than backdating the PEIM for each of the 43 years in the study period. It also considers the full rehabilitation investment associated with the HTC (e.g., \$7.3 billion in FY 2020), 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., \$6.5 billion in FY 2020).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, which include 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 2020, the certified rehabilitation (Part 3) qualified rehabilitation expenditures amounted to about \$6.5 billion, while the total rehabilitation outlay associated with the HTC was an estimated \$7.3 billion.

National Economic Impacts

The following table summarizes the impacts of the HTC in inflation-adjusted 2020 dollars for each of these economic measures for the cumulative period FY 1978-2020 and for FY 2020.

National Total Impacts 2020 \$ billion	FEDERAL HTC-ASSISTED REHABILITATION	
	\$181.0 billion CUMULATIVE (FY 1978–2020)² historic rehabilitation expenditures results in:	\$7.3 billion ANNUAL FY 2020 historic rehabilitation expenditures results in:
Jobs (person-years, in thousands)	2,908	122
Income (\$ billion)	\$143.6	\$5.2
Output (\$ billion)	\$391.5	\$13.8
GDP (\$ billion)	\$195.2	\$7.0
Taxes (\$ billion)	\$55.6	\$1.8
Federal (\$ billion)	\$39.4	\$1.2
State (\$ billion)	\$8.0	\$0.3
Local (\$ billion)	\$8.2	\$0.3

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 2020 are illustrative. During that period, \$181.0 billion in HTC-related rehabilitation investment created 2,908,000 jobs and \$195.2 billion in GDP, about 30% of which (892,000 jobs and \$57.9 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 (527,000 jobs, \$25.9 billion in GDP), the manufacturing sector (612,000 jobs, \$51.6 billion in GDP), and the retail trade sector (411,000 jobs, \$13.8 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 most impressive. In FY 2020, HTC-related investments generated approximately 122,000 jobs, including 42,000 in construction and 27,000 in manufacturing, and were responsible for \$7.0 billion in GDP, including \$2.3 billion in construction and \$2.0 billion in manufacturing. HTC-related activity in FY 2020 generated \$5.2 billion in income, with construction (\$1.9 billion) and manufacturing (\$1.2 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.



Residents and community members relax in the lounge of the West Pullman School Senior Community. Photo: MacRostie Historic Advisors

The HTC National and State Economic Impacts

A breakdown by state of the national economic benefits, both for FY 2020 and cumulatively for the last five fiscal years (FY 2016–2020), 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 Minnesota in FY 2020, Federal HTC-related rehabilitation activity totaled about \$58.7 million. The national impacts of that investment included 924 jobs, an additional \$109.6 million in output, \$41.2 million in income, \$55.5 million in GDP, \$9.5 million in Federal taxes, and \$13.9 million in total taxes. In Minnesota alone, the same \$58.7 million in HTC-related spending resulted in 526 jobs, \$58.7 million in output, \$26.1 million in income, \$32.1 million in gross state product (GSP), and \$7.1 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 rehabilitation expenditures.³ Applying that calculation, the federal HTC costs the U.S. Treasury approximately \$34.3 billion (in inflation-adjusted 2020 dollars) over the period of FY 1978 through FY 2020, while the cost for projects certified by the National Park Service in FY 2020 alone was about \$1.308 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 \$39.4 billion in federal tax receipts over the life of the program, compared with \$34.3 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 rehabilitations. 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 2020 Highlights

\$7.3 billion

Total in rehabilitation investment

2020 POSITIVE IMPACTS
on the national economy:

\$13.8 billion in output,
\$7.0 billion in GDP,
\$5.2 billion in income, and
\$1.8 billion in taxes, including
\$1.2 billion in Federal tax receipts.

122,000

New jobs created and billions
of dollars in total (direct and
secondary) economic gains

51%

Projects in low- and moderate-
income census tracts*

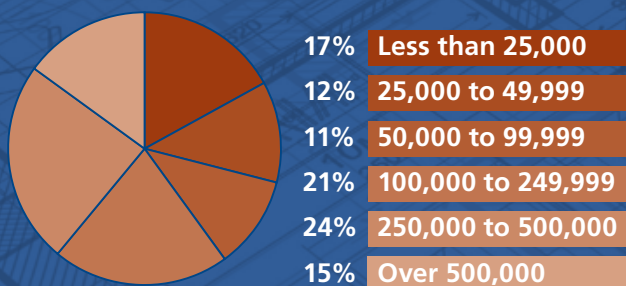
75%

Projects in economically
distressed areas*

29%

Projects in communities of
less than 50,000 people*

Projects by Community Size (Population)*



*Courtesy of PolicyMap (Estimated Population, 2015–2019. United States Census Bureau, American Community Survey 5-year estimates. 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 2020 Cumulative HTC Impacts

\$181.0 billion

in cumulative rehabilitation investment

An inflation-adjusted (2020 dollars) \$34.3 billion
HTC cost encouraged a five times greater amount
of historic rehabilitation, \$181.0 billion

2.9 million

New jobs created and billions
of dollars in total (direct and
secondary) economic gains

CUMULATIVE POSITIVE IMPACTS
on the national economy:

\$391.5 billion in output,
\$195.2 billion in GDP,
\$143.6 billion in income, and
\$55.6 billion in taxes, including
\$39.4 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 1978–2020			
	Nominal \$ ^d		Real \$ ^e	
	Total	Annual Average	Total	Annual Average
Approved proposed (for tax credit) rehabilitation (Part 2)	\$133.0	\$3.09	\$215.0	\$5.00
Certified (for tax credit) rehabilitation (Part 3)	\$98.6	\$2.29	\$162.9	\$3.79
Total rehabilitation cost ^b	\$109.5	\$2.55	\$180.9	\$4.21
Federal tax credit ^c	\$20.2	\$0.47	\$34.3	\$0.80

Dollar amounts are expressed in billions			
Economic Impacts (See Exhibit 3.1 for details)	FY 1978–2020		
	Total	Annual Average	
Jobs (in thousands)	2,908	68	
Income	\$143.6	\$3.34	
Gross Domestic Product	\$195.2	\$4.54	
Output	\$391.5	\$9.10	
Taxes-All Government	\$55.6	\$1.29	
Taxes-Federal Government	\$39.4	\$0.92	
Taxes-State Government	\$8.0	\$0.19	
Taxes-Local Government	\$8.2	\$0.19	

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 1978–2020 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” items (or Qualified Rehabilitation Expenditures—QRE) 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 (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 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 1978–2020.

^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 2020. 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 2020 dollars.

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

Exhibit 2.1 **Fiscal Year 2020**
National Economic and Tax Impacts of Federal HTC-Related Investment by State

State	Total Rehabilitation Costs (in 2020 \$ millions)	National Economic Impacts (in 2020 \$ millions)				Tax Impacts (in 2020 \$ millions)			
		Employment (jobs)	Income	GDP	Output	Local	State	Federal	Total
Alabama	\$21.50	397	\$13.60	\$25.60	\$35.30	\$0.40	\$0.60	\$3.30	\$4.20
Alaska	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arizona	14.10	243	8.30	10.70	27.10	13.30	8.60	2.40	24.30
Arkansas	98.20	2,034	68.30	102.00	181.50	1.90	3.60	16.40	21.90
California	43.30	645	31.40	41.00	84.70	1.10	1.70	7.90	10.80
Colorado	45.00	2,886	31.70	44.00	84.70	1.10	1.50	7.50	10.10
Connecticut	98.10	1,404	68.30	94.90	179.40	5.20	4.40	15.70	25.30
Delaware	13.30	210	9.40	12.80	24.80	0.60	0.60	2.10	3.30
District of Columbia	73.20	1,064	49.40	66.80	128.90	4.90	2.00	10.00	16.90
Florida	3.20	56	2.30	3.10	6.00	0.20	0.10	0.50	0.80
Georgia	128.20	2,532	89.00	130.90	234.70	6.00	5.90	21.70	33.60
Hawaii	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Idaho	11.40	217	7.70	11.10	20.50	0.30	0.30	1.70	2.20
Illinois	1,204.70	17,760	877.00	1,131.80	2,352.70	38.20	34.70	211.00	283.80
Indiana	68.60	1,202	49.00	66.00	130.90	22.60	15.10	11.70	49.30
Iowa	131.10	2,368	88.80	132.50	230.60	4.40	3.90	20.60	28.90
Kansas	63.00	1,145	44.10	61.00	116.80	14.90	10.30	10.10	35.40
Kentucky	60.30	1,155	41.80	59.00	110.50	6.00	4.80	9.60	20.50
Louisiana	182.50	3,225	130.10	170.40	345.80	6.40	6.60	29.90	42.90
Maine	24.50	371	14.40	21.60	46.90	1.10	1.00	3.90	6.00
Maryland	223.90	3,458	157.20	211.40	415.40	7.30	6.60	35.80	49.70
Massachusetts	295.90	3,846	207.70	278.60	551.10	7.90	9.50	47.80	65.20
Michigan	164.80	2,619	116.80	156.40	310.90	4.90	5.90	27.20	38.10
Minnesota	58.70	924	41.20	55.50	109.60	2.10	2.30	9.50	13.90
Mississippi	43.20	900	30.10	42.70	79.60	3.30	2.60	7.00	12.90
Missouri	573.20	9,821	408.80	541.60	1,089.90	15.80	18.10	94.90	128.90
Montana	10.70	207	7.40	10.50	19.60	0.40	0.40	1.70	2.40
Nebraska	7.20	138	4.90	7.10	12.90	1.50	1.00	1.10	3.60
Nevada	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Hampshire	19.20	295	13.40	18.60	35.60	0.80	0.30	3.10	4.10
New Jersey	61.00	875	43.30	56.90	115.80	1.20	1.80	10.00	13.00
New Mexico	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New York	1,005.70	16,638	716.60	957.10	1,892.50	65.20	55.20	172.90	293.30
North Carolina	197.80	3,706	139.30	198.20	370.60	4.80	6.90	33.80	45.50
North Dakota	8.10	143	5.70	7.50	15.00	0.30	0.20	1.20	1.70
Ohio	436.50	7,842	310.80	430.10	829.00	19.00	16.00	75.70	110.60
Oklahoma	76.90	1,516	54.80	76.80	146.80	1.90	2.70	13.20	17.70
Oregon	24.20	429	17.60	23.10	47.20	0.60	0.80	4.20	5.70
Pennsylvania	321.10	5,219	233.10	309.00	626.10	10.70	9.10	56.50	76.30
Rhode Island	156.50	2,387	106.70	160.20	281.40	35.10	5.70	4.90	13.20
South Carolina	26.40	493	18.30	26.70	48.20	0.80	0.80	4.40	6.00
South Dakota	11.00	221	7.80	10.10	20.50	0.40	0.20	1.70	2.20
Tennessee	17.60	311	12.30	17.10	32.80	0.50	0.40	2.90	3.70
Texas	449.70	7,264	325.80	426.00	880.70	15.50	8.90	80.30	104.70
Utah	30.90	573	21.70	30.40	57.40	0.80	1.00	5.10	6.90
Vermont	8.70	154	6.30	8.20	16.60	0.30	0.40	1.40	2.20
Virginia	293.50	4,940	210.00	283.90	559.20	7.60	9.90	50.30	67.70
Washington	210.40	3,373	150.90	204.50	404.40	9.70	7.60	36.30	53.70
West Virginia	2.30	44	1.60	2.30	4.20	0.10	0.10	0.40	0.50
Wisconsin	244.50	4,255	173.20	238.10	459.30	8.60	9.80	41.20	59.70
Wyoming	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals	\$7,263.8	121,505	\$5,167.7	\$6,973.8	\$13,774.1	\$355.4	\$290	\$1,210.5	\$1,823.4

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

Exhibit 2.2 Cumulative Fiscal Years 2016–2020

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

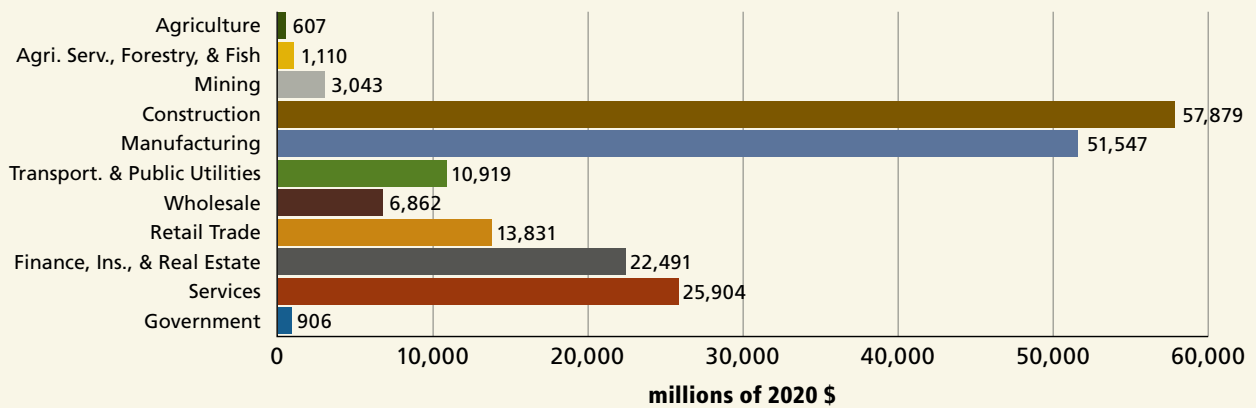
State	Total Rehabilitation Costs (in 2020 \$ millions)	National Economic Impacts				Tax Impacts (in 2020 \$ millions)			
		Employment (jobs)	(in 2020 \$ millions)		Output	Local	State	Federal	Total
			Income	GDP					
Alabama	\$261.4	4,544	\$165.7	\$311.7	\$429.1	\$4.6	\$7.0	\$39.9	\$51.4
Alaska	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arizona	132.7	2,145	78.5	101.1	255.4	125.6	81.1	22.3	228.8
Arkansas	294.6	5,862	204.9	305.9	544.4	5.8	10.7	49.3	65.8
California	621.3	8,859	450.3	588.2	1,215.3	15.7	25.1	114.1	154.9
Colorado	104.4	6,518	73.5	102.1	196.5	2.6	3.4	17.4	23.5
Connecticut	540.2	7,258	376.1	522.7	988.1	28.4	24.2	86.6	139.2
Delaware	68.7	1,029	48.6	66.1	128.1	3.1	3.2	10.8	17.2
District of Columbia	584.5	8,078	394.2	533.1	1,029.0	39.3	15.9	79.9	134.9
Florida	86.3	1,425	61.0	82.6	161.7	4.5	2.8	14.5	21.7
Georgia	534.2	10,148	370.7	545.1	977.5	25.1	24.5	90.4	139.9
Hawaii	8.0	106	5.4	7.6	13.9	39.2	46.3	169.9	255.3
Idaho	26.1	479	17.6	25.3	46.8	0.6	0.6	3.9	5.1
Illinois	2,328.4	33,181	1,694.9	2,187.5	4,547.2	73.8	67.1	407.8	548.7
Indiana	309.6	5,196	221.1	297.5	590.4	101.9	67.9	52.6	222.4
Iowa	884.6	15,155	599.1	894.2	1,556.2	29.6	26.3	138.9	194.8
Kansas	316.7	5,467	221.7	306.9	587.4	74.9	52.0	50.9	177.9
Kentucky	440.0	7,972	304.6	430.4	805.9	44.0	35.0	70.1	149.2
Louisiana	1,640.6	27,457	1,169.4	1,531.9	3,107.8	57.3	59.6	269.1	385.9
Maine	217.4	3,102	127.9	192.1	416.8	9.9	9.2	34.4	53.5
Maryland	769.3	11,301	540.2	726.5	1,427.5	25.0	22.7	123.1	170.7
Massachusetts	1,783.6	21,986	1,251.7	1,679.2	3,321.4	47.6	57.4	287.9	392.9
Michigan	1,140.2	17,354	808.0	1,082.2	2,151.0	33.8	41.0	188.4	263.2
Minnesota	967.7	14,282	679.5	915.4	1,807.2	34.0	38.5	156.0	228.5
Mississippi	121.9	2,438	84.9	120.3	224.5	9.2	7.3	19.8	36.4
Missouri	2,143.3	39,435	1,724.0	2,283.9	4,596.1	66.7	76.3	400.3	543.4
Montana	27.1	495	18.8	26.6	49.6	1.0	0.9	4.3	6.1
Nebraska	178.3	3,198	121.8	176.2	318.8	36.8	25.1	27.5	89.5
Nevada	1.4	19	1.0	1.3	2.6	0.0	0.0	0.2	0.3
New Hampshire	91.4	1,384	63.6	88.5	169.2	3.5	1.3	14.6	19.4
New Jersey	708.9	9,494	503.0	662.0	1,346.8	13.9	21.0	115.9	150.9
New Mexico	6.1	112	4.4	6.0	11.6	0.3	0.3	1.0	1.5
New York	4,716.5	74,220	3,360.7	4,488.6	8,875.5	305.7	259.0	810.8	1,375.4
North Carolina	1,327.1	23,667	934.8	1,329.4	2,486.1	32.0	46.3	227.0	305.5
North Dakota	21.2	363	14.9	19.6	39.2	0.7	0.5	3.1	4.4
Ohio	2,783.4	47,753	1,982.0	2,742.5	5,285.8	120.9	101.8	482.7	705.4
Oklahoma	411.4	7,694	293.1	411.1	785.8	9.9	14.3	70.6	94.7
Oregon	245.9	4,223	178.6	234.1	478.7	6.4	8.6	42.8	58.0
Pennsylvania	2,079.6	32,453	1,509.6	2,001.2	4,055.0	69.3	58.8	366.0	494.2
Rhode Island	608.0	8,853	414.7	622.5	1,093.5	51.4	19.9	75.5	114.4
South Carolina	297.4	8,330	324.5	474.3	854.8	13.5	15.0	77.8	106.2
South Dakota	21.4	377	13.6	17.6	35.8	0.6	0.3	2.9	3.9
Tennessee	486.6	8,189	341.3	472.0	906.9	13.8	10.5	79.3	103.5
Texas	1,775.7	27,560	1,286.3	1,682.2	3,477.9	61.3	35.1	317.0	413.4
Utah	54.4	980	38.2	53.5	101.2	1.4	1.7	9.0	12.2
Vermont	61.9	1,040	44.6	58.6	118.4	1.7	3.0	10.1	15.5
Virginia	1,751.5	28,103	1,253.4	1,694.0	3,337.2	45.4	58.9	299.9	404.1
Washington	548.2	8,474	393.1	532.7	1,053.3	25.4	19.9	94.6	139.8
West Virginia	73.5	1,343	50.9	73.8	134.2	2.2	2.5	11.8	16.7
Wisconsin	936.4	15,705	663.5	912.1	1,759.2	33.0	37.6	157.9	228.7
Wyoming	3.3	67	2.6	3.8	6.7	0.2	0.1	0.7	1.1
Totals	\$35,542.3	574,876	\$25,486.3	\$34,623.7	\$67,909	\$1,752.2	\$1,547.6	\$6,201.3	\$9,470.1

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

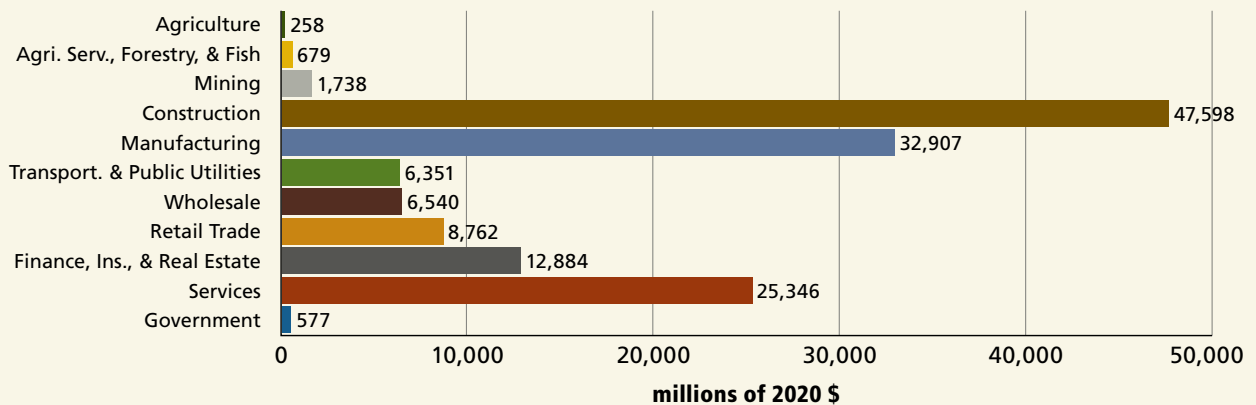
Exhibit 3.1

National Economic and Tax Impacts of Federal HTC-Related Activity FY 1978 through FY 2020 (HTC Investment: \$181.0 billion)

Gross Domestic Product by Sector from Federal Historic Preservation Investment \$195,199 million cumulative, FY 1978–2020



Income Created by Sector from Federal Historic Preservation Investment \$143,640 million cumulative, FY 1978–2020



Jobs Created by Sector from Federal Historic Preservation Investment 2,907,438 jobs cumulative, FY 1978–2020

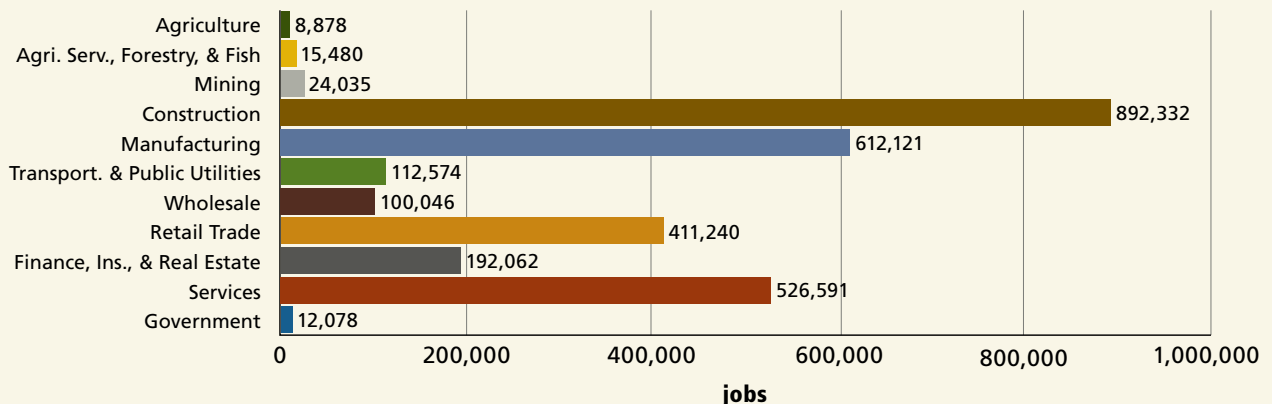
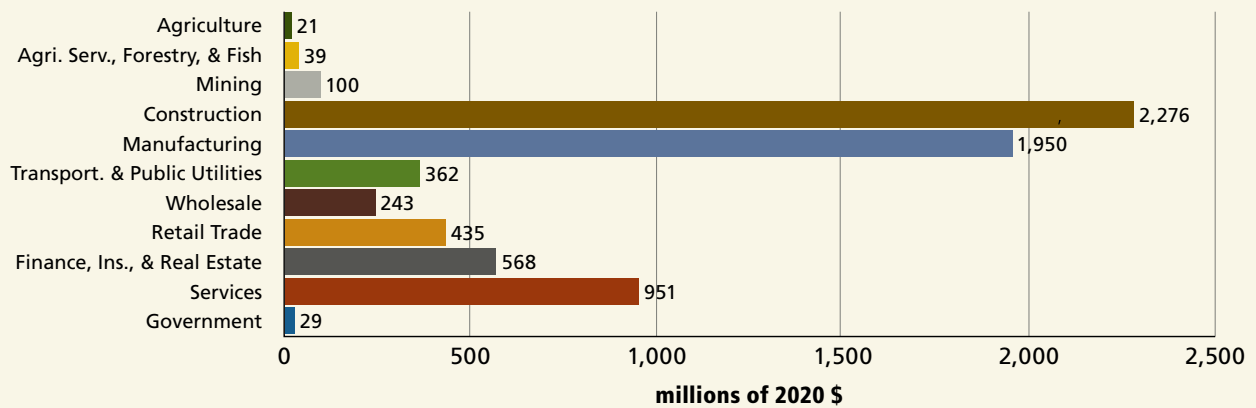


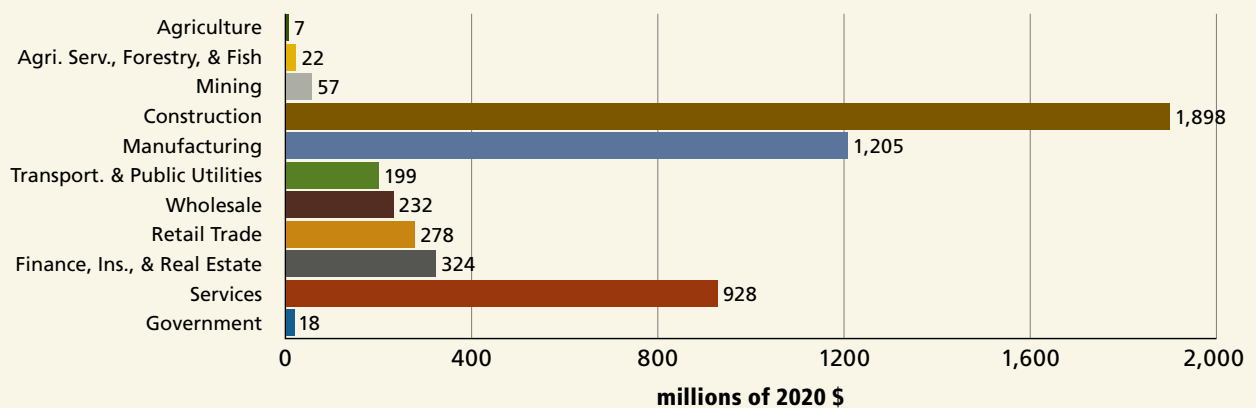
Exhibit 3.2

National Economic and Tax Impacts of Federal HTC-Related Activity FY 2020 (HTC Investment: \$7.3 billion)

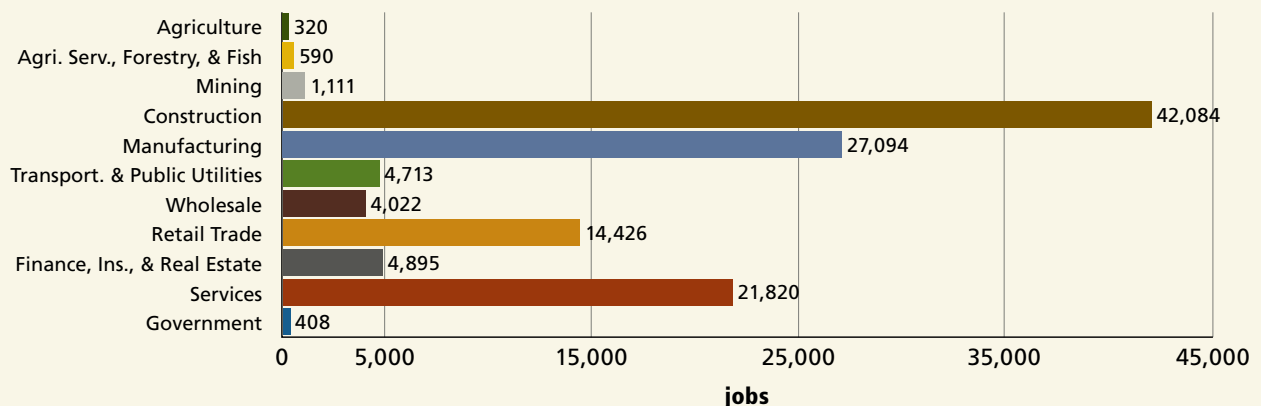
Gross Domestic Product by Sector from Federal Historic Preservation Investment \$6,973 million, FY 2020



Income Created by Sector from Federal Historic Preservation Investment \$5,168 million, FY 2020



Jobs Created by Sector from Federal Historic Preservation Investment 121,505 jobs, FY 2020





CASE STUDY #1

Forty-Four & Sixty-Six Service Station Boise, Idaho

PROJECT PROFILE

Historic Name: Forty-Four & Sixty-Six Service Station

Current Name: Design Vim

Year Built: 1964

Rehabilitation Completed: 2020

Original Use: Gas and service station

New Use: Offices

Estimated Qualified Rehabilitation Expenditures: \$157,004

Estimated Total Project Cost: \$166,364

History

As post-war Americans hit the highways at the zenith of the nation's infatuation with car culture, automotive service stations proliferated across the country. Corporate branding became increasingly important as American oil companies vied to attract the attention of the motoring public. In 1956, Clarence Reinhardt, the corporate architect for Phillips Petroleum, began to experiment with dramatic V-shaped canopies at the company's branded filling stations. By 1960, a harlequin paint scheme and Reinhardt's "bat wing" canopy were launched as the "New Look" of the Phillips architectural brand.

Boise's only example of this design was constructed on State Highway 44 in 1964. This numerical highway identifier and the Phillips 66 brand of gasoline resulted in the gas station's first recorded name, the Forty-Four & Sixty-Six Service Station. By 1975, the building no longer functioned as a gas station and instead began to house a variety of auto service and sales companies. Milan and Blazena Kral, defectors from Soviet Czechoslovakia, purchased the building in 1977 and for 20 years operated the German Car Service auto repair shop.

Following Milan's death in 2016, the building was bequeathed to his son and daughter-in-law, Thames and Stacy Kral, who were determined to preserve and rehabilitate this vestige of mid-century Boise.



Forty-Four & Sixty-Six Service Station
Photos: Dan Everhart

Rehabilitation

Instead of demolition and sale of the land to the highest bidder, the Krals sought a tenant who would appreciate the quirky characteristics of the space and sensitively adapt it to a new use. Design Vim, a women-veteran-owned interior design firm approached the Krals with an intent to renovate the gas station for their offices. The Krals insisted that the original elements of the building be respected and retained.

The Krals had the building listed in the National Register of Historic Places in 2019, the first of its style and property type to be listed in Idaho. They also submitted an application to the Idaho State Historic Preservation Office and the National Park Service to qualify for the historic tax credits. The Krals worked with Design Vim to retain key spaces and fixtures in the former garage and in the office area where original cabinetry, flooring, and windows have been retained or replaced in kind. Design Vim's current workspace reflects the historic uses of the interior, with a lobby in the customer service area and open-floor offices in the garage bays.

The Krals rehabilitation project was rewarded with a 2020 Orchid Award for Excellence in Historic Preservation from Preservation Idaho.

Courtesy: Dan Everhart, Idaho State Historic Preservation Office

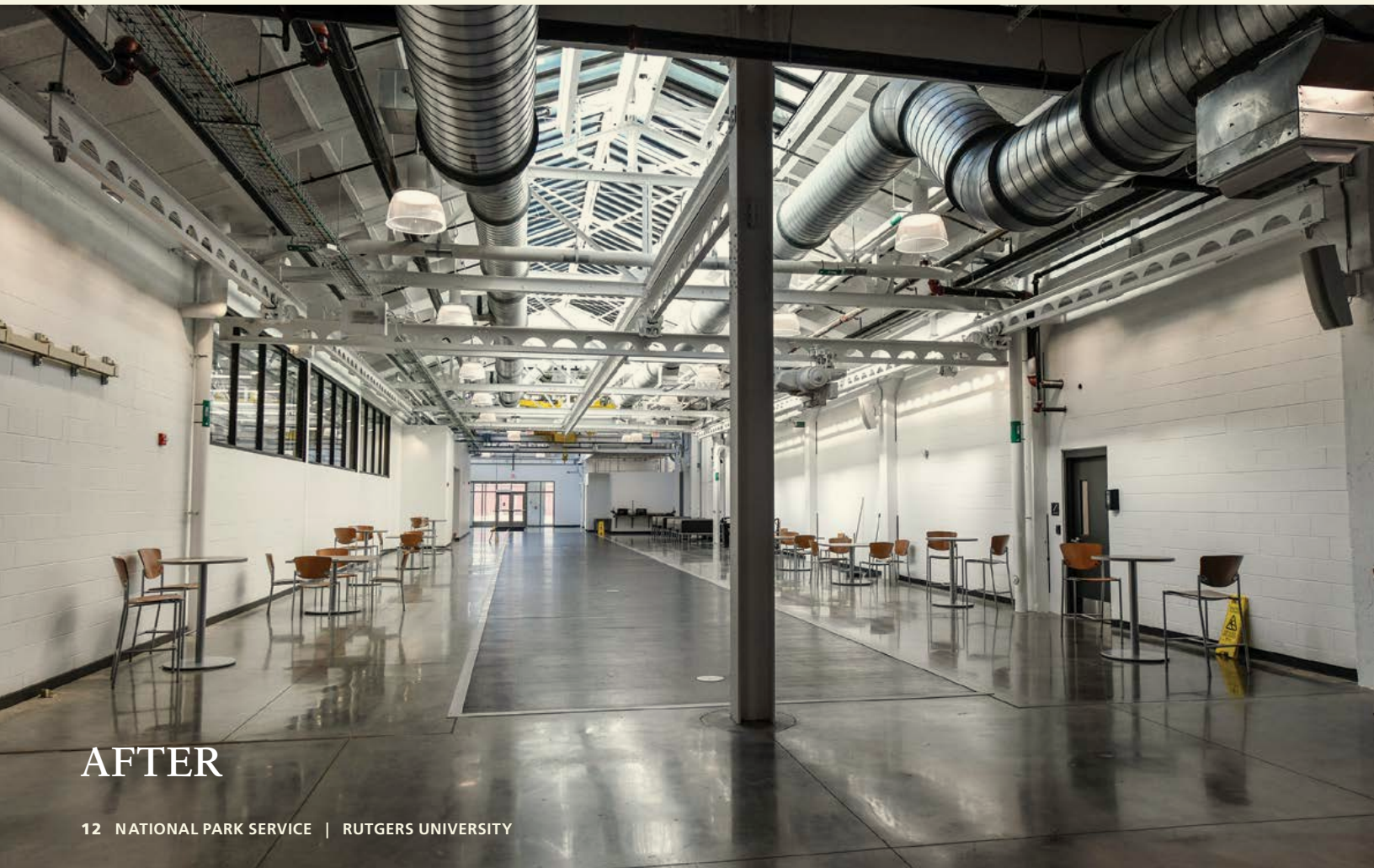
CASE STUDY #2

Niagara Machine and Tools Works

Buffalo, New York



BEFORE



AFTER



BEFORE

Photos: Joseph M. Cascio



AFTER

History

The Niagara Machine and Tool Works is an intact example of a large-scale tool and machine factory designed and built during the first half of the twentieth century. The company played an important role in defense contracting for World War I and World War II, as well as in the development of the East Side of Buffalo along the Belt Line railroad. Noted Buffalo architectural firm Green & Wicks designed the original buildings, with additions from local civil engineers. The complex includes an exposed reinforced-concrete-framed four-story office building and manufacturing spaces constructed of concrete, brick, and steel with steel-framed sawtooth and monitor skylights. Most of the company's manufacturing activities ceased at the site by 1999. A City of Buffalo development agency purchased the property from a private owner in 2015.

Rehabilitation

Although the buildings had been deteriorating for decades, they were mostly intact. The skylights and sawtooth monitors were reglazed, and new aluminum windows designed to match the original steel windows were installed throughout the complex. New partitions in the interior included windows along the walls between laboratory spaces to provide a visual continuation reminiscent of the former factory floor. To comply with current energy codes, interior insulation was added to some uninsulated exterior masonry walls, and existing walls were exposed where possible. The factory building was structurally sound but required some retrofits to meet current snow load requirements. An original entrance along the front elevation was restored as the main lobby public entrance.

In addition to the Federal Historic Tax Credit, several other incentives were critical to the project's financing, including the New York State Historic Tax Credit, the Federal New Markets Tax Credit, the Brownfield Tax Credit, and New York Power Authority grants. The project also received funding from Governor Andrew Cuomo's "Buffalo Billion" investment in the city of Buffalo.

The former manufacturing complex is now a training center focused on the Western New York workforce and specializing in training for the advanced manufacturing and energy sectors. It is supported by a public/private partnership of employers, educational institutions, community and faith-based organizations, and state and local governments.

The Northland Workforce Training Center represents a revival in an industrial neighborhood that was once considered forgotten by its residents. Its reuse as an energy and manufacturing educational center maintains the industrial significance and aesthetics of the complex. The rehabilitation was the first step in the revitalization and reuse of one of Buffalo's great historic factory districts, and it served as a catalyst for the rehabilitation of two other factory buildings and planning for infill housing in the area.

Courtesy: Barbara A. Campagna/Architecture + Planning

PROJECT PROFILE

Historic Name: Niagara Machine and Tool Works

Current Name: Northland Workforce Training Center

Year Built: 1910–1967

Rehabilitation Completed: 2020

Original Use: Company headquarters and manufacturing

New Use: Workforce training center and related light industrial space

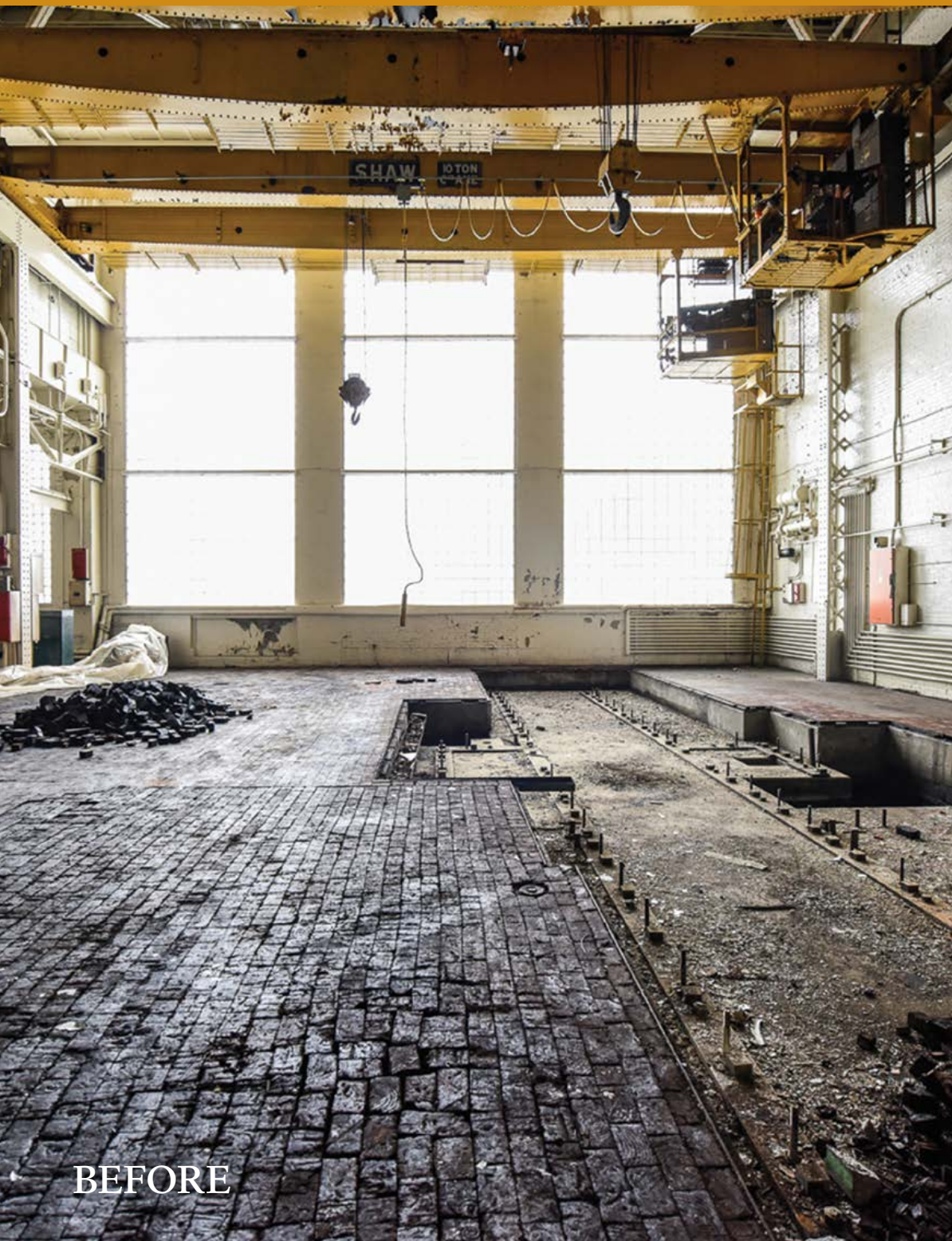
Estimated Qualified Rehabilitation Expenditures: \$92,958,078

Estimated Total Project Cost: \$111,702,975

CASE STUDY #2—Continued

Niagara Machine and Tools Works

Buffalo, New York

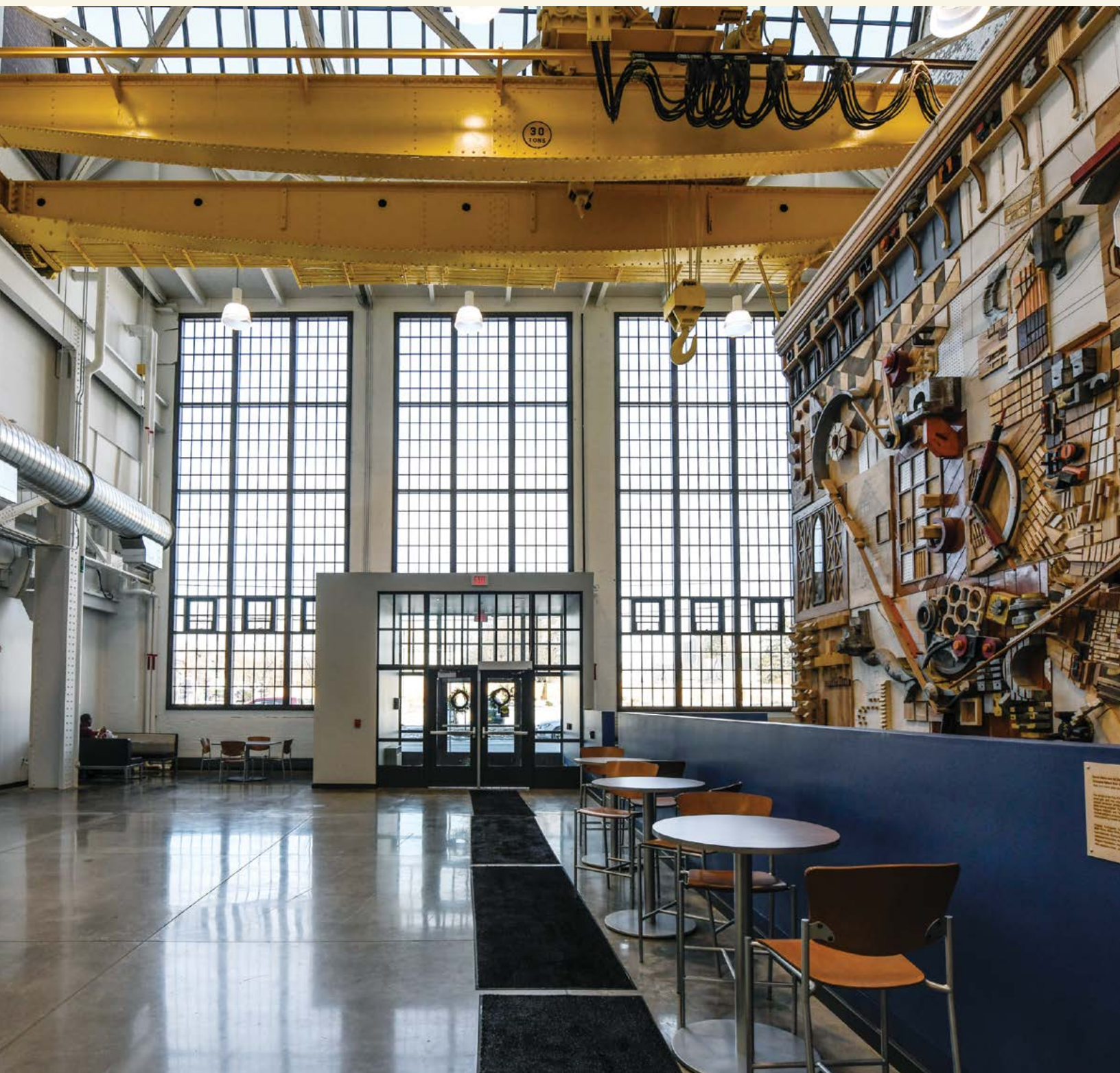


BEFORE



AFTER

Niagara Machine and Tool Works, photos: Joseph M. Cascio



CASE STUDY #3

West Pullman Elementary School

Chicago, Illinois

History

The West Pullman Elementary School is a former public school located on Chicago's Far South Side. Designed by Chicago Board of Education architects, the school was constructed in three stages between 1894 and 1923. The Romanesque Revival- and Classical Revival-style building maintained its original use as a school until 2013, when it was closed along with dozens of other Chicago schools to address the school district's mounting budget problems. The building sat vacant until 2017 when a developer proposed to rehabilitate it into affordable senior housing, which was much needed in the neighborhood. The rehabilitation process began with listing the school in the National Register of Historic Places and submitting applications for the Federal and State historic tax credits.

Rehabilitation

The rehabilitation maintained the building's exterior appearance while improving the envelope, accessibility, and landscaping. The interior changes retained the building's primary spaces including the 1923 auditorium and gymnasium, which now offer opportunities for resident wellness and for events that draw the wider community back to the historic building. All four historic stairs and the wide corridors were also preserved. While the classrooms were subdivided for apartments, the development team was able to preserve the historic trim, built-in cabinets, and chalkboards.

The successful rehabilitation not only met the Secretary of the Interior's Standards for Rehabilitation but filled an important community need. Landmark Illinois recognized the rehabilitation of the West Pullman Elementary School with a 2021 Richard H. Driehaus Foundation Preservation Award for Adaptive Reuse.

Courtesy: Darius Bryjka, Illinois State Historic Preservation Office

PROJECT PROFILE

Historic Name: West Pullman Elementary School

Current Name: West Pullman School Senior Community

Year Built: 1894–1923

Rehabilitation Completed: 2020

Original Use: Public elementary school

New Use: Senior apartments

Estimated Qualified Rehabilitation Expenditures: \$17,760,120

Estimated Total Project Cost: \$21,171,765

West Pullman School exterior after rehabilitation
Photo: Lee Bey



“It is well established that reusing an existing structure, particularly ones as solidly constructed as the West Pullman School, is the most sustainable response to new development. The embodied energy contained within these buildings remains, and landfills that might have been filled with the building’s debris remain unused.”

Project developer Scott Henry, Celadon Holdings, receiving a 2021 Landmarks Illinois Preservation Award

A resident of the new West Pullman School Senior Community sits in the entrance to the former school. Photo: MacRostie Historic Advisors



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.

Front and Back Cover Images:
Forty-Four & Sixty-Six Service
Station, Boise, Idaho
Photos: Dan Everhart



RUTGERS

Edward J. Bloustein School
of Planning and Public Policy



Edward J. Bloustein School of Planning and Public Policy
Rutgers, The State University of New Jersey
Civic Square Building, 33 Livingston Avenue
New Brunswick, NJ 08901
848-932-5475
<https://bloustein.rutgers.edu/>
ejb@ejb.rutgers.edu

Technical Preservation Services
National Park Service
U. S. Department of the Interior
1849 C Street NW
Washington, DC 20240
<https://www.nps.gov/tps/>