



UNIVERSITY OF MINNESOTA | EXTENSION



EXTENSION CENTER FOR COMMUNITY VITALITY

Economic Impact of Projects Leveraged by the Minnesota Historic Rehabilitation Tax Credit in Fiscal Year 2016

AN ECONOMIC IMPACT ANALYSIS PROGRAM REPORT

Authored by Brigid Tuck with contribution from Ginny Way



IN PARTNERSHIP WITH: MINNESOTA HISTORICAL SOCIETY, STATE HISTORIC PRESERVATION OFFICE
PHOTO OF MAASS AND MCANDREW BUILDING BY BRANDON STENGEL, FARM KID STUDIOS



MINNESOTA HISTORICAL SOCIETY
HERITAGE PRESERVATION

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May 2017

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Cover Photo:

Photo credit: Brandon Stengel, www.farmkidstudios.com
Building name: Maass and McAndrew Building (Conley-Maass-Downs Building)
Owner: Hunter and Traci Downs
Architect: 9 SQUARE
Contractor: Benike Construction

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We would like to thank Ginny Way for her assistance in writing the history of the case studies.

Note on the Analysis:

As part of Minnesota's historic tax credit legislation, the Minnesota Historical Society "must annually determine the economic impact to the state from the rehabilitation of property for which credits or grants are provided" ([Minnesota Statutes, Chapter 290.0681, Subdivision 9](#)). To complete this charge, the Minnesota Historical Society has contracted annually with University of Minnesota Extension's Economic Impact Analysis (EIA) program. Pursuant to Minnesota Statutes, Chapter 3.197 regarding the cost of reports, the total for this study was \$2,500.



Table of Contents

1. EXECUTIVE SUMMARY	1
2. INTRODUCTION	2
3. ECONOMIC IMPACT FISCAL YEAR 2016	2
Direct Effects Fiscal Year 2016	3
Indirect and Induced Effects	4
Total Impact in Fiscal Year 2016	5
Top Sectors Impacted	5
Fiscal Year 2016 Economic Impact in Context of Minnesota’s Economy	7
4. CASE STUDIES OF COMPLETED PROJECTS	9
Loose-Wiles Biscuit Company Building	9
Kruse Garage	11
Munger Terrace	12
5. SUMMARY OF PAST RESEARCH	14
Total Impacts: Fiscal Years 2011 to 2016	14
Total Impacts by Fiscal Year	14
6. A NOTE ON THE ANALYSIS	15
7. APPENDIX 1: DEFINITION OF TERMS	16





EXECUTIVE SUMMARY: ECONOMIC IMPACT OF PROJECTS LEVERAGED BY THE MINNESOTA HISTORIC REHABILITATION TAX CREDIT IN FISCAL YEAR 2016

In 2010, Minnesota passed legislation that created the Minnesota Historic Rehabilitation Tax Credit. The purpose of the tax credit, as articulated by the National Park Service, is to support historic preservation, generate jobs, enhance property values, create affordable housing, and increase local and state revenues. The Minnesota Historical Society's State Historical Preservation Office and the National Park Service jointly administer the tax credit.

To measure the effectiveness of the credit, the Minnesota Historical Society contracts each year with Extension to determine the economic contribution of the state credit. This study includes an estimate of the total economic impact of projects with approval to begin rehabilitation in fiscal year (FY) 2016. It also examines three fully completed projects that previously received approval.

- **Output Effects:** In FY 2016, the total estimated economic impact of the Minnesota Historic Rehabilitation Tax Credit was \$206.9 million. Directly, private developers planned to invest \$124.2 million in rehabilitation costs. This investment is expected to generate \$72.7 million of additional activity across all industries in Minnesota. Aside from the construction industry, those industries benefiting the most from the tax credit are wholesale trade, housing, banking, and hospitals.
- **Employment Effects:** In FY 2016, the Minnesota Historic Rehabilitation Tax Credit supported an estimated 1,027 full-time equivalent (FTE) jobs in the state. Developers anticipated hiring 566 workers to complete the proposed projects. This investment will also support an additional 461 FTE jobs across all industries. Job impacts are expected to be highest in the wholesale trade, real estate, employment services, and restaurant industries.
- **Labor Income Effects:** In FY 2016, the Minnesota Historic Rehabilitation Tax Credit generated an estimated \$63.3 million in labor income. Developers planned to pay an estimated \$35.4 million to workers. The spending of this income will generate an estimated \$27.9 million of labor income across all industries in the state.
- **Tax Credit:** Provided the projects are completed as planned, developers will be awarded \$23.5 million in tax credits. Thus, for every dollar of tax credit or grant awarded, \$8.78 in economic activity will be generated in Minnesota.
- **Total Impact 2011-2016:** Since 2011, the Minnesota Historic Rehabilitation Tax Credit has generated an estimated \$2.0 billion in economic activity, including \$677.9 million in labor income. The credit has supported an estimated 12,550 FTE jobs.
- **Highlighted Completed Projects:** Three completed projects are featured in this report—the Loose-Wiles Biscuit Company (Minneapolis), Kruse Garage (Cannon Falls), and Munger Terrace (Duluth). Together, the three projects generated \$41 million of economic activity with \$2.9 million of tax credits and raised the buildings' property values by \$13 million.



INTRODUCTION

In the early 1960s, Americans became interested in preserving history, particularly historic buildings and structures across the country. This interest culminated in 1966 with the National Historic Preservation Act. The Act ushered in the Federal Historic Preservation Tax Incentives Program, which began offering federal incentives in 1976. The program strives to preserve historic places that create character in America's communities.

Since 1976, more than 41,250 projects have been completed nationally with federal tax incentives, generating more than \$78 billion in total economic activity. The incentive aims to support historic preservation, generate jobs, enhance property values, create affordable housing, and increase local and state revenues (National Park Service, 2012).¹

“Through this program, abandoned or underused schools, warehouses, factories, churches, retail stores, apartments, hotels, houses, and offices throughout the country have been restored to life in a manner that maintains their historic character” (National Park Service, 2012).

The Federal Historic Preservation Tax Incentives Program is administered in partnership between the National Park Service and State Historic Preservation Office. In 2010, Minnesota passed legislation that created the Minnesota Historic Rehabilitation Tax Credit—the law required for the availability of federal funding in the state.

Eligibility for the Minnesota Historic Rehabilitation Tax Credit requires two things. First, the property must be a certified historic structure; that is, a building listed on the National Register of Historic Places or certified as contributing to a registered historic district. Second, the building must be rehabilitated for an income-producing use, and the project must meet a substantial rehabilitation test. As a condition of receiving the credit, all work on the property must meet the U.S. Secretary of Interior's Standards for Rehabilitation. The U.S. National Park Service approves all completed work before the credit is awarded.

The Minnesota Historic Preservation Office and the Minnesota Department of Revenue administer the tax credit in Minnesota. The credit law allows for either a state income tax credit or a grant in lieu of the credit. A state income tax credit of up to 20 percent of qualifying expenses is available if a property meets eligibility requirements. Alternatively, a grant in lieu of a credit (equal to 90 percent of allowable credit) is available to property owners. Properties must meet eligibility requirements for the federal credit in order to qualify for the state credit.

As part of the 2010 legislation, the legislature required the Minnesota Historical Society to annually measure the economic impact of the tax credit. Since the Minnesota Historic Rehabilitation Tax Credit became law, more than 90 properties have received initial approval for the tax credit. Several of these projects are now complete, allowing for an analysis of the credit's impact in the economy.

The first section of this report examines the economic impact of the state historic tax credit during the 2016 fiscal year (July 1, 2015 to June 30, 2016). The second section contains case studies of completed projects that used tax credit funding. The third summarizes the economic contribution of the tax credit during the past six years.

ECONOMIC IMPACT IN FISCAL YEAR 2016

The first step to calculate the economic impact of the Minnesota Historic Rehabilitation Tax Credit is to determine its direct effect. In this case, it is the construction activity directly occurring at sites receiving the state tax credit. Once the direct effect is quantified, it can be entered into an input-

¹ <https://www.nps.gov/tps/tax-incentives/taxdocs/about-tax-incentives-2012.pdf>

output model. Input-output models trace the flow of goods and services throughout an economy. Once the flow is known, it is possible to examine how a change in one part of the economy (say, construction) will affect other parts of the economy (for example, retail trade and manufacturing). For this study, Extension used data provided by the Minnesota Historical Society’s State Historic Preservation Office to quantify the direct effect. This data was then entered into the input-output model, IMPLAN, to measure the indirect and induced effects.

Direct Effect in Fiscal Year 2016

The Minnesota Historic Rehabilitation Tax Credit creates a direct effect through the construction occurring at rehabilitation properties. To be eligible for construction expenditures, a site must receive National Park Service Part II approval. In order to earn Part II approval, project developers must submit an estimate of total rehabilitation costs to the State Historic Preservation Office, through the Part A application. These rehabilitation costs are the direct effect of the credit for the FY in which it was approved. The state tax credit, however, is not awarded until all work is completed and approved by the National Park Service through the Part III certification.²

In fiscal year 2016, 13 properties received the initial Part II approval (Table 1). Nine approved projects are in the Twin Cities metropolitan area and four are in Greater Minnesota.

Table 1: Minnesota Historic Rehabilitation Tax Credit Projects Receiving National Park Service Part II Approval between July 1, 2015 and June 30, 2016

Historic Property Name	Current Property Name	Proposed Use	Location
Lake Street Sash and Door Company	Millworks Lofts	Housing	Minneapolis
Advance Thresher Company	Thresher Square	Hotel	Minneapolis
Beck Building	Beck Building	Housing/Retail	Winona
Ogden Apartment Hotel	Continental Apartments	Housing	Minneapolis
Emerson-Newton Implement Company	Thresher Square	Hotel	Minneapolis
Empire Apartments	Empire Apartments	Housing	Minneapolis
Gordon and Ferguson Building	33 On the Park	Housing/Retail	St. Paul
LaSalle Apartments	Ivy Manor	Housing	Virginia
Maass and McAndrew	Conley Maass Building	Office space	Rochester
Maytag Building	Maytag Building	Office space	Minneapolis
Pletke Building	Pletke Building	Housing/Retail	Winona
Thompson Hotel	Thompson Hotel	Housing	Minneapolis
Upham Building	Security Building	Office/Retail	St. Paul

Source: Part A applications submitted to the Minnesota Historical Society

On the Part A application, project developers estimated that total rehabilitation costs for the 13 projects would be \$159.4 million (Table 2). Included in this amount are costs for items such as

² To learn more about Part I, II, and III visit <https://www.nps.gov/tps/tax-incentives/application-process.htm>.



property acquisition, site development and grading, demolition, construction supplies, furnishings, electrical and plumbing work, permits, and fees.

Table 2: Direct Impact of Fiscal Year 2016 Minnesota Historic Rehabilitation Tax Credit Projects

Total Estimated Rehabilitation Project Costs	Total Estimated Rehabilitation Project Costs (Excluding Acquisition)	Estimated Minnesota Historic Rehabilitation Tax Credit
\$159,385,618	\$124,169,596	\$23,548,836

Acquisition costs do not create an economic impact. They are a transfer of wealth (cash for land and/or a building). Thus, under the theory of economic impact analysis, acquisition costs are not included in the direct impact. Costs post-acquisition, such as demolition and grading, are included. Project costs, with acquisition fees removed, were an estimated \$124.2 million in FY 2016. This is the direct impact of the tax credit.

Project developers are expected to be awarded an estimated \$23.5 million in state tax credits or grants.³ For every dollar of the Minnesota Historic Rehabilitation Tax Credit, private developers in FY 2016 plan to invest \$6.77 of their own funds.

Indirect and Induced Effects

Indirect effects are those associated with business spending for goods and services. In this case, these are the changes in the local economy stemming from developers purchasing construction materials (i.e., lumber, cement, or equipment) and construction-related services (i.e., architectural and engineering). These are often called business-to-business impacts.

Induced effects are those associated with a change in economic activity stemming from spending by the employees of businesses (labor) and by households. In this analysis, these are primarily economic changes related to spending by construction workers and are often called business-to-consumer impacts.

Indirect and induced effects were calculated by the input-output model IMPLAN.⁴ Results that include total effects are highlighted in the next section of this report.



Maass and McAndrew Building, before rehabilitation; photo courtesy of 9 SQUARE



Maass and McAndrew Building, after rehabilitation; photo by Brandon Stengel, www.farmkidstudios.com

³ The estimated tax credit is not equal to 20 percent of project costs, as not all costs qualify for the tax credit.

⁴ The IMPLAN v.3 model with type SAM multipliers was used in this analysis. www.implan.com.

Total Impact in Fiscal Year 2016

The Minnesota Historic Rehabilitation Tax Credit generated an estimated \$206.9 million of economic activity in FY 2016 (Table 3). This includes \$63.3 million in labor income paid to the estimated 1,027 full-time equivalent (FTE) workers whose jobs were supported by the credit.

The following are specific contributions for FY 2016:

- Direct impacts include an estimated \$124.2 million in new construction-related sales (output), 566 FTE construction jobs, and \$35.4 million in payments to construction workers. The direct output effect accounts for 60 percent of the total impact.
- Eighteen percent of the state tax credit impact was through business-to-business transactions. In FY 2016, the tax credit indirectly generated an estimated \$36.6 million in sales (output), including 186 FTE jobs in all sectors of the economy and \$12.8 million in payments to workers.
- Twenty-two percent of the state tax credit impact was through business-to-consumer transactions. Through induced impacts, an estimated \$46.1 million in sales (output) was generated in Minnesota in FY 2016. This includes 275 FTE jobs in all sectors of the economy and \$15.1 million in labor income.

The Minnesota Historic Rehabilitation Tax Credit supported \$206.9 million of economic activity in FY 2016.

Table 3: Total Economic Impact of Projects Leveraged by Minnesota Historic Rehabilitation Tax Credit in the Fiscal Year 2016

	Direct	Indirect	Induced	Total
Output (millions)	\$124.2	\$36.6	\$46.1	\$206.9
Employment (FTE's)	566	186	275	1,027
Labor Income (millions)	\$35.4	\$12.8	\$15.1	\$63.3

Estimates by the University of Minnesota Extension Center for Community Vitality

Based on Part A applications, project developers will receive \$23.5 million of Minnesota Historic Rehabilitation Tax credits or grants upon successful completion of their planned projects. Given a total economic impact of \$206.9 million, this means that for every dollar of tax credit or grant awarded, \$8.78 in economic activity will be generated in Minnesota. This \$8.78 includes the total investment by private developers, along with the indirect and induced effects of construction-related spending.

Top Sectors Impacted

In total, the Minnesota Historic Rehabilitation Tax Credit generated \$206.9 million of economic activity in FY 2016. Of this, 60 percent was from direct construction activity. The remaining 40 percent was from supporting industries. Understanding the industries most affected by the credit can provide insight into its benefit.

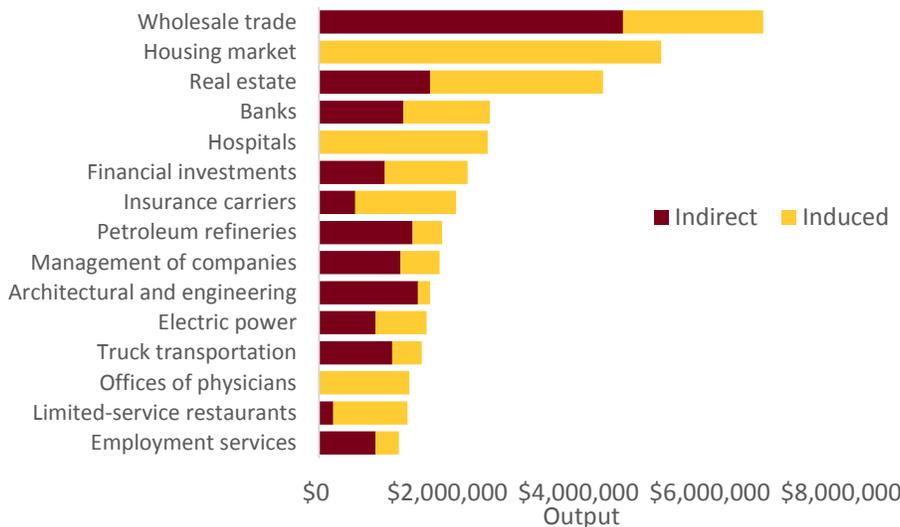


The highest output effects were in the wholesale trade, housing (owner-occupied dwellings and real estate), and banking sectors (Chart 1).⁵ Projects undertaken by contractors will create approximately \$4.6 million in activity within the wholesale trade sector. Of this amount, roughly two-thirds is the result of spending by the contractors for supplies and services (indirect effects), and one-third is the result of spending by employees of the contracting firms (induced effects).

Not surprisingly, the highest *indirect* impacts were in the wholesale trade, banking, architectural and engineering, and trucking sectors. These are primary components of the construction supply chain. Companies can often source these components within the state of Minnesota, increasing the impact.

High *induced* impacts were in the housing market (both owner-occupied and rental), as well as health care (including hospitals, offices of physicians, and insurance carriers). These results are indicative of average household spending, which is often concentrated in housing and health care.

Chart 1: Top 15 Sectors Impacted, Indirect and Induced Effects, Sorted by Output



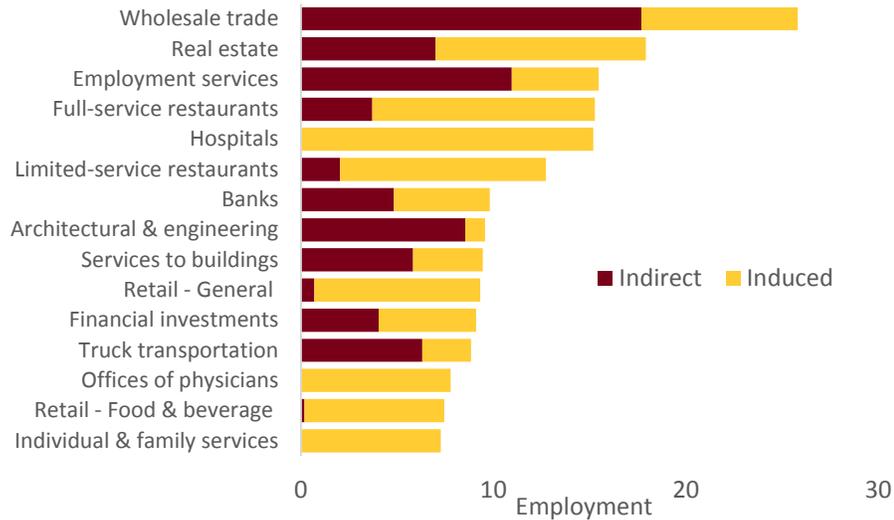
In FY 2016, the Minnesota Historic Rehabilitation Tax Credit supported an estimated 1,027 FTE jobs in Minnesota. Of those, 566 were directly related to construction at the properties. The other 461 were across other industry sectors.

The highest numbers of support jobs were in the wholesale trade, real estate (rental), employment services, and restaurant sectors (Chart 2). The real estate sector is impacted by both employees (paying for their housing) and construction firms (paying for their office space, for example). The restaurant sector, including both limited-service and full-service dining, shows higher impacts on the employment chart than in the output chart. This is because restaurants tend to have a lower output per employee ratio.

Similar to output impacts, indirect employment impacts are highest within sectors related to the construction supply chain (e.g., architects, engineers, and wholesale suppliers). Induced employment impacts, on the other hand, are highest in sectors that provide goods and services to employees of the contractors (e.g., housing and health care).

⁵ “The wholesaling process is an intermediate step in the distribution of merchandise. Wholesalers are organized to sell or arrange the purchase or sale of (a) goods for resale (i.e., goods sold to other wholesalers or retailers), (b) capital or durable nonconsumer goods, and (c) raw and intermediate materials and supplies used in production.” — www.naics.com

Chart 2: Top 15 Sectors Impacted, Indirect and Induced Effects, Sorted by Employment



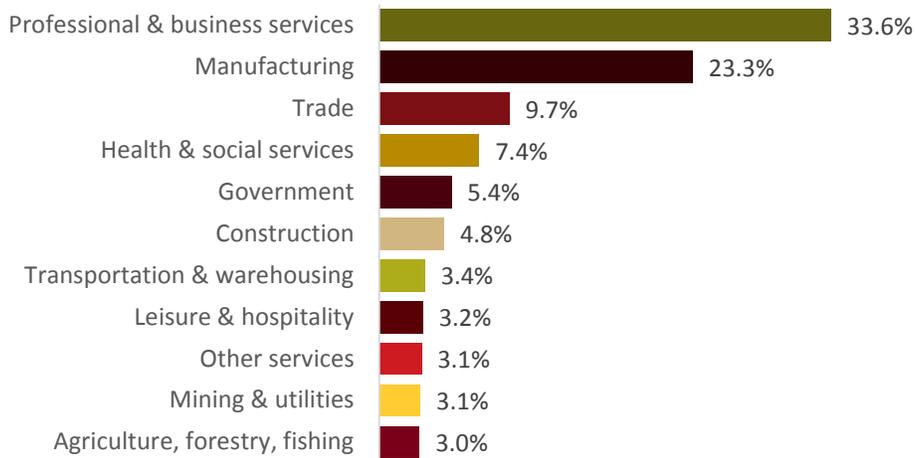
Fiscal Year 2016 Economic Impact in Context of Minnesota’s Economy

It is valuable to understand the impact of the Minnesota Historic Rehabilitation Tax Credit within the context of the Minnesota economy. In 2015, the most recent data year available, Minnesota’s total output was \$649.3 billion. The professional and business services sector generated approximately one-third of that output (Chart 3). Other industries with major contributions include manufacturing and trade.

The majority of the tax credit’s direct impacts are in the construction industry. Minnesota construction firms produced \$31.3 billion of output in 2015. The tax credit helped directly support \$124.2 million of that total.

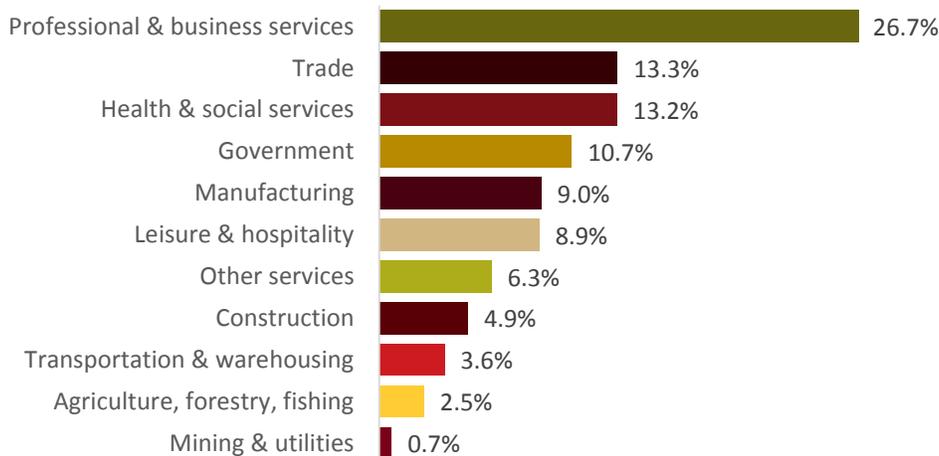
The tax credit also supported several of Minnesota’s other major industries. Top sectors impacted were wholesale trade and real estate/housing. Wholesale trade is part of the trade industry. Real estate/housing, meanwhile, is part of the professional and business services industry.

Chart 3: Percent of Output by Industry, Minnesota, 2015



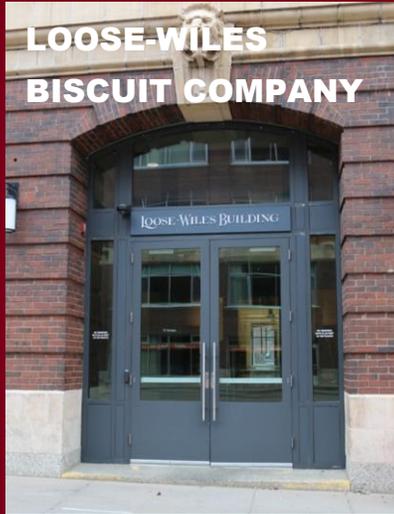
In 2015, Minnesota businesses and enterprises created 3.7 million jobs. Of those, 27 percent were in the professional services industry, 13 percent in the trade industry, and 13 percent in the health and social services industry (Chart 4). Construction jobs accounted for 5 percent of the state's jobs in 2015. Of the 181,000 construction jobs in 2015, the tax credit helped directly create 566 FTE jobs.

Chart 4: Percent of Employment by Industry, Minnesota, 2015



CASE STUDIES OF COMPLETED PROJECTS

Since the Minnesota Historic Rehabilitation Tax Credit became law, more than 90 properties have received Part A approval. During its six-year history, several projects moved from Part II approval to completion. This section of the report highlights three completed projects.



ADDRESS	701 Washington Ave N Minneapolis, Minnesota
DATE BUILT	1910
REHABILITATION	2012-2014
DEVELOPER	United Properties
ORIGINAL USE	Warehouse/Office
NEW USE	Commercial

Photo Credit: Hess, Roise, and Company

Background

Constructed in 1910, the Loose-Wiles Biscuit Company Building is part of the Minneapolis Warehouse Historic District. The district was an important area of early commercial growth during Minneapolis' development, as the city became a major distribution and jobbing center in the upper Midwest. The Warehouse Historic District is also significant for its concentration of architect-designed 19th and 20th century commercial buildings.

The Loose-Wiles Biscuit Company Building was designed by prominent local architect Edwin Hewitt. The brick building is seven stories tall with restrained Prairie style detailing. Originally built as a speculative venture by investor George Christian, the building was purchased in 1914 by long-term tenant Loose-Wiles Biscuit Company. The company formed in Kansas City in 1902. When it celebrated its Minneapolis grand opening in 1912, a newspaper reported that the "new Loose Wiles Minneapolis bakery is considered one of the most modern and up to date in the United States. It is equipped with the latest machinery and is capable of turning out enough biscuits to supply every man, woman, and child in Minneapolis with 35 every day. The ovens are located on the highest floor, above the fly zone, and away from the dust that blows into the windows nearer the streets."⁶

With historic tax credit funding, the Loose-Wiles Biscuit Company Building, originally a single tenant office building, was rehabilitated to be a multi-tenant office building. Substantial long-term maintenance was also performed.

⁶ Anderson, Rolf T., *Minneapolis Warehouse Historic District* National Register Nomination, Reference Number 89001937, January 1987.



Project Financing and Economic Impact

United Properties received Part A approval for the project in FY 2013. At the time, it estimated project costs qualifying for the tax credit would be \$8.8 million. The estimated state tax credit, based on that investment, was \$1.4 million.

On September 30, 2014, the project was completed when the Loose-Wiles Biscuit Company Building was placed into service. United Properties reported spending a total \$19.4 million, of which \$8.8 million were costs qualifying for the tax credit (Table 4). In the end, \$1.8 million in state tax credits were awarded for the project.

During rehabilitation, the Loose-Wiles Biscuit Company Building project generated an estimated \$28.8 million of economic activity. As a result, for each dollar of tax credit invested, the project created \$16.40 of activity. This includes private investments by the developer and additional economic activity generated by the project.⁷

In addition to economic activity, the project also increased the property value of the building. Before the rehabilitation, the property value was \$7.1 million. Upon project completion, the property value increased by 179 percent to \$19.8 million.

Table 4: Project Financing and Economic Impact of Loose-Wiles Biscuit Company Building

Total Final Project Costs (millions)	\$19.4
Total Qualifying Rehabilitation Costs (millions)	\$8.8
Tax Credit (millions)	\$1.8
Economic Impact of Construction (millions)	\$28.8
Total Economic Activity Per Dollar of Tax Credit	\$16.40
Property Value 2010 (millions)	\$7.1
Property Value 2016 (millions) ⁸	\$19.8

⁷ The ratio of total economic activity per dollar of tax credit can vary, depending on the nature of the project. Two factors influence the ratio. One, the amount of additional investment by the developer (above and beyond the tax credit). Two, the nature of the project and the type of spending influence the magnitude of indirect and induced impacts.

⁸ Property value is estimated market value. Property tax values accessed via City of Minneapolis PropertyInfo.





KRUSE GARAGE

ADDRESS	421 Mill Street West Cannon Falls, Minnesota
DATE BUILT	1918
REHABILITATION	2013-2014
DEVELOPER	JDP Properties
ORIGINAL USE	Commercial
NEW USE	Commercial (winery)

Photo Credit: Sarah Beimers

Background

The Kruse Garage is part of the Cannon Falls Commercial Historic District. The district is located in the center of Cannon Falls, which historically served as a small Midwestern agricultural service community. The district is formed of a cohesive set of late 19th and early 20th century commercial buildings and is historically significant as a local example of a commercial downtown business district.

The Kruse Garage, located at 421 Mill Street West, was originally owned by Clem Kruse. Constructed circa 1918, the building is two-story, brown brick, and commercial style. It also has restrained architectural detailing. In 1919, Kruse sold Oldsmobile, Maxwell, and Chalmers vehicles on the first floor while the second floor was home to a large meeting hall, known as Kruse's Hall. Before the construction of an adequate high school gym, the hall was used for high school basketball games. Dances, plays, graduations, roller skating, and other community events were also held in the space.

During the rehabilitation, Cannon River Winery redesigned the space as an expansion of their tasting room and event area.

Project Financing and Economic Impact

JDP Properties received initial approval for the Kruse Garage project in FY 2014. At the time, the developer estimated project costs to be \$750,000. Based on this, the applicable state tax credit was estimated at \$150,000.

The project ended on June 1, 2014 when JDP Properties placed the Kruse Garage into service. Upon project completion, the developer reported total spending of \$1.01 million on the project, of which \$970,000 were costs qualifying for the tax credit (Table 5). As a result, JDP Properties was awarded \$190,000 in state tax credits.

The project generated an estimated \$1.88 million in economic activity during the rehabilitation phase. For every one dollar of tax credit invested, the project generated \$9.70 of economic activity.⁹

⁹ The ratio of total economic activity per dollar of tax credit includes private developer investment, as well as the indirect and induced effects.

Rehabilitation spurred by the tax credit also increased the property value. Prior to the rehabilitation, the property value was \$345,500. Upon project completion, the property value increased by 57 percent to \$544,000.

Table 5: Project Financing and Economic Impact of Kruse Garage

Total Final Project Costs (millions)	\$1.01
Total Qualifying Rehabilitation Costs (millions)	\$0.97
Tax Credit (millions)	\$0.19
Economic Impact of Construction (millions)	\$1.88
Total Economic Activity Per Dollar of Tax Credit	\$9.70
2010 Property Value (millions)	\$345,500
2016 Property Value (millions) ¹⁰	\$544,000



MUNGER TERRACE

ADDRESS	405 Mesaba Avenue Duluth, Minnesota
DATE BUILT	1891-1892
REHABILITATION	2012-2013
DEVELOPER	SNM Development Company
ORIGINAL USE	Residential
NEW USE	Residential

Photo Credit: Hess, Roise, and Company

Background

Designed in 1891 by Duluth architects Oliver Traphagen and Francis Fitzpatrick, Munger Terrace was constructed at 405 Mesaba Avenue in Duluth. Completed in 1892, the building is an excellent example of the Chateausque style and is considered one of Duluth’s most architecturally significant apartment buildings.

Munger Terrace is a massive, four-story, stone and brick structure with an asymmetrical primary façade. Circular towers with dormered, conical roofs anchor the corners of the building. Between

¹⁰ Property value is estimated market value. Retrieved from <http://visualgov.co.goodhue.mn.us/Property/>.

them a series of highly individualized, elaborately ornamented, projecting pavilions, towers, and arched recesses form the front façade.

Originally, Munger Terrace comprised eight spacious apartments of 16 rooms each. The building was rented and occupied by the Sacred Heart Academy until 1895. During the remainder of the 1890s and into the 20th century, Munger Terrace was one of the most fashionable addresses in Duluth. In 1915, the interior of the building was remodeled to accommodate 32 apartments.

Today, Munger Terrace is still comprised of apartments. Using historic tax credits, the entire building was rehabilitated following a fire that destroyed a small portion of the building.

Project Financing and Economic Impact

During FY 2013, SNM Development Company received initial approval to begin the Munger Terrace project. In the Part A application, the developers estimated project costs at \$6.4 million. Based on this, the potential state tax credit was estimated at \$0.9 million (Table 6).

The project ended on December 31, 2013, when the Munger Terrace building was placed into service. Upon project completion, the developer reported spending \$5.9 million, of which \$4.7 million were qualifying costs for the tax credit. SNM Development Company was awarded \$0.9 million in state tax credits.

Based on these final reported expenditures, the project generated an estimated \$10.3 million in economic activity during the rehabilitation phase. For every one dollar of tax credit invested, the project generated \$10.90 of economic activity.¹¹

Property values also increased as a result of rehabilitation. Prior to the project, the property value was \$0.96 million. Upon project completion, however, the property value increased by 13 percent to \$1.1 million.

Table 6: Project Financing and Economic Impact of Munger Terrace

Total Project Cost (millions)	\$5.9
Total Qualifying Rehabilitation Costs (millions)	\$4.7
Tax Credit (millions)	\$0.9
Economic Impact of Construction (millions)	\$10.3
Total Economic Activity Per Dollar of Tax Credit	\$10.90
2011 Property Tax Value (millions)	\$0.96
2016 Property Tax Value (millions) ¹²	\$1.1

¹¹ The ratio of total economic activity per dollar of tax credit includes private developer investment, as well as the indirect and induced effects.

¹² Property tax value is estimated market value. Retrieved from <http://apps.stlouiscountymn.gov/auditor/parcelInfo2005Iframe/>. Data for 2011 provided to Extension by St. Louis County.

SUMMARY OF PAST RESEARCH

This is the sixth year University of Minnesota has quantified the economic contribution of the tax credit. This section compiles the results for a comprehensive look at its impact and it also provides summary data by year. The full reports detailing the analysis by fiscal year are available at <http://www.extension.umn.edu/community/economic-impact-analysis/reports/>.

Total Impacts: Fiscal Years 2011 to 2016

The Minnesota Historic Rehabilitation Tax Credit generated an estimated \$2.0 billion in output in the state's economy between FY 2011 and FY 2016 (Table 7). The credit supported 12,553 FTE jobs and generated \$677.9 million in labor income. During the same period, the projects receiving approval requested credits and grants totaling \$225.1 million.¹³ For every state dollar of tax credit or grant allowed during the six years, \$8.98 in economic activity was generated in Minnesota.

The Minnesota Historic Rehabilitation Tax Credit has supported \$2.0 billion of economic activity since its inception.

Included in the total impact is the direct effect. Directly, the tax credit has leveraged an estimated \$1.1 billion in construction activity since its inception. This includes 6,496 FTE construction jobs and \$363.4 million in payments to construction workers. These are direct impacts of the tax credit.

Table 7: Total Economic Impact of Projects Leveraged by the Minnesota Historic Rehabilitation Tax Credit, Fiscal Years 2011 to 2016

	Direct	Indirect	Induced	Total
Output (millions)	\$1,108.8	\$427.6	\$484.6	\$2,021.0
Employment (FTE's)	6,496	2,678	3,379	12,553
Labor Income (millions)	\$363.4	\$152.3	\$162.2	\$677.9

Estimates by the University of Minnesota Extension Center for Community Vitality

Total Impacts by Fiscal Year

Table 8 details the economic impact of the Minnesota Historic Rehabilitation Tax Credit by fiscal year. The impact can vary by year, based on the proposed investments by developers. In certain years—FY 2012, for example—developers received approval for projects with direct investments of \$292.4 million that leveraged a total economic impact of \$558.7 million. In FY 2013, developers received approval for projects with a direct investment of \$72.7 million, leveraging \$138.8 million in economic activity.

¹³ These are estimated tax credits and grants given the applications submitted and are distributed over time. Final tax credits and grants are not awarded until projects are completed.

Table 8: Total Economic Impact of Projects Leveraged Between Fiscal Year 2011 and FY 2016 by the Minnesota Historic Rehabilitation Tax Credit¹⁴

	Output (millions)	Employment (FTEs)	Labor Income
FY 2011	\$429.9	2,880	\$143.7
FY 2012	\$558.7	3,502	\$180.5
FY 2013	\$138.8	1,200	\$46.5
FY 2014	\$237.2	1,338	\$86.0
FY 2015	\$449.5	2,607	\$157.8
FY 2016	\$206.9	1,027	\$63.3
Total	\$2,021.0	12,553	\$677.9

Estimates by the University of Minnesota Extension
Center for Community Vitality

A NOTE ON THE ANALYSIS

As part of Minnesota’s historic tax credit legislation, the Minnesota Historical Society “must annually determine the economic impact to the state from the rehabilitation of property for which credits or grants are provided” ([Minnesota Statutes, Chapter 290.0681, Subdivision 9](#)). To complete this charge, the Minnesota Historical Society contracts annually with University of Minnesota Extension’s Economic Impact Analysis (EIA) program. Pursuant to Minnesota Statutes, Chapter 3.197 regarding the cost of reports, the total for this study was \$2,500.

¹⁴ Due to a reclassification of one project, the numbers for FY 2011 changed slightly since publication of the initial report.



APPENDIX 1: DEFINITION OF TERMS

Special models, called input-output models, exist to conduct economic impact analysis. There are several input-output models available, and IMPLAN (IMpact Analysis for PLANning, MIG, Inc.) is one such model. Many economists use IMPLAN for economic contribution analysis because it can measure output and employment impacts, is available on a county-by-county basis, and is flexible for the user. While IMPLAN has some limitations and qualifications, it is one of the best tools available to economists for input-output modeling. Understanding the IMPLAN tool, its capabilities, and its limitations helps ensure the best results from the model.

One of the most critical aspects of understanding economic impact analysis is the distinction between the “local” and “non-local” economy. The local economy is identified as part of the model-building process. Either the group requesting the study or the analyst defines the local area. Typically, the study area (the local economy) is a county or a group of counties that share economic linkages. In this report, the study area is the entire state of Minnesota.

A few definitions are essential in order to properly read the results of an IMPLAN analysis. These terms and their definitions are provided below.

Output

Output is measured in dollars and is equivalent to total sales. The output measure can include significant “double counting.” Think of limestone, for example. The value of limestone is counted when it is sold as a component in the manufacturing of cement, again when the cement is sold to the contractor, and yet again when the contractor charges the building owner. The value of the limestone is built into the price of each of these items, and then the sale of each of item is added to determine total sales (or output).

Employment

IMPLAN includes total wage and salaried employees, as well as the self-employed, in employment estimates. Because employment is measured in jobs and not in dollar values, it tends to be a very stable metric.

Labor Income

Labor income measures the value added to the product by the labor component. So, in the limestone example, when the limestone is sold to the cement manufacturing company, a certain percentage of the sale is for the labor to quarry the limestone. Then when the cement is sold to the contractor, it includes some markup for its labor costs in the price. When the contractor charges the building owner, he/she includes a value for the labor. These individual value increments for labor can be measured, which amounts to labor income. Labor income does *not* include double counting.

Labor income includes both employee compensation and proprietor income. It is measured as wages, salaries, and benefits.

Direct Impact

Direct impact is equivalent to the initial activity in the economy. In this study, it is construction spending generated by projects leveraged by the Minnesota Historic Rehabilitation Tax Credit.



Indirect Impact

The indirect impact is the summation of changes in the local economy that occur due to spending for inputs (goods and services) by the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, this implies a corresponding increase in output by the plant. As the plant increases output, it must also purchase more inputs, such as electricity, steel, and equipment. As the plant increases purchases of these items, its suppliers must also increase production, and so forth. As these ripples move through the economy, they can be captured and measured. Ripples related to the purchase of goods and services are indirect impacts. In this study, indirect impacts are those associated with spending by the developers to purchase construction materials (lumber, cement, equipment, and so forth) and construction-related services (i.e., architectural and engineering).

Induced Impact

The induced impact is the summation of changes in the local economy that occur due to spending by labor—that is, spending by employees in the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, the new employees will have more money to spend on housing, groceries, and going out to dinner. As they spend their new income, more activity occurs in the local economy. This can be quantified and is called the induced impact. Primarily, in this study, the induced impacts are economic changes related to spending by construction workers hired to perform the rehabilitation work.

Total Impact

The total impact is the summation of the direct, indirect, and induced impacts.