



# Economic Impact of Projects Leveraged by the Minnesota Historic Rehabilitation Tax Credit in Fiscal Year 2013

AN ECONOMIC IMPACT ANALYSIS PROGRAM REPORT

Brigid Tuck and Neil Linscheid



MUNGER TERRACE IN DULUTH, MINNESOTA

IN PARTNERSHIP WITH: MINNESOTA HISTORICAL SOCIETY

THE MUNGER TERRACE IS A NATIONAL REGISTER OF HISTORIC PLACES APARTMENT BUILDING IN DULUTH, MINNESOTA. THE MINNESOTA HISTORIC REHABILITATION TAX CREDIT PROJECT WILL PRESERVE THIS IMPORTANT HISTORIC BUILDING AND PROVIDE UPDATES TO APARTMENTS. PHOTO: UNIVERSITY OF MINNESOTA DULUTH



# Economic Impact of Projects Leveraged by the Minnesota Historic Rehabilitation Tax Credit in Fiscal Year 2013

AN ECONOMIC IMPACT ANALYSIS PROGRAM REPORT

June 2014

Brigid Tuck and Neil Linscheid

**Partners/Sponsors:**  
Minnesota Historical Society

© 2014 Regents of the University of Minnesota. All rights reserved. University of Minnesota Extension is an equal opportunity educator and employer. In accordance with the Americans with Disabilities Act, this material is available in alternative formats upon request. Direct requests to the Extension Store at 800-876-8636.

# Table of Contents

- 1. INTRODUCTION** **1**
- 2. EXECUTIVE SUMMARY** **2**
- 3. PROFILE OF THE STUDY AREA ECONOMY** **3**
- 4. ECONOMIC IMPACT** **5**
  - Direct Effects Fiscal Year 2013 5
  - Indirect and Induced Effects Fiscal Year 2013 7
  - Total Impact Fiscal Year 2013 7
  - Top Industries Impacted 8
- 5. SUMMARY OF PAST RESEARCH** **11**
  - Total Impacts Fiscal Year 2011 11
  - Total Impacts Fiscal Year 2012 11
  - Total Impacts Fiscal Years 2011, 2012, and 2013 12
- 5. METHODOLOGY** **13**
- 6. CONCLUSION** **15**

## INTRODUCTION

The history of historic preservation efforts as a redevelopment tool began in the 1960's. In 1966, following increasing recognition of the importance of historic places, the United States' Congress passed the National Historic Preservation Act. The Act, and related legislation, created a partnership between the federal government (National Park Service) and state governments (State Historic Preservation Offices). Since 1976, the federal government has provided a historic tax credit as a financial incentive to assist in the preservation of important historic structures, but not all states adopted the measure. Minnesota, in fact, did not enact a historic tax credit until 2010.

In April 2010 the Minnesota Historic Rehabilitation Tax Credit was signed into law. The Minnesota State Historic Preservation Office, in conjunction with the Minnesota Department of Revenue, administers the credit. The law is intended to promote private investment in historic properties with the goal of stimulating job growth, increasing the tax base, and revitalizing communities. The law makes two tools available; state income tax credits and grants in lieu of credits. Eligible property owners can receive a state income tax credit of up to 20 percent of qualifying expenses on historic preservation projects. Alternatively, a grant in lieu of a credit (equal to 90 percent of allowable credit) is available to property owners. Properties must be eligible for the federal tax credit in order to receive the state credit.

Eligibility for the Minnesota Historic Rehabilitation Tax Credit is determined by two factors. 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 US Secretary of Interior's Standards for Rehabilitation and the completed work must be approved by the US National Park Service.

As part of the Minnesota 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 State Historical Society contracted with University of Minnesota Extension's Economic Impact Analysis (EIA) program. University of Minnesota Extension first completed the analysis in 2011, covering projects receiving part II approval from NPS in fiscal year 2011. A second report was prepared for the fiscal year 2012. The reports can be viewed here: <http://www.z.umn.edu/historictax>.

This report is a third update to the original analysis. The primary focus of this report is on projects receiving part II approval from NPS in fiscal year 2013. Information from 2011 and 2012 will be included to provide context. A summary of the economic impact of the three years of the Minnesota Historic Rehabilitation Tax Credit is incorporated into this report. Pursuant to Minnesota Statutes, Chapter 3.197 regarding the cost of reports, the cost of this economic impact report is \$2,500.

*The Minnesota Historic Rehabilitation Tax Credit allows for a state income tax credit of up to 20 percent of qualifying expenses or a grant in lieu of credit.*



## EXECUTIVE SUMMARY OF THE ECONOMIC IMPACT OF PROJECTS LEVERAGED BY THE MINNESOTA HISTORIC REHABILITATION TAX CREDIT

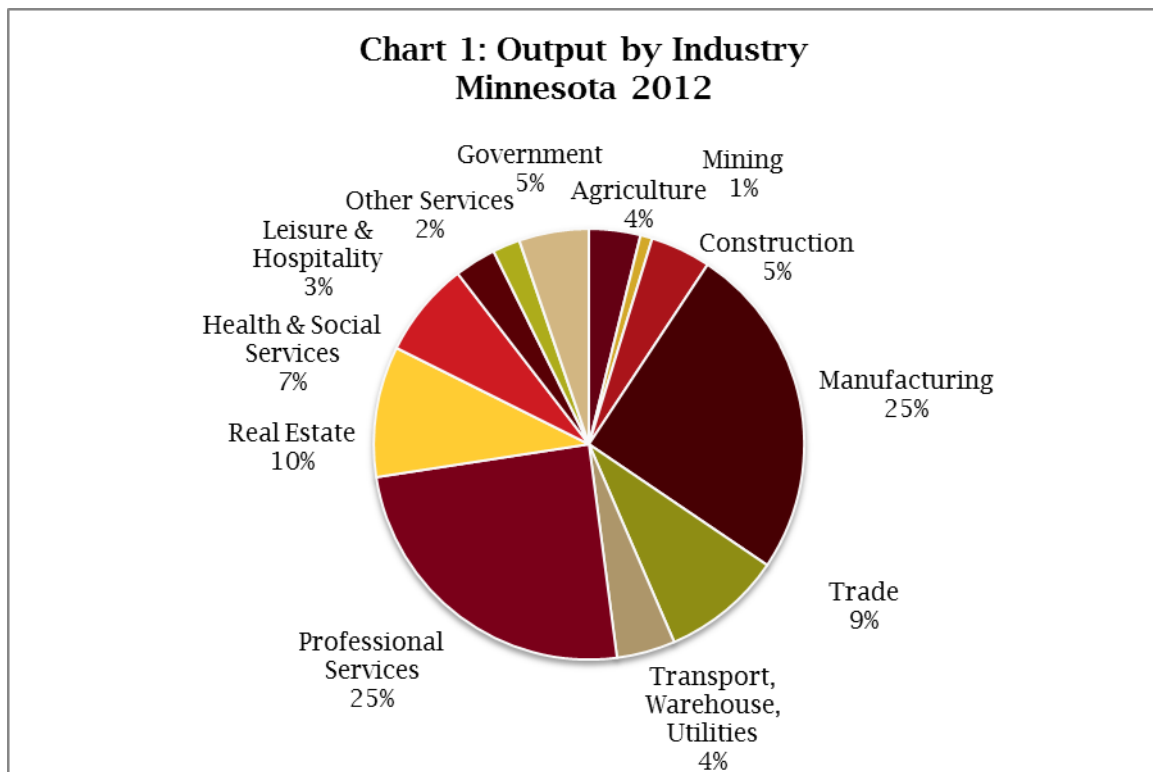
In April 2010, the Minnesota State Legislature passed and the Governor signed legislation creating the Minnesota Historic Rehabilitation Tax Credit. Eligible property owners can receive a state income tax credit of up to 20 percent of qualifying rehabilitation expenses or a grant in lieu of the credit.

- *Direct Impact:* From July 1, 2012 to June 30, 2013, 15 projects received preliminary approval for the credit, had begun renovation projects, and were included in this study. The 15 projects receiving preliminary approval for the credit in FY 2013 estimate spending \$72.7 million dollars on local, qualifying rehabilitation expenses. The project developers anticipate hiring 785 construction workers. They will pay an estimated \$23.1 million to their employees.
- *Economic Impact:* The total economic impact of projects leveraged by the FY 2013 Minnesota Historic Rehabilitation Tax Credit is an estimated \$138.8 million. This includes \$46.5 million in labor income. Projects spurred by the credit support 1,200 jobs.
- *Tax Credit:* Provided the projects are completed as planned and meet the requirements of the program, an estimated \$16.0 million will be awarded by the Minnesota Historic Rehabilitation Tax Credit to leverage these projects. Therefore, for every state dollar of tax credit or grant allowed, \$8.68 in economic activity is generated in Minnesota.
- *Benefiting Industries:* Minnesota's construction industry benefited most significantly from the rehabilitation projects. Other construction-related industries also benefited. These include the wholesale trade industry, the housing market and the architectural and engineering industry. Finally, wages earned by construction workers spurred additional economic activity in the food service and beverage industry and the health care industry.
- *Impacts in Previous Years:* In the three years of the Minnesota Historic Rehabilitation Tax Credit, the tax credit has generated an estimated \$1.1 billion in output in the state's economy, 7,582 jobs, and \$370.7 million in labor income. Projects receiving Part II approval from NPS in fiscal years 2011, 2012, and 2013 requested credits and grants totaling \$134.5 million. Therefore, for every state dollar of tax credit or grant allowed in the past three years, \$8.38 in economic activity was generated in Minnesota. It is important to note that credits and grants in lieu of credit will be claimed over several years, as projects are completed.
- This is a conservative analysis, focused primarily on construction-related spending. The economic benefits of any potential new commercial activity are not included in this study. Further, this study does not measure any non-market values generated from newly renovated structures.

## PROFILE OF THE STUDY AREA ECONOMY

The study area for this analysis is the state of Minnesota. The state was chosen as the study area since the Historic Rehabilitation Tax Credit can be issued in any community in Minnesota. The spending on tax credit projects can be compared to \$568 billion of output in all sectors of Minnesota's economy in 2012. There were 3.5 million jobs in all sectors in the state.

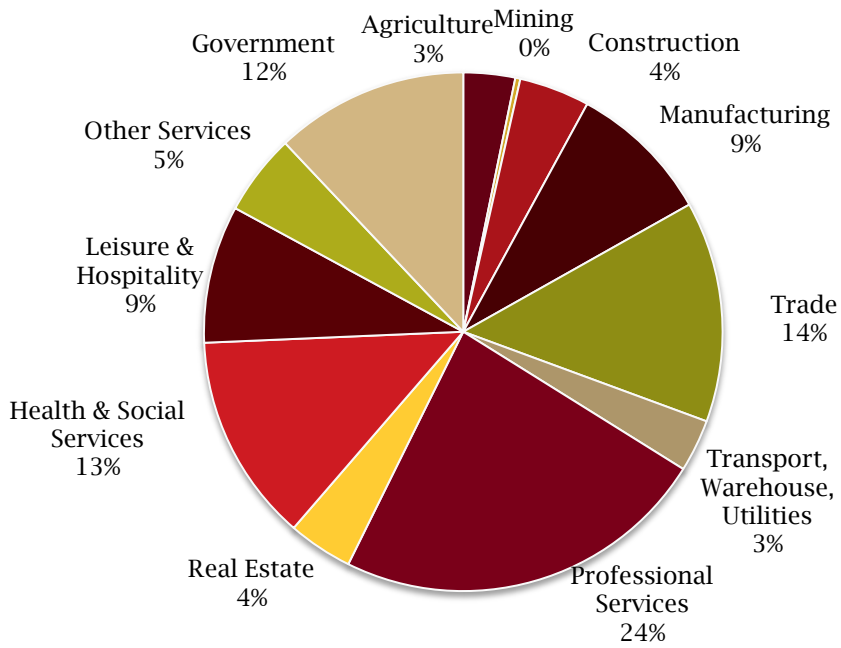
Chart 1 shows total output in Minnesota by industry category. The manufacturing sector contributes 25 percent of total output to the state's economy. The service sector, in total, contributes 47 percent of output to the state's economy. Of the service sector categories, professional services (25 percent) comprises the largest component. The construction sector generated \$25.8 billion in output in 2012.



Employment by industry category is shown in chart 2. The service industry has the largest share of employees in Minnesota (55 percent). Professional services, trade, and health and social services have the largest shares respectively. The construction industry employs 4 percent of workers in Minnesota. In 2012, there were 153,000 construction workers in the state.

While manufacturing creates 25 percent of output, it only employs 9 percent of all workers. There are two possible reasons for this observation. One, in the database, one job is one job, regardless of its status as part-time, full-time, or seasonal. Since the service sector tends to employ more part-time employees and manufacturing more full-time, manufacturing's share of employment may appear lower. Second, manufacturing tends to have higher dollar-volume-productivity per worker.

**Chart 2: Employment by Industry  
Minnesota 2012**





## ECONOMIC IMPACT

Total economic impact is equal to the summation of direct, indirect, and induced effects. The direct effect is the initial change triggered by an economic event. This could be the opening of a new business, the closing of a plant, or construction spurred on by a tax credit. The direct effect triggers additional economic activity to occur, therefore setting off ripples in the local economy. These ripples fall into two categories, indirect effects (created by business-to-business transactions) and induced effects (created by consumer-to-business transactions). In an economic impact analysis, researchers quantify the direct effects. An input-output model then measures the indirect and induced impacts. The input-output model used was IMPLAN (MIG, Inc).

### Direct Effects Fiscal Year 2013

The direct effect of the historic tax credit program is the value of the construction activity spurred by the credit. From July 1, 2012 through June 30, 2013, 15 renovation projects received National Park Service Part II approval. This means the projects received initial approval and began making construction expenditures. They will not receive final approval and the tax credit until all work is completed and approved by the National Park Service (a process known as Part III certification).

Table 1 lists the 15 renovation projects that received Part II approval between July 1, 2012 and June 30, 2013. The historic name of the property, the current property name, and the property's proposed use are provided in the table. The historic property name reflects the original use and designation of the building. The proposed use column indicates what the building will be used for following the renovation project. Thirteen projects are planned for the Twin Cities metropolitan area and two will occur in greater Minnesota.

**Table 1. Minnesota Historic Rehabilitation Tax Credit Projects Receiving National Park Service Part II Approval between July 1, 2012 and June 30, 2013**

<b>Historic Property Name</b>	<b>Current Property Name</b>	<b>Proposed Use</b>	<b>Location</b>
<b>The Barrington</b>	Barrington Apartments	Apartments	Minneapolis
<b>John W L Corning House</b>	Corning House	Residential	St. Paul
<b>John H Donohue House</b>	Donohue House	Residential	St. Paul
<b>Minneapolis Brewing Company Office Building</b>	Grain Belt Office	Office/Community Space	Minneapolis
<b>The Grand Hotel</b>	Grand Center for Arts and Culture	Arts Center	New Ulm
<b>Jackson Building</b>	Jackson Building	Residential / Commercial	Minneapolis
<b>John J Johnson House</b>	Johnson House	Residential	St. Paul
<b>Lincoln Bank Building</b>	City Place Lofts	Education / Residential	Minneapolis
<b>Loose-Wiles Biscuit</b>	HGA/Litin Paper	Office	Minneapolis

<b>Company Building</b>			
<b>The Mayhew (622)</b>	The Heritage	Apartments	Minneapolis
<b>The Mayhew (624)</b>	The Heritage	Apartments	Minneapolis
<b>Munger Terrace</b>	Munger Terrace	Residential	Duluth
<b>Northwestern National Life Insurance Company Home Office</b>	Loring Office Building	Apartments	Minneapolis
<b>Schmidt Brewing Company Office, Keg House, and Well House #4</b>	Schmidt Brewing Company Office, Keg House, and Well House #4	Office / Retail	St. Paul
<b>Strong and Warner Company / Rayette Building</b>	Rayette Building	Residential / Commercial	St. Paul

Source: Part A Applications Submitted to the Minnesota Historical Society

The direct impact of Minnesota Historic Rehabilitation Tax Credit projects in FY 2013 is shown in table 2. Total project costs are the total costs as estimated by the developer. In economic impact analysis theory, acquisition costs do not create an economic impact. This is because they are simply a transfer of wealth (cash for land and/or a building). Therefore, acquisition costs are not included in the economic impact. Further, not all costs associated with the rehabilitation qualify for the tax credit. Column two in the table reflects the total qualifying project costs minus any acquisition costs.

**Table 2: Direct Impact of Fiscal Year 2013 Minnesota Historic Rehabilitation Tax Credit Projects**

<b>Total Estimated Rehabilitation Project Costs</b>	<b>Total Qualifying Rehabilitation Project Costs (Excluding Acquisition)</b>	<b>Estimated Minnesota Historic Rehabilitation Tax Credit</b>	<b>Number of Construction Employees</b>
\$100,955,813	\$80,764,650	\$15,986,575	785

Total estimated costs for the 15 projects total \$101.0 million. Excluding acquisitions and non-qualifying expenses, project costs are estimated at \$80.8 million. To complete these projects, developers anticipate hiring 785 construction workers. These employment estimates are for construction crew members only and do not account for architects, lawyers, and other professionals working for firms contracted by the developer.<sup>1</sup> These projects are being leveraged by an estimated \$16.0 million in tax credits and/or grants. Given these estimates, for every dollar of the Minnesota Historic Rehabilitation Tax Credit, private developers will be investing \$6.32 of their own funds.

<sup>1</sup> Estimates of employment created in architectural/engineering and law firms are indirect effects and are generated by the model. See the discussion of total impacts.

The total project costs, excluding acquisitions and non-qualifying expenses, are the direct effect of the Minnesota Historic Rehabilitation Tax Credit. The study area for this project is the state of Minnesota. Only construction spending that occurs in Minnesota can be entered into the model. Since the state is a diverse economy, it is assumed that the majority (90 percent) of construction-related purchases can be made in-state.<sup>2</sup> Therefore, the direct impact of the credit entered into the model is \$72.7 million.

### Indirect and Induced Effects Fiscal Year 2013

Using the direct impacts from above (table 2), \$72.7 million in direct impact was entered into an input-output model. Input-output models trace the flow of dollars throughout a local economy and can capture the indirect and induced, or ripple effects, of an economic activity. The input-output modeling software and data from IMPLAN (MIG, Inc) was used in this report.

Indirect effects are those associated with a change in economic activity due to business spending for goods and services. In this case, these are the changes in the local economy occurring because developers need to purchase construction materials (lumber, cement, equipment, for example) and construction-related services (architectural, law, engineering, etc.). These are business-to-business impacts.

Induced effects are those associated with a change in economic activity due to spending by the employees of businesses (labor) and by households. Primarily, in this study, these are economic changes related to spending by construction workers hired to perform the rehabilitation work. These are business-to-consumer impacts.

### Total Impact Fiscal Year 2013

The total economic impact of projects leveraged by the Minnesota Historic Rehabilitation Tax Credit in FY 2013 is an estimated \$138.8 million dollars. To produce \$138.8 million in output, 1,200 workers were employed and \$46.5 million in payments were made those employees. Total economic impact is comprised of direct, indirect, and induced impacts. These are each detailed in table 3.

- Direct impacts, determined using the process outlined, include an estimated \$72.7 million in new construction-related sales (output), 785 construction jobs, and \$23.1 million in payments to construction workers.
- Spending on construction-related materials creates indirect impacts. Indirect impacts from the tax credit total an estimated \$35.3 million in sales (output), including 215 jobs in all sectors of the economy and \$12.8 million in payments to those workers.

*The Minnesota Historic Rehabilitation Tax Credit supported \$138.8 million of economic activity in FY 2013.*

<sup>2</sup> The 90 percent local spending assumption is an estimate based on the knowledge and experience of the analyst. Any further specificity would require primary data collection. It is unlikely 100 percent of construction spending occurs in Minnesota. However, given the size of the study area economy, it appears reasonable the large majority of spending does occur in-state.

- Finally, labor spending creates induced impacts. Induced impacts from the tax credit total an estimated \$30.8 million in sales (output), including 200 jobs in all sectors of the economy and \$10.5 million in payments to those workers.

**Table 3: Total Economic Impact of Projects Leveraged by the Fiscal Year 2013 Minnesota Historic Rehabilitation Tax Credit**

	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
<b>Output (Sales)</b>	\$72,697,184	\$35,317,653	\$30,819,679	\$138,834,515
<b>Employment (FTE's)</b>	785	215	200	1,200
<b>Labor Income</b>	\$23,147,479	\$12,833,232	\$10,530,694	\$46,511,405

Estimates by the University of Minnesota Extension Center for Community Vitality

Provided the projects are completed as planned, the Minnesota Historic Rehabilitation Tax Credit granted to FY 2013 projects will total \$16.0 million. Therefore, for every state dollar of tax credit or grant allowed, \$8.68 in economic activity is generated in the state of Minnesota. This activity is mostly driven by additional investments by project developers, but also includes the ripple effects of construction-related spending.

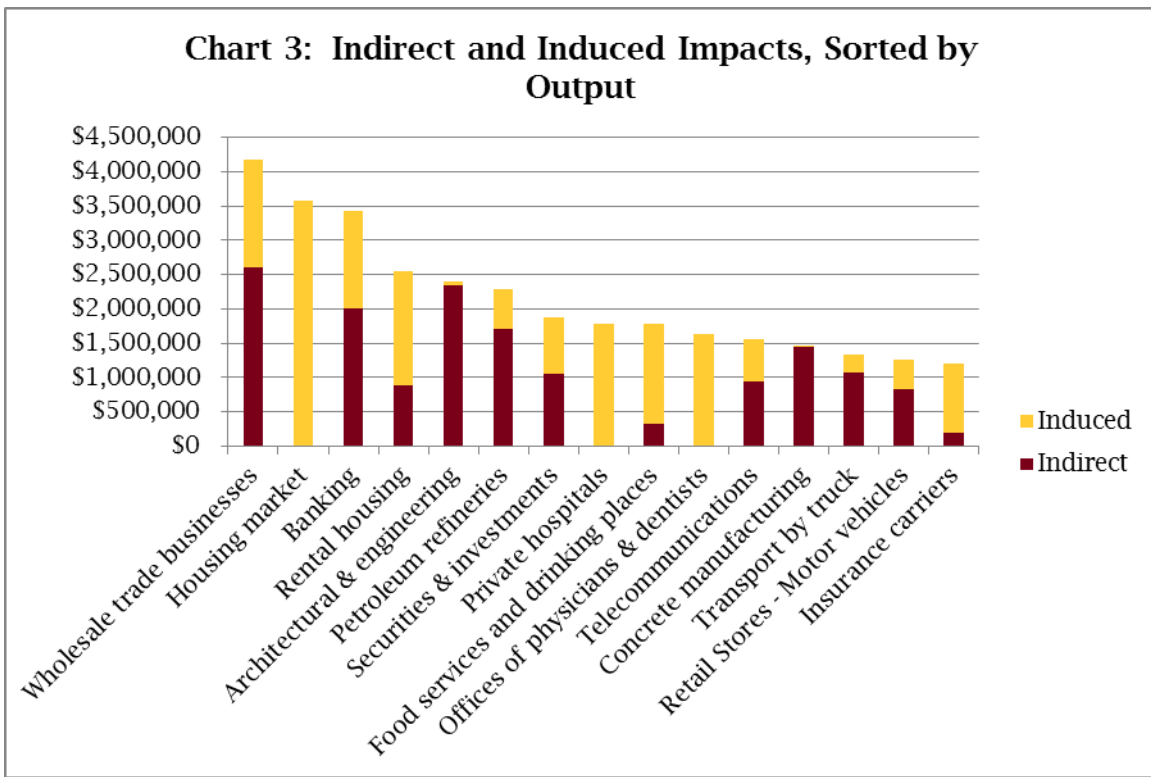
### **Top Industries Impacted**

The top fifteen industries impacted by projects of the FY 2013 Minnesota Historic Rehabilitation Tax Credit are shown in charts 3 and 4. Chart 3 illustrates the top five industries sorted by output and chart 4 sorted by employment. These charts do not include the direct impacts in the construction industries.

In terms of output, the magnitude of impacts of the Minnesota Historic Rehabilitation Tax Credit is highest in the wholesale trade, housing, banking, and architectural and engineering industries. The projects undertaken by the contractors will create \$4.2 million in activity in the wholesale trade industry. Of this, approximately half will be the result of spending by the contractors for supplies and services and half the result of spending by the employees of the contracting firms.

Not surprisingly, high indirect impacts are observed in the architectural and engineering industry, the wholesale trade industry, banking, and the concrete manufacturing industry. These industries are the core of the construction supply chain. They are also items that are typically available on a local basis.

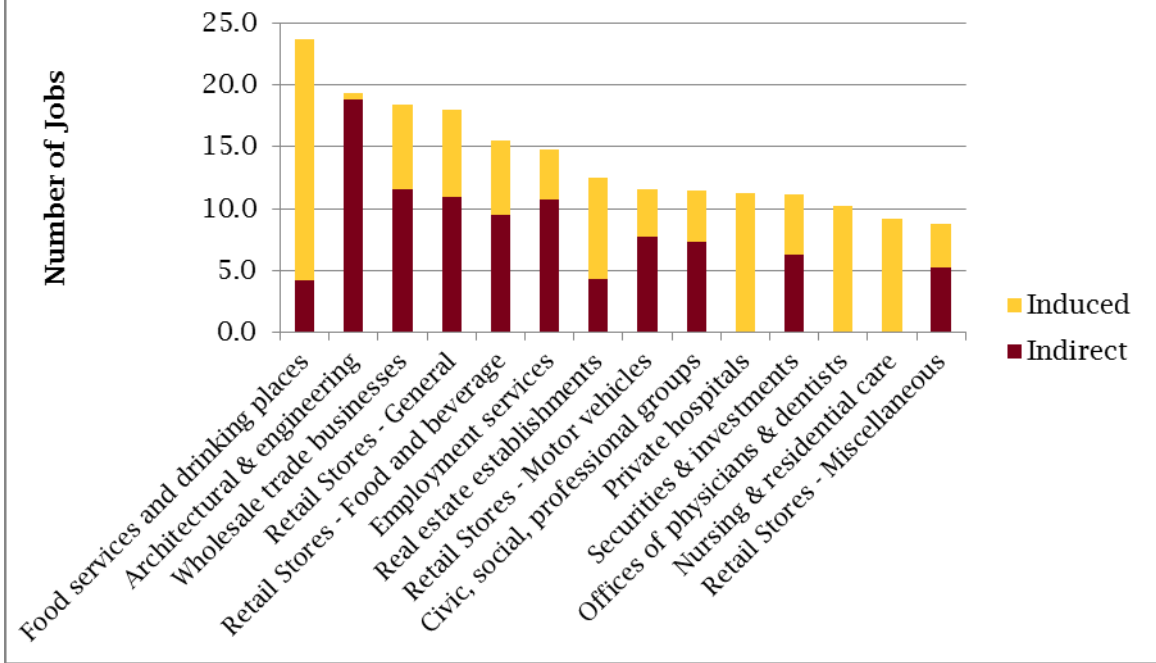
High induced impacts are in the housing market (both owner-occupied and rental) and health care (including hospitals, offices and physicians and dentists, and insurance carriers). These results are indicative of the average household's spending, which is often concentrated in housing and health care.



In terms of employment, the magnitude of impacts of the Minnesota Historic Rehabilitation Tax Credit is highest in the food services and drinking places industry, the architectural and engineering industry, and wholesale trade businesses. In the food services and drinking industry, approximately one-quarter of the impacts are derived from direct expenditures from contractors, perhaps if they provide food to their crew on occasion. Three-fourths of the impact is driven by spending of incomes by the contractors' employees.

As with the output impacts, indirect impacts are highest in industries in the supply chain of contractors (architects and engineers and wholesale suppliers, for example). Induced impacts are higher in industries which provide goods and services to employees of the contractors (retail and health care, for example).

**Chart 4: Top Induced and Indirect Impacts, Sorted by Employment**



## SUMMARY OF PAST RESEARCH

As mentioned, this is the third year University of Minnesota has quantified the economic contribution of the tax credit. This section summarizes the results of previous research into the credit. It also reports the total contribution of the tax credit for the three-year period.

### Total Impacts Fiscal Year 2011

Fourteen projects were included in the FY 2011 analysis. One of those projects, The Buzza Company Building, actually moved into FY 2012. The numbers shown in this report have been adjusted to reflect this change and are different from the previously published report.

The analysis showed project managers in fiscal year 2011 anticipated spending an estimated \$244.1 million locally to implement their projects (table 4). This includes hiring 1,500 construction and related workers and paying \$79.8 million in labor income. As a result of this direct spending triggered by the fiscal year 2011 Minnesota Historic Rehabilitation Tax Credit, total output in the state economy increased by an estimated \$429.9 million, including 2,880 jobs and \$143.7 million in labor income.

The Minnesota Historic Rehabilitation Tax Credit granted to these projects totaled \$49.1 million. Therefore, for every state dollar of tax credit or grant allowed, \$8.75 in economic activity is generated in the Minnesota. This activity is mostly driven by additional investments by project developers, but also includes the ripple effects of construction-related spending.

**Table 4: Total Economic Impact of Projects Leveraged by the Fiscal Year 2011 Minnesota Historic Rehabilitation Tax Credit**

	Direct	Indirect	Induced	Total
<b>Output (Sales)</b>	\$244,115,698	\$88,312,228	\$97,472,355	\$429,900,281
<b>Employment (FTE's)</b>	1,500	632	747	2,880
<b>Labor Income</b>	\$79,753,130	\$31,868,749	\$32,078,655	\$143,700,534

Estimates by the University of Minnesota Extension Center for Community Vitality

Note: Due to change an incorrect classification of one project (Buzza Building), these numbers have changed since publication of the initial report.

### Total Impacts Fiscal Year 2012

University of Minnesota Extension also analyzed the economic impact of the Minnesota Historic Rehabilitation Tax Credit for the fiscal year 2012. Sixteen projects were included in the FY 2012 analysis. The 16 projects planned to expend an estimated \$292.4 million on renovations and improvements (table 5). Contractors employed to complete the projects estimated they would hire 1,480 individuals to complete the projects.

The economic impact of the Minnesota Historic Rehabilitation Tax Credit projects in fiscal year 2012 was an estimated \$558.7 million in Minnesota. This impact includes \$180.5 million of labor income paid to the estimated 3,502 workers whose jobs were created as a result of the tax credit.

The Minnesota Historic Rehabilitation Tax Credit granted to these projects totaled \$69.7 million. Therefore, for every state dollar of tax credit or grant allowed, \$8.00 in economic activity is generated in the State of Minnesota. This activity is mostly driven by additional investments by project developers, but also includes the ripple effects of construction-related spending.

**Table 5: Total Economic Impact of Projects Leveraged by the Fiscal Year 2012 Minnesota Historic Rehabilitation Tax Credit**

	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
<b>Output (Sales)</b>	\$292,400,000	\$127,442,258	\$138,856,381	\$558,678,577
<b>Employment (FTE's)</b>	1,480	935	1,087	3,502
<b>Labor Income</b>	\$85,730,517	\$47,416,767	\$47,386,866	\$180,534,150

Estimates by the University of Minnesota Extension Center for Community Vitality

**Total Impacts Fiscal Years 2011, 2012, and 2013**

In the three years of the Minnesota Historic Rehabilitation Tax Credit, the credit has leveraged an estimated \$609.2 million in construction activity, including 3,765 jobs and \$188.6 million in payments to labor, the direct impacts shown in table 6. As a result of the spending on renovation projects, the tax credit has generated \$1.1 billion in output in the state's economy, 7,582 jobs, and \$370.7 million in labor income. Projects receiving Part II approval from NPS in fiscal years 2011, 2012, and 2013 requested credits and grants totaling \$134.5 million, which will be paid out over several years. Therefore, for every state dollar of tax credit or grant allowed in the two years, \$8.38 in economic activity was generated in Minnesota.

**Table 6: Total Economic Impact of Projects Leveraged by the Minnesota Historic Rehabilitation Tax Credit, Fiscal Years 2011, 2012, and 2013**

	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
<b>Output (Sales)</b>	\$609,212,882	\$251,072,139	\$267,148,415	\$1,127,413,373
<b>Employment (FTE's)</b>	3,765	1,782	2,034	7,582
<b>Labor Income</b>	\$188,631,126	\$92,118,748	\$89,996,215	\$370,746,089

Estimates by the University of Minnesota Extension Center for Community Vitality

Expenditures for fiscal year 2013 are lower than in previous years. It is important to note the decrease in activity is due to several large projects that were awarded credits in the first two years of the program.



## METHODOLOGY

Special models, called input-output models, exist to conduct economic impact analysis. There are several input-output models available. IMPLAN (Impact Analysis for PLANning, Minnesota IMPLAN Group)<sup>3</sup> 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. IMPLAN has some limitations and qualifications, but it is one of the best tools available to economists for input-output modeling. Understanding the IMPLAN tool, its capabilities, and its limitations will help 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 study, 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. The 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 corn, for example. The value of the corn is counted when it is sold to the mill, again when it is sold to the dairy farmer, again as part of the price of fluid milk, and yet again when it is sold as cheese. The value of the corn is built into the price of each of these items and then the sales of each of these items are added up to get total sales (or output).

### Employment

Employment includes full- and part-time workers and is measured in annual average jobs, not full-time equivalents (FTE’s). 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 corn example when the corn is sold to the mill, a certain percentage of the sale goes to the farmer for his/her labor. Then when the mill sells the corn as feed to the dairy farmer, it includes some markup for its labor costs in the price. When the dairy farmer sells the milk to the cheese manufacturer, he/she includes a value for his/her labor. These individual value increments for labor can be measured, which amounts to labor income. Labor income does *not* include double counting.

### 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.

---

<sup>3</sup> IMPLAN Version 3.0 was used in this analysis. The trade flows model with SAM multipliers was implemented.

### **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 (architectural, law, engineering, etc.).

### **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 to purchase housing, buy groceries, and go 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 those 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.

## CONCLUSION

In April 2010, the Minnesota Historic Rehabilitation Tax Credit was signed into law. The law promotes private investment in historic properties with the goal of stimulating job growth, increasing the tax base, and revitalizing communities. The Minnesota State Legislature has asked for an annual report answering the question “What is the economic impact of projects leveraged by the Minnesota Historic Rehabilitation Tax Credit.” This report details the results of the analysis for the fiscal year 2013.

Fifteen renovation projects were deemed eligible for the Minnesota Historic Rehabilitation Tax Credit in fiscal year 2013. Project developers and contractors anticipate spending \$72.7 million in local, qualified, and non-acquisition related construction expenditures. The developers plan to hire 785 workers to complete the work and pay \$23.1 million in labor income. These are the direct effects of the credit.

As project developers and contractors spend money in the state to complete their projects, additional spending is generated, which is measured as economic impact. The economic impact of projects currently leveraged by the Minnesota Historic Rehabilitation Tax Credit is an estimated \$138.8 million. The projects and related-activity spurred by the credit supports 1,200 jobs which pay \$46.5 million in compensation.

Provided the projects are completed as planned and meet the requirements of the program, an estimated \$16.0 million will be awarded by the Minnesota Historic Rehabilitation Tax Credit to leverage these projects. For every state dollar of tax credit or grant allowed, \$8.68 in economic activity will be generated in Minnesota. This activity is mostly driven by additional investments by project developers, but also includes the ripple effects of construction-related spending.

In the three years of the Minnesota Historic Rehabilitation Tax Credit, the tax credit and grant has generated an estimated \$1.1 billion in output in the state’s economy, supported 7,582 jobs, and generated \$370.7 million in labor income. Credits and grants allocated by the program in fiscal years 2011, 2012, and 2013 total \$134.5 million. Therefore, for every state dollar of tax credit or grant allowed, \$8.38 in economic activity was generated in the state of Minnesota over the three year period.

Minnesota’s construction industry will benefit most directly from projects completed using the Minnesota Historic Rehabilitation Tax Credit. However, other construction-related industries will also benefit from the projects. These include the housing market, wholesale trade, and the architectural, engineering, and related services industry. Finally, the wages earned by construction workers will spur additional economic activity in the food service and beverage industry and the health care industry.

This is a conservative analysis, focused primarily on construction-related spending. The economic benefit of any potential new commercial activity is not included in this study. Further, this study does not measure any non-market benefits, such as improved community atmosphere, aesthetics, or historic preservation significance.

---

*For every state dollar of tax credit or grant allowed, \$8.68 in economic activity is generated in Minnesota. In fiscal year 2013, projects leveraged by the Minnesota Historic Rehabilitation Tax Credit supported 1,200 jobs in the state.*

---