Economic Impact of Minnesota Housing's Investments

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Summary

Minnesota Housing's investments leverage significant funding from other sources and have a substantial impact on the economy, which is critical given the nation's painfully slow recovery from the Great Recession.

- Between 2007 and 2010, Minnesota Housing and its partners spent on average $318 million per year on construction and rehabilitation projects, with $137 million provided by Minnesota Housing and the other $180 million coming from the agency's partners as leveraged funding. The large amount of leveraging significantly increases the impact of the agency's investments.
- On top of the direct output generated by the expenditure of the $318 million, the investments led to an additional $238 million in output as these expenditures made their way through the economy – construction suppliers (windows, siding, plumbing, etc.) increased their production and workers spent their paychecks. Each dollar of Minnesota Housing's spending generated an additional 75 cents of indirect and induced output.
- These expenditures annually supported about 3,745 Minnesota jobs in residential construction, related industries, and the overall economy. To put this in context, during the second quarter of 2010, Minnesota had over 2.5 million jobs with over 33,000 jobs in the residential construction industry. The country's economic struggles have hit the residential construction industry particularly hard. Between the second quarter of 2005 and 2010, the number of residential construction jobs declined by 26,000, or 43.8% in Minnesota. (2005 was the peak for residential construction employment.) The percentage decline was twice as high as any other industry group.
- Minnesota Housing's job-to-spending ratio of 11.8 jobs per million dollars of spending is higher than most other industries.

Background

Minnesota Housing's mission is to finance and advance affordable housing opportunities for low and moderate income Minnesotans to enhance quality of life and foster strong communities. Using bond sale proceeds, housing tax credits, agency resources, and appropriated funds, the agency offers a wide range of housing-related assistance, including:

- Mortgages with below-market interest rates,
- Entry cost assistance for homebuyers (e.g. down payment assistance),
- Education, counseling, and training for homebuyers and homeowners,
- Rental assistance payments,
- Federal housing tax credits, permanent financing, and deferred loans for the development of affordable rental housing,
- Deferred and low-interest loans for the rehabilitation and improvement of existing owner-occupied homes and multifamily rental housing,
- Asset management funds/loans and operating subsidies for owners of affordable rental housing, and
- Assistance for building the capacity of housing nonprofit organizations.

While these programs improve the economic well-being of low- and moderate-income households by reducing their housing costs, they also provide many social benefits, such as providing individuals and families with a stable home environment to carry out their lives, support their families, and increase their quality of life. Furthermore, the programs stimulate economic activity. For example, buildings are constructed or renovated, construction materials are purchased, workers are hired, and paychecks are spent on goods and services.

To assess the impact that Minnesota Housing has on the state's economy and jobs, Minnesota Housing provided the Department of Employment and Economic Development (DEED) with data on the agency's construction and rehabilitation expenditures. DEED entered the data into a nationally recognized economic impact model (IMPLAN), which estimated the number of jobs and economic activity supported in Minnesota by Minnesota Housing's spending. The analysis does not include the impact that reducing families' housing costs would have on the economy by allowing them to spend more money on other necessities. The analysis focuses on jobs created from bricks and mortar construction and rehabilitation.

The IMPLAN analysis is an input-output assessment. Based on an entity's spending levels in various industry categories, the model estimates the resulting economic benefits, including:

- Output -- production of goods and services expressed as a dollar value,
- Value Added – contributions to the Minnesota economy, and
- Employment – the number of Minnesota jobs created or supported.[1]

The analysis also involves three types of effects.

- Direct effects are the economic activity and employment generated by Minnesota Housing's spending. For example, builders hire construction workers and purchase building materials.
- Indirect effects are the economic activity and employment generated as the inputs to the housing industry (lumber, dry wall, windows, shingles, pipes, fixtures, etc.) are produced.
- Induced effects are the economic activity and employment generated as the people who gained employment and income (including profits) as a result of the direct and indirect effects spend their income on goods and services.

The model not only captures the direct work of constructing and rehabilitating housing in Minnesota but also the indirect effects as housing construction stimulates economic activity in related Minnesota industries, such as wood products. Furthermore, it includes spending by the people who gained employment and earned profits because of this economic activity.

To estimate the economic activity generated by Minnesota Housing's spending, the analysis include two different levels of spending:

- Minnesota Housing funds by themselves,
- Minnesota Housing funds plus funds provided by other sources for the same project, including property owners and other partners.

[1] The model can also estimate the tax revenues generated by these activities. Because the Minnesota Department of Revenue is responsible within Minnesota state government for estimating the tax implications of policies and activities, DEED defers this type of analysis to the Department of Revenue.

The first level of spending captures the funds spent directly by Minnesota Housing, while the second category captures the Minnesota Housing funds plus additional funds leveraged to supplement Minnesota Housing's funding.

Expenditure data was collected for five types of Minnesota Housing's activities:

- Multifamily new construction,
- Multifamily rehabilitation,
- Multifamily projects with mix of new construction and rehabilitation (including conversion),
- Single-family new construction, and
- Single-family rehabilitation and home improvement.

These five categories create economic activity and employment not only in construction-related industries but also in ancillary areas linked to a construction or rehabilitation project, including real estate, legal, insurance, etc.

This study does <u>not</u> include the economic activity generated by reducing the housing costs of low- and moderate-income households. For example, if a lower-income family bought a $120,000 house with Minnesota Housing assistance ($3,000 of down payment assistance and a mortgage interest rate that is one-half of a percentage point below market), the family's annual housing costs would be $630 lower than without the assistance. This savings would increase the family's disposable income to spend on other necessities, which would generate "induced" jobs and economic activity. Nevertheless, this report only assesses the jobs and economic activity created through construction- and rehabilitation-related spending. By excluding rent assistance and the purchase of existing homes with affordable mortgages, a significant share of Minnesota Housing's activity is excluded. For example, in 2010, single-family, first-lien mortgages for existing homes accounted for $228 million of Minnesota Housing's $717 million of funding.

The analysis also excludes other types of housing expenditures that do not lead directly to jobs. These types of expenditures include assistance to multifamily property owners in the form of:

- Operating subsidies, and
- Debt restructuring.

Expenditure data was collected for the most recent four federal fiscal years (2007-2010). The analysis results apply to the average year during that four year period.

Analysis Results

As shown in the right section of Table 1, Minnesota Housing and its partners spent on average $318 million on construction and rehabilitation projects each year between 2007 and 2010. This spending added about $268 million to the Minnesota economy ("value added" column) and supported roughly 3,745 jobs ("employment" column) each year.

Table 1: Construction and Rehabilitation Projects Funded by Minnesota Housing, Annual Average 2007-10

	Minnesota Housing			Other Sources			Total		
Expenditures	$137 million			$180 million			$318 million		
Impact	**Employ-ment**	**Output**	**Value Added**	**Employ-ment**	**Output**	**Value Added**	**Employ-ment**	**Output**	**Value Added**
Direct	917	$121 million	$61 million	931	$140 million	$69 million	1,847	$261 million	$130 million
Indirect	402	$51 million	$29 million	480	$61 million	$35 million	882	$113 million	$64 million
Induced	488	$60 million	$35 million	528	$65 million	$38 million	1,017	$125 million	$74 million
Total	1,806	$232 million	$126 million	1,939	$266 million	$142 million	3,745	$499 million	$268 million

The $318 million of construction and rehabilitation spending fell into three types of expenditures:

- Construction and rehabilitation costs $ 206 million
- Soft costs (e.g. real estate, legal, insurance) $ 56 million

    Subtotal: Construction/Rehabilitation and Soft Costs $ 261 million

- Acquisition costs $ 56 million
- Total $ 318 million

Because acquisition of property is a transfer payment (an exchange of money for an asset), it does not create jobs or economic output. However, the remaining $261 million (construction/ rehabilitation and soft costs) contributes to the economy. The $261 million of spending generates, not surprisingly, $261 million of *direct* output (see "output" column in Table 1), which leads to another $113 million of *indirect* output. Finally, the direct and indirect output leads to another $125 million of *induced* output. The $261 million of direct output leads to $499 million of total output (direct, indirect, and induced), which is an output multiplier of 1.91. Each dollar of direct output (spending on construction/rehabilitation and soft costs) leads to another 91 cents of indirect and induced output. However, when examining overall spending, not just construction/rehabilitation and soft costs, the output multiplier needs to be interpreted carefully. Because some of the overall spending on construction and rehabilitation projects is for property acquisition, not all of the spending contributes to indirect and induced output. Taking into account acquisition spending, each dollar spent on construction and rehabilitation projects overall leads to 75 cents of indirect and induced output.

The $499 million of output does not represent additional economic activity in Minnesota. A construction company may buy bathroom sinks that are produced in Wisconsin. The additional economic activity that occurs in Minnesota is the *value added* shown in Table 1. The $318 million of spending adds $268 million to the Minnesota economy. (If acquisition expenditures are excluded, $261 million of spending on construction/rehabilitation and soft costs adds $268 million to the Minnesota economy.) Economic activity occurring outside of Minnesota is a primary reason why the $268 value added figure is less than the $499 million output figure. The $268 million of economic activity in Minnesota supports roughly 3,745 Minnesota jobs each year.

As the two sections on the left of Table 1 show, over the last four years, Minnesota Housing annually spent about $137 on construction-related spending. The agency's partners (including property owners) annually spent another $180 million on these projects. Table 1 also shows the split in jobs and value added between Minnesota Housing's and its partners' spending.

The Tables 2 through 6 break the results of the employment and value added analysis into the following categories:

- Multifamily new construction,
- Multifamily rehabilitation,
- Multifamily projects with mix of new construction and rehabilitation (including conversion),
- Single-family new construction, and
- Single-family rehabilitation and home improvement.

Table 2: Multifamily New Construction Funded by Minnesota Housing, Annual Average 2007-10

	Minnesota Housing		Other Sources		Total	
Expenditures	$31 million		$96 million		$127 million	
Impact	**Employment**	**Value Added**	**Employment**	**Value Added**	**Employment**	**Value Added**
Direct	168	$13 million	508	$39 million	676	$52 million
Indirect	104	$7 million	321	$23 million	425	$30 million
Induced	103	$7 million	313	$23 million	416	$30 million
Total	375	$28 million	1,143	$85 million	1,517	$112 million

Table 3: Multifamily Rehabilitation Funded by Minnesota Housing, Annual Average 2007-10

	Minnesota Housing		Other Sources		Total	
Expenditures	$34 million		$60 million		$94 million	
Impact	**Employment**	**Value Added**	**Employment**	**Value Added**	**Employment**	**Value Added**
Direct	208	$14 million	252	$19 million	460	$33 million
Indirect	73	$5 million	91	$7 million	164	$12 million
Induced	104	$8 million	126	$9 million	230	$17 million
Total	385	$27 million	468	$34 million	853	$61 million

Table 4: Multifamily New Construction/Rehabilitation Mixed Projects (including Conversion) Funded by Minnesota Housing, Annual Average 2007-10

	Minnesota Housing		Other Sources		Total	
Expenditures	$9 million		$16 million		$24 million	
Impact	**Employment**	**Value Added**	**Employment**	**Value Added**	**Employment**	**Value Added**
Direct	55	$4 million	100	$7 million	155	$11 million
Indirect	23	$2 million	40	$3 million	63	$5 million
Induced	29	$2 million	53	$4 million	82	$6 million
Total	107	$8 million	193	$14 million	299	$22 million

Table 5: Single-Family New Construction Funded by Minnesota Housing, Annual Average 2007-10

	Minnesota Housing		Other Sources		Total	
Expenditures	$28 million		$3 million		$31 million	
Impact	**Employment**	**Value Added**	**Employment**	**Value Added**	**Employment**	**Value Added**
Direct	157	$12 million	17	$1 million	175	$13 million
Indirect	91	$7 million	10	$1 million	101	$7 million
Induced	89	$6 million	10	$1 million	98	$7 million
Total	336	$24 million	37	$3 million	374	$27 million

Table 6: Single-Family Rehabilitation and Home Improvement Funded by Minnesota Housing, Annual Average 2007-10

	Minnesota Housing		Other Sources		Total	
Expenditures	$36 million		$6 million		$42 million	
Impact	**Employment**	**Value Added**	**Employment**	**Value Added**	**Employment**	**Value Added**
Direct	329	$19	54	$3	382	$22
Indirect	111	$8	18	$1	129	$9
Induced	164	$12	27	$2	191	$14
Total	604	$39 million	98	$6 million	703	$45 million

As Tables 2 through 6 show, Minnesota Housing spends similar amounts of money on multifamily projects as single-family projects, $74 million compared with $64 million. However, the multifamily projects leverage far more outside funding, $171 million compared with $9 million. Multifamily projects often require funding from several different sources to make the financing work. However, the single-family funding comes primarily from loan programs (first-lien mortgages and home improvement loans), where Minnesota Housing finances most of the work with a small contribution from the homeowner. (With respect to single-family first-lien mortgages, the analysis only includes loans where the homeowners purchased newly constructed homes, assuming the additional demand for these newly constructed homes would not have existed without Minnesota Housing's financing.[2]) Under the single-family categories, both new construction and rehabilitation, the Community Revitalization (CRV) program leverages more outside funding than the first-lien mortgages and home improvement loans.

As shown in Table 7, single-family rehabilitation and home improvement programs generally support more jobs per million dollars of spending than the other programs. They have a higher job support ratio because home improvement projects do not involve property acquisition, which does not support jobs.

[2] The analysis excludes mortgages for the purchase of existing homes, which are the vast majority of the mortgages, particularly in the current market.

Table 7: Job Support Ratio

Activity	Expenditure Level – Construction/Rehab, Soft, and Acquisition	Jobs Supported	Jobs per Million $
Multifamily Construction	$127 million	1,517	12.0
Multifamily Rehabilitation	$94 million	853	9.1
Multifamily Mixed	$24 million	299	12.3
Single-Family Construction	$31 million	374	12.2
Single-Family Rehabilitation	$42 million	703	16.8
All Activities	$318 million	3,745	11.8

As a point of reference, of the 440 industries included in the IMPLAN model, only 154 (or 35%) have a job-to-spending ratio greater than 11.8, the overall ratio for Minnesota Housing.

Need to Create More Residential Construction Jobs

The residential construction industry has lost a higher percentage of jobs than any another sector in Minnesota. As Table 8 shows, between 2005 and 2010, the number of employees in Minnesota's residential construction industry dropped by 43.8 percent (or 26,178 employees). The largest declines in other industries were 20.6 percent for non-residential construction and 15.9 percent for manufacturing. Additional investments in housing would help put many of these Minnesotans back to work. For example, if Minnesota Housing and its partners annually spent an additional $50 million on multifamily new construction projects ($12 million from Minnesota Housing and $38 million from its partners, which is a typical leverage ratio); about 600 jobs would annually be supported in residential construction, related industries, and the general economy.

Table 8, Change in Minnesota Employment, 2nd Quarter 2005 to 2nd Quarter 2010

Industry	2005	2010	2005-10 Change	Percentage Change
All Industries	2,649,920	2,578,487	-71,433	-2.7%
Natural Resources and Mining	23,277	24,580	1,303	5.6%
Construction	138,522	96,139	-42,383	-30.6%
Residential Construction (including specialty trades)	59,727	33,549	-26,178	-43.8%
Non-Residential Construction	78,795	62,590	-16,205	-20.6%
Manufacturing	346,143	291,168	-54,975	-15.9%
Trade, Transportation and Utilities	547,195	507,557	-39,638	-7.2%
Information	63,281	57,905	-5,376	-8.5%
Financial Activities	178,266	170,154	-8,112	-4.6%
Professional and Business Services	306,262	314,896	8,634	2.8%
Education and Health Services	578,024	647,677	69,653	12.1%
Leisure and Hospitality	262,347	256,940	-5,407	-2.1%
Other Services	87,544	83,135	-4,409	-5.0%
Public Administration	118,998	128,046	9,048	7.6%

NOTES: Data excludes proprietors and the self-employed.
SOURCE: Minnesota Housing Analysis of data from the Department of Employment and Economic Development's Quarterly Census of Employment and Wages; http://www.deed.state.mn.us/lmi/tools/qcew/default.aspx.

Affordable housing investments not only improve quality of life and foster stable communities; they also create jobs, particularly in an industry that has been hit very hard by the “Great Recession” and painfully slow recovery.