# Building a Foundation for Success The Economic Impact of the Midlands Housing Trust Fund on Central South Carolina



#### Developed by:

Division of Research Moore School of Business University of South Carolina July 2015



# Study Prepared by:

Dr. Joseph C. Von Nessen
Research Economist, Division of Research

joey.vonnessen@moore.sc.edu

Prepared for the Midlands Housing Trust Fund

# **Executive Summary**

The economic benefits of housing are among the most well known and widely cited of any industrial sector. Not only does the housing industry encompass approximately 15 percent of all economic activity in the United States and generate employment for millions, but individuals who live in stable housing environments also experience numerous economic and social benefits. These include, for example, the ability to build wealth, to increase overall health and well being, and to reduce neighborhood crime rates. Access to affordable housing options is, therefore, a crucial component of maintaining a healthy and thriving regional economy.

In order to help maximize the number of Midlands residents who can take advantage of the various economic and social benefits of housing, the Midlands Housing Trust Fund (MHTF) was created to provide financing, technical assistance, and advocacy for the construction, rehabilitation, and preservation of affordable housing throughout central South Carolina. The MHTF also offers fee-based consulting services for targeted, customized technical assistance to developers and municipalities who are planning, constructing, or rehabilitating housing and community development projects in low- to moderate-income communities.

This report quantifies the total economic impact of all activities associated with the MHTF on the seven-county Midlands region of South Carolina. This impact will incorporate not only the direct job and income creation that occurs from all new construction and rehabilitation projects funded through the MHTF, but also the additional economic activity that results from the economic multiplier effect – that is – the additional rounds of spending activity that occur throughout the local economy as a result of the initial increase in construction activity. The main findings of this report are as follows:

In the Midlands of South Carolina, there is a clear need for affordable housing options. Overall, approximately 33 percent of households experience "housing cost-burden," meaning that they pay more than 30 percent of their household income on housing costs. Nearly 41 percent of all households that either own or rent their dwelling earn 80 percent or less of the median income in South Carolina (i.e., these households earn \$35,000 per year or less). This equates to over 95,000 households in Lexington and Richland counties alone.

- Since its inception in 2011, the MHTF has helped finance \$7.6 million in affordable housing initiatives \$5.6 million in new construction projects and \$2.0 million in rehabilitation efforts for existing housing. Over the next five years, the MHTF seeks to help finance an additional \$23 million for these two initiatives 43 percent of which is already sponsored.
- The total <u>annual</u> economic impact of the MHTF on the Midlands of South Carolina is \$4.8 million. This figure reflects the dollar value of all final goods and services produced in the Midlands region that can be attributed (directly or indirectly) to all new construction and rehabilitation projects funded through the MHTF. This impact corresponds to approximately 33 jobs and \$1.4 million in labor income for Midlands residents.
- Because of new spending activity on household-related goods that typically accompany a move from one housing unit to another, there are additional economic impacts that arise from the MHTF initiatives known more generally as "move-in effects." The affordable housing initiatives supported by the MHTF currently generate annual move-in effects of approximately \$61,964, a value that will increase to \$523,544 over the next five years from new initiatives currently in the planning phases.
- The total economic activity supported by the MHTF through its various affordable housing initiatives also generates an increase in tax revenue for the state of South Carolina. The total estimated increase in annual state tax revenue that arises from the ongoing operations of the MHTF is \$101,704. By extension, the construction and rehabilitation projects currently in the planning phases have the potential to generate nearly \$1 million in additional revenue for the state of South Carolina over the next five years. This contribution has the potential to increase significantly as the operations of the MHTF expand over time.

# **Table of Contents**

Executive Summary	3
Section I – Introduction	6
Section II – Social and Economic Benefits of Affordable Housing	8
Health Economic Activity The Effect of Foreclosures	10
Section III – The Local Need for Affordable Housing	12 13 13
Section IV – The Economic Impact of the MHTF on the Midlands of South  Carolina	
Methodology  Table 4 – Total Dollar Value of MHTF Affordable Housing Efforts  Primary Results	<b>1</b> 4 16
Table 5 – Economic Impact of the MHTF on the Midlands of South Carolina  Table 6 – Economic Impact of the MHTF on the Midlands of South Carolina by Industrial Sector	17
Table 7 – Projected Future Economic Impact Estimates  Table 8 – Projected Economic Impact of the MHTF on the Midlands of South  Carolina by Industrial Sector	19
The Move-In Effect	
Figure 2 – U.S. Average Spending Activity of Movers vs. Non-Movers	21
Section V – Conclusion	23
Deferences	2

#### Section I - Introduction

The housing industry is one of the primary drivers of economic growth in the United States. Housing markets represent a sizable *economic footprint*, encompassing approximately 15 percent of all economic activity in the U.S. and generating millions of jobs across the country. In addition, individuals and families who live in stable housing environments experience numerous economic and social benefits. For example, homeownership provides a means to establish a credit history and to build wealth for the future. In the social realm, stable housing environments lead to better school performance among children, increased health and well being for families, and reduced neighborhood crime rates.

Access to affordable housing options is one component of maintaining a healthy and thriving regional economy. In South Carolina, approximately 33 percent of households experience a "housing cost-burden," meaning that they pay more than 30 percent of their household income on housing costs. Across the state, approximately 65 percent of citizens have subprime credit, which limits their ability to qualify for home mortgages. In addition, banks have tightened their lending activities in the wake of the 2008 recession, making it harder to obtain financing for housing development and limiting options for working poor individuals and families to qualify for home mortgages. There are also fewer federal dollars available for affordable housing initiatives, which forces communities to find new ways to support housing development for their low- and moderate-income citizens. These facts all illustrate a need for affordable housing options.

In order to address this need and to help maximize the number of Midlands residents who can take advantage of the various economic and social benefits of housing, the Midlands Housing Trust Fund (MHTF) was created to provide financing, technical assistance, and advocacy for the construction, rehabilitation, and preservation of affordable housing throughout central South Carolina.<sup>2</sup> Originally developed as an initiative of the United Way of the Midlands, the MHTF is now a revolving loan fund that lends to housing developers who produce housing units designed for households earning less than 80 percent of the median income in the Midlands region.

<sup>&</sup>lt;sup>1</sup> Source: National Association of Homebuilders; this percentage denotes construction and all housing related service industries

<sup>&</sup>lt;sup>2</sup> In this report, the terms "Midlands region" and "central South Carolina" are defined as encompassing the following seven counties: Lexington, Richland, Kershaw, Fairfield, Calhoun, Orangeburg, and Newberry

The MHTF represents a public/private partnership that generates revenue through a variety of measures. The capital to establish the initial trust fund has been acquired through fundraising efforts geared towards private banks, non-profit organizations, local government, and private foundations. The MHTF also has the capacity to generate revenue through interest earned on loans, fees associated with loan applications, as well as fee-based consulting services for targeted, customized technical assistance to developers and municipalities who are planning, constructing, or rehabilitating housing and community development projects in low- to moderate-income communities.

The MHTF is currently certified by the S.C. Department of Commerce as a Community Development Financial Institution (CDFI). The MHTF will apply for CDFI certification from the U.S. Department of the Treasury (DOT) in 2016, which will enable it to be eligible for Financial Assistance (FA) financial support from the DOT. This federal funding source for affordable housing development has been previously unavailable to the Midlands region because there was no agency eligible to receive it prior to the formation of the MHTF.

The purpose of this study is to specifically quantify the economic impact of all activities associated with the MHTF on the Midlands of South Carolina. This impact will incorporate not only the direct job and income creation that occurs from all new construction and rehabilitation projects funded through the MHTF, but also the additional economic activity that results from the economic multiplier effect – that is – the additional rounds of spending activity that occur throughout the local economy as a result of the initial increase in construction activity. In addition, these estimates will incorporate "move-in effects," which refer to economic impacts arising from spending activities that typically accompany a household move from one housing unit to another. Finally, these estimates will be used to determine the additional tax revenue generated from all new economic activity for the state of South Carolina.

This study begins in Sections II and III by providing a detailed review of the major economic and social benefits of housing and by specifically quantifying the need for affording housing in the Midlands region. Section IV then estimates the economic impact of the MHTF on the Midlands region of South Carolina, which includes a description of all direct, indirect, and induced effects. This is followed by an analysis of the positive implications of these economic impact estimates for the state of South Carolina's tax base. Finally, Section V provides a brief conclusion and synopsis of all results.

## Section II - Social and Economic Benefits of Affordable Housing

Affordable housing initiatives have the ability to provide many advantages to a local region. Typically, these advantages are broken down into three primary categories: education, health, and economic activity. Affordable housing helps to prevent low- and moderate-income families from experiencing a housing cost-burden, which is defined as a situation in which a household pays more than 30 percent of its income on housing costs. By reducing involuntary resident mobility, whether due to eviction, inability to make rent payments, or a desire to avoid unhealthy living conditions, access to affordable housing can help to benefit households in the form of improved school performance and improved health. In addition, affordable housing construction can increase local economic activity through expenditures on construction labor, materials, and services in the local economy. In some cases, access to affordable housing can also increase regional competitiveness as well as adjacent property values.

#### Education

There is a large base of research that clearly documents how access to affordable housing can improve educational outcomes among residents to the extent that it reduces involuntary mobility of low-income households. Involuntary mobility typically results from a desire to avoid unhealthy or unpleasant living conditions, eviction, or the inability to make unaffordable rent payments. There are a number of ways in which frequent family mobility translates into poor academic performance.

Frequent mobility can disrupt social connections among children, parents, and teachers that are often linked to educational success.<sup>3</sup> Changing schools also subjects children to discontinuity in academic and social expectations, requiring an adjustment period in which academic performance may suffer.<sup>4</sup> Living in substandard housing often increases exposure to environmental hazards that can worsen health, which inevitably undermines learning and leads to increases in school absenteeism. Homelessness is also strongly correlated with poor school performance. These poor outcomes are not limited to one type of student, but rather span across all grade levels and racial backgrounds. Further, these problems worsen as the frequency of moves increases.<sup>5</sup> Poor educational performance

<sup>&</sup>lt;sup>3</sup> Swanson (1999)

<sup>&</sup>lt;sup>4</sup> Burkham (2009)

<sup>&</sup>lt;sup>5</sup> Mantzicopoulos (2000)

that is associated with frequent moves is usually measured by overall achievement, the likelihood of repeating a grade, and the likelihood of dropping out.

#### Health

Without an adequate supply of affordable housing, families may be more likely to live in poor quality housing that presents hazards to their health. Research has shown that when families on a waiting list for affordable housing assistance were evaluated against a comparison group that was not facing a *housing cost-burden*, these families were exposed to higher levels of environmental hazards or other factors that increase the likelihood of injury or otherwise impair health. For example, Sharfstein (2001) documents that groups awaiting affordable housing were more likely to have encountered rats, gone without heat, experienced the absence of running water, lived with broken toilets, and seen peeling paint. According to a comprehensive study on the impact of affordable housing on health by the Center for Housing Policy, "well-constructed and managed affordable housing developments can reduce health problems associated with poor quality housing by limiting exposure to allergens, neurotoxins, and other dangers."

In addition to increasing physical wellbeing, access to affordable housing can also improve health by freeing up financial resources to pay for health care services. The Center for Housing Policy reported in 2011 that households that spend more than half of their income on housing spend only 4.2 percent of their income on healthcare and insurance compared with 9 percent allocated by households that spend less than 30 percent of their income on housing. This result holds even when controlling for family structure, education, location, and race.

Additional research conducted by the Center for Housing Policy has shown that after controlling for demographic characteristics, children receiving rent subsidies had higher birth weights compared to similar children in households without rental assistance. This implies that affordable housing increases poor households' ability to meet basic nutritional needs of pregnant mothers and their children. Family mobility has also been linked to more general social problems. Children who move three or more times double their

<sup>&</sup>lt;sup>6</sup> Cohen (2011)

chances of having emotional and behavioral problems relative to those who never moved, including depression, hyperactivity, peer conflict, and antisocial behavior.

#### **Economic Activity**

A third benefit of affordable housing initiatives lies in the economic advantages to a local region. In Section IV below, the economic impact of new construction and rehabilitation efforts that occur through affordable housing initiatives facilitated by the MHTF will be quantified along with all associated economic multiplier effects. However, there also two primary *qualitative* economic benefits that a region may experience as a result of residents having better access to affordable housing initiatives.

The first of these is the impact on *regional competiveness*. The availability of affordable housing near areas with relatively high demand for labor is an important factor to many employers considering new regions in which to locate. According to Wardrip, et al. (2011), "while few studies have directly measured the role of affordable housing on employee attraction and retention, formal and informal surveys consistently demonstrate its perceived role in a vibrant community." In other words, all else being equal, affordable housing can affect a region's ability to attract and retain a workforce. This, in turn, has implications for the ability to attract companies to that region.

The second qualitative economic benefit that can arise from affordable housing initiatives is the increase in adjacent property values. This usually occurs when existing housing units in distressed communities are repaired and revitalized, which can then directly lead to higher property values for adjacent structures in those communities. Of course, the extent of any positive return to neighboring properties depends on the specific nature of the community. According to Nguyen (2005), "...current research does not support a definitive conclusion about the relationship between affordable housing and property values."

#### The Effect of Foreclosures

Affordable housing is not solely a problem for families directly involved with being able to find or stay in their homes. Foreclosures, which result from the inability of a household to pay its mortgage, often negatively affect neighboring property values and also result in vandalism and disinvestment. According to Schuetz et al. (2015), negative externalities can include visual blight, attracting crime, and sending negative signals about a neighborhood's future to current residents and future investors. Past research has also shown that foreclosures can have a fairly sizeable negative spillover effect on house prices for other properties. Lin et al. (2009) estimate in their 2006 sample that there can be an up to 8.7 percent discount on neighborhood property values for homes located roughly in a 10 block radius of foreclosed properties with the effect gradually dropping over five years and mediated by housing cycles.

Zielenbach (2003) used in-depth interviews at two sites in Milwaukee and Seattle to go beyond standard quantitative analysis of the benefits of spillover effects. He finds that the replacement of substandard public housing with affordable housing options contributed positively to perceptions about future economic growth and some residential and commercial investment in the surrounding neighborhoods.

# Section III - The Local Need for Affordable Housing

It is clear that stable housing has benefits not only for the individuals in the household but also spillover effects for the entire community. What is the extent of the need for affordable housing in the MHTF-served region and the state of South Carolina as a whole?

In the United States more than 48.8 million (15.8 percent) of individuals are considered to be living in poverty. Within South Carolina, that number is approximately 858,500 or about 18.5 percent. For the seven county area served by the MHTF, the percentage of the population considered to be living in poverty is slightly lower than the statewide average at about 17.5 percent, but there is significant variation amongst the counties – from a high of 25.7 percent in Orangeburg to a low of 12.8 percent in Lexington. Table 1 highlights these poverty estimates for the Midlands region and Figure 1 displays county-level poverty levels across South Carolina.

Table 1 – National and Regional Poverty Estimates

Region	Population in Poverty	<b>Total Population</b>	Percent in Poverty
United States	48,810,868	308,196,783	15.8%
South Carolina	858,553	4,631,792	18.5%
7-County Midlands	151,058	861,770	17.5%
Region			
Orangeburg	22,501	87,770	25.7%
Fairfield	5,245	22,739	23.1%
Newberry	7,170	36,298	19.8%
Calhoun	2,939	14,915	19.7%
Richland	68,491	367,402	18.6%
Kershaw	10,125	62,014	16.3%
Lexington	34,587	270,921	12.8%

<sup>&</sup>lt;sup>7</sup> US Census, Small Area Income and Poverty Estimates, 2013

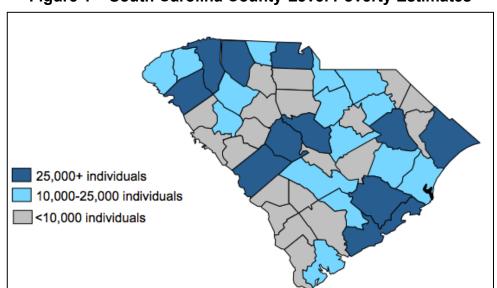


Figure 1 – South Carolina County-Level Poverty Estimates

It is important to recognize that the counties with the highest *levels* of poverty do not necessarily correspond to the counties with the highest *percentages* of poverty. For example, Richland County has a significantly higher number of people living in poverty (68,491) than does Fairfield County (5,245), but the percentage of total residents living in poverty in Fairfield County is considerably higher (23.1% vs. 18.6%). It is important to consider both measures when determining which areas should be targeted for affordable housing initiatives.

The median household income in South Carolina is significantly lower than the national average (\$44,310 vs. \$52,250). Again, the seven-county area has a wide range of household incomes – going from a lower value of \$32,180 in Orangeburg to a higher value of \$53,880 in Lexington, as Table 2 indicates.

Table 2 – National and Regional Household Income Estimates

Region	Median Household Income
United States	\$52,250
South Carolina	\$44,310
7-County Midlands Region	\$46,912
Orangeburg	\$32,180
Fairfield	<i>\$35,531</i>
Newberry	\$37,890
Calhoun	\$40,593
Richland	\$47,492
Kershaw	\$44,787
Lexington	\$53,880

Approximately 40.6 percent of all households that either own or rent their dwelling earn 80 percent or less of the statewide median income (i.e., these households earn \$35,000 or less per year). This equates to nearly 729,000 households across South Carolina. Detailed statistics at the county level on the distribution of household income are not available for all seven counties. However, approximations could be made for Orangeburg, Lexington, and Richland counties. In Orangeburg, about 40.9 percent (or 13,500 households) earn less than 80 percent of the median household income. The equivalent percentages for Lexington and Richland counties are 35.8 percent (37,400 households) and 39.9 percent (58,0000 households), respectively.

The American Community Survey (2013) provides estimates of the percent of households that spend more than 30 percent of their monthly income on housing costs and are therefore housing-cost burdened, as Table 3 denotes.<sup>8</sup>

Table 3 – Pct. of Households that are *Housing-Cost Burdened* in S.C.

Income Range	Pct. Housing-Cost Burdened
Less than \$20,000	77.5%
\$20,000 - \$35,000	49.4%
\$35,000 - \$50,000	26.8%
\$50,000 - \$75,000	11.4%
\$75,000 and Above	3.4%

Overall, approximately 33 percent of all households in the South Carolina are considered housing-cost burdened. This equates to over 593,000 households spending more than 30 percent of their monthly income on housing costs. This speaks to a great need to provide affordable housing options for lower income families who are typically considered to be living in poverty.

# Section IV – The Economic Impact of the MHTF on the Midlands of South Carolina

# Methodology

Every economic impact analysis starts with an initial change in economic activity. For most organizations, this initial change takes the form of either increased or decreased purchase activity within a region, which then leads to either increased or decreased demand for a variety of goods and services. These changes in demand lead to real economic effects, including effects on employment, labor income, and economic output.

<sup>&</sup>lt;sup>8</sup> This includes both owner-occupied and rental-occupied housing units.

For example, an increase in new construction activity within the Midlands of South Carolina would not only generate additional demand for building supplies (e.g., lumber, concrete, or roofing materials), but also for goods and services purchased by any new employees (e.g., food, entertainment, or local services) hired by these supplier firms to increase the production of building supplies and satisfy this higher level of demand.

Economic impact estimates are typically divided into *direct, indirect,* and *induced* effects. The direct effect reflects all MHTF assisted funding of new construction and rehabilitation projects, which injects new spending activity directly into the local economy – thereby increasing demand for construction and rehabilitation services (e.g., structural remodeling, repairs, inspection fees, title update fees, etc.). This new spending activity, in turn, creates new jobs and more income for employees and suppliers of these firms.

The indirect effect results from all of the additional spending activity that occurs due to inter-industry linkages between local firms. For example, when the MHTF introduces new spending activity into the Midlands region through helping to fund the rehabilitation of an existing housing development, the construction company that is hired will have to purchase numerous building supplies from vendors. As a result, each of these vendors will experience an increase in demand. To satisfy this demand, they will have to purchase inputs from their suppliers – such as additional staff and equipment. Suppliers of this additional staff and equipment must, in turn, purchase additional supplies as well, and so on. These indirect effects ripple through the economy and affect many sectors of the Midlands region.

The induced effect represents additional economic activity that results from increases in the spending of household income. For example, when the MHTF helps to fund the rehabilitation of an existing housing development, the construction company hired will purchase inputs from a vendor, thereby increasing the vendor's overall demand. Because of this increase in demand, some of the staff working for this vendor will see a rise in their income levels. Part of this income will then be spent in the Midlands region on a variety of goods and services that increase demand for numerous local businesses. The increase in demand of these businesses will then lead to higher incomes for some of their employees, part of which will also be spent locally.

These successive rounds of indirect and induced spending do not go on indefinitely – and as a result a value can be calculated for each of them. In each round of spending, money will be "lost" from the local Midlands region for a variety of reasons. For example, firms may purchase inputs from vendors located outside the Midlands or outside of South Carolina. Similarly, employees may save part of their income or spend it outside of the Midlands or outside of South Carolina.

In order to calculate the total economic impact (direct, indirect, and induced) that results from an initial change in economic activity, economic multipliers are used. Multipliers are different in each sector of the economy and are largely determined by the size of the local supplier network. Multipliers also depend on the region being examined. For example, the economic impact of an increase in spending of a local construction company completing the rehabilitation of a housing development would be higher in the seven-county Midlands region than it would be in Richland County alone. In addition to the total economic impact of a change in spending activity, multipliers can be used to calculate the total employment and income levels associated with this total economic impact.

In this analysis, the direct impact of the MHTF is assumed to consist of all construction and rehabilitation projects that are directly funded through various financing alternatives. Table 4 below summarizes the dollar value of all projects the MHTF has helped to finance since 2011 as well as all scheduled future projects.

Table 4 – Total Dollar Value of MHTF Affordable Housing Efforts

Affordable Housing Project Type	Dollar Value
New Construction Projects (2011-2014)	\$5,686,364
Rehabilitation of Existing Housing Developments (2011-2014)	\$1,991,977
Total	\$7,678,341
Projected New Construction Projects	\$14,200,000
Projected Rehabilitation for Existing Housing Developments	\$9,232,000
Total	\$23,432,000

Since 2011, the MHTF has helped financed new construction projects totaling \$5,686,364 and rehabilitation efforts for existing housing developments totaling \$1,991,977. In

<sup>&</sup>lt;sup>9</sup> Note that all funding included in this analysis derive from *non-state funding sources*. Any economic activity in which the MHTF engages that is funded by the state of South Carolina is explicitly excluded. Funding sourced from state dollars does not generate a net increase in economic activity. Rather, they simply move economic activity from one sector of the economy to another.

addition, over the next several years, the MHTF expects to help finance over \$23 million worth of additional new construction and rehabilitation efforts – 43 percent of which is already sponsored. These dollar values provide the primary set of data that were used to evaluate the total economic impact of the MHTF on the Midlands region of South Carolina.

All multiplier effects based on these data were calculated using input-output analysis, which is the industry-standard method for estimation that is widely implemented across the United States. The Division of Research developed a customized input-output model of the seven-county Midlands region containing specific information on economic linkages between approximately 500 different industries. The *IMPLAN* software package was used to generate all model estimates.

## **Primary Results**

There are three primary measures by which the economic impact of the MHTF is measured: total economic activity (output), employment, and labor income. Economic output is an all-inclusive measure of the total value of all goods and services that are associated with the activities of the MHTF. It can also be thought of as the total contribution of the MHTF to the local economy. Employment simply refers to the total number of jobs associated with this level of economic output. Similarly, labor income represents all wages, salaries, and benefits that are associated with total employment.

Table 5 summarizes the economic impact of the MHTF on the Midlands region of South Carolina, which totals approximately \$4.8 million in annual economic output, 33 jobs, and nearly \$1.5 million in labor income for Midlands residents.

Table 5 – Economic Impact of the MHTF on the Midlands of South Carolina

	Economic Output	Employment	Labor Income
Direct Impact	\$2,559,447	14	\$770,655
Indirect Impact	\$1,388,048	12	\$426,944
Induced Impact	\$833,592	7	\$245,118
Total Impact	\$4,781,087	33	\$1,442,717

The MHTF has helped finance approximately \$2.6 million in affordable housing construction and rehabilitation projects in each of its first four years in existence. These dollars directly support approximately 14 jobs and over \$770,000 in labor income in the

Midlands region. In addition, another \$2.2 million in economic activity arises as a result of the indirect effects that come about from expenditures with local suppliers as well as the induced effects that come about from new household spending activity associated with increases in labor income. The \$2.2 million in indirect and induced effects also supports an additional 19 jobs and approximately \$672,000 in labor income.

The economic impact of the MHTF also extends to many industrial sectors. Table 6 highlights the 15 most impacted sectors and the annual economic activity associated with each.

Table 6 – Economic Impact of the MHTF on the Midlands of South Carolina by Industrial Sector

Sector	Dollars
Construction of new residential structures	\$1,895,455
Retail – General merchandise	\$223,391
Real estate establishments	\$98,425
Wholesale trade businesses	\$91,610
Monetary authorities and depository credit intermediation activities	\$58,128
Concrete manufacturing	\$50,539
Truck transportation	\$43,623
Architectural, engineering, and related services	\$30,294
Hospitals	\$27,932
Full-service restaurants	\$15,434
Warehousing and storage	\$14,217
Commercial and industrial machinery and equipment services	\$10,980
Landscape and horticultural services	\$5,789
Business support services	\$4,057
Office administrative services	\$3,484

The MHTF continues to build its loan portfolio and will seek to become a Community Development Financial Institution (CDFI) beginning 2016. Certification as a CDFI will provide the MHTF with access to funding support from the CDFI Fund of the United States Department of the Treasury. Because it will be the only CDFI focused on affordable housing in the Midlands, the MHTF will be in a unique position to secure new, previously unavailable resources for Midlands affording housing development. Currently, the MHTF has approximately \$23 million worth of expected construction and rehabilitation projects in the planning stages. Table 7 highlights the total economic impacts that arise from this level of funding.

Table 7 – Projected Future Economic Impact Estimates

	Economic Output	Employment	Labor Income
Direct Impact	\$23,432,001	127	\$7,058,209
Indirect Impact	\$12,585,787	116	\$3,874,403
Induced Impact	\$7,609,607	60	\$2,237,603
Total Impact	\$43,627,395	303	\$13,170,215

The \$23 million in *expected* direct expenditures for new construction and rehabilitation of existing housing developments will support approximately 127 jobs and \$7.1 million in labor income for Midlands area residents. Furthermore, the indirect and induced effects lead to another \$20.1 million in economic output, which is associated with 176 jobs and \$6.1 million in labor income. In sum, the current expected financing for new construction and rehabilitation projects over the next five years that the MHTF has helped to acquire will generate a total of nearly \$44 million in economic output along with 303 jobs and \$13.2 million in labor income for Midlands residents.

These *projected* economic impact estimates of the MHTF also extend to many industrial sectors. Table 8 highlights the 15 most impacted sectors and the total economic activity associated with each.

Table 8 – Projected Economic Impact of the MHTF on the Midlands of South

Carolina by Industrial Sector

Sector	Dollars
Construction of new residential structures	\$17,296,017
Retail – General merchandise	\$2,038,441
Real estate establishments	\$898,127
Wholesale trade businesses	\$835,940
Monetary authorities and depository credit intermediation activities	\$530,417
Concrete manufacturing	\$461,168
Truck transportation	\$398,059
Architectural, engineering, and related services	\$276,432
Hospitals	\$254,879
Full-service restaurants	\$140,835
Warehousing and storage	\$129,730
Commercial and industrial machinery and equipment services	\$100,192
Landscape and horticultural services	\$52,824
Business support services	\$37,020
Office administrative services	\$31,791

#### The Move-In Effect

A second major impact that the MHTF has on the economy of the Midlands region arises through the move-in effect. The move-in effect is simply defined as any economic impact that results from new spending activity that accompanies a household move from one housing unit to another. For example, according to Consumer Expenditure Survey (CES) data from the U.S. Bureau of Labor Statistics (BLS), a household residence change typically triggers additional spending on appliances, furnishings, and remodeling. This new spending activity usually exceeds that of non-moving households. This effect is especially pronounced among new homeowners. Figure 2 highlights the differences in spending activity across multiple categories among movers and non-movers. 10

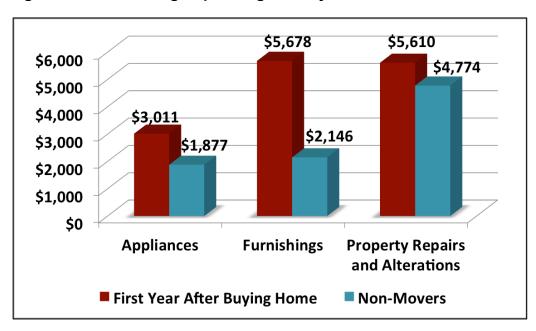


Figure 2 – U.S. Average Spending Activity of Movers vs. Non-Movers

 $<sup>^{10} \</sup> Source: \ National \ Association \ of \ Home \ Builders; \ \textit{The Ripple Effect of Home Buying}; \ Natalia \ Siniavskaia;$ October 2013

The majority of any new spending activity that results from a household move occurs within the first two years of that move. Using state-level household income data from the BLS, this study estimated the average new spending activity that likely occurs for the first two years following a move of a low-income household *above and beyond* what would occur if that household had not moved. When these effects are applied to the specific housing units that the MHTF has helped finance over the past four years as well as the units that it will help to finance but are currently in the planning phase, the aggregate move-in effect can be calculated. Table 9 displays these results, along with the associated economic multiplier effects.

Table 9 – Economic Impact of the MHTF Arising from the "Move-In" Effect

Category	Value
Average 1 <sup>st</sup> Year Post-Move Spending (per household) Average 2 <sup>nd</sup> Year Post-Move Spending (per household)	\$3,435
Average 2 <sup>nd</sup> Year Post-Move Spending (per household)	\$1,926
Number of Current Units Associated with MHTF-Based Funding Initiatives	73
Number of <i>Projected</i> Units Associated with MHTF-Based Funding Initiatives	514
Annual Economic Impact from Move-In Effects of Current Units	\$61,964
Estimated Total Economic Impact from Move-In Effects of <i>Projected</i> Units	\$2,617,720

A low-income household in South Carolina that moves from one housing unit to another spends approximately \$5,361 more on household-related goods and services in the two-year period following their move than their non-moving counterparts. Applying this spending pattern to the number of housing units the MHTF helps finance yields an annual *move-in effect* of approximately \$61,964. In addition, MHTF construction and rehabilitation projects currently in the planning stages will generate move-in effects of over \$2.6 million in the Midlands region as they are completed.

# Implications for Tax Revenue

Another major impact of the MHTF comes from the increase in state tax revenue that results from the economic activity it supports. As summarized in Table 10, the annual economic impact of the MHTF that arises from new construction, rehabilitation of existing projects, and "move-in" effects totals approximately \$4.8 million.

<sup>&</sup>lt;sup>11</sup> Low-income households were defined as those at or below 80 percent of the median income in South Carolina. Household spending patterns for this analysis were adjusted to account for differences between the average household income in the U.S. as a whole and the average household income in South Carolina, as well as the difference in spending patterns for low-income households.

Historically, every additional dollar that is generated in economic activity (i.e., nominal gross state product) within South Carolina also generates 5.1 cents in new state tax revenue. <sup>12</sup> By applying this figure to the new economic activity generated through MHTF initiatives, the tax revenue from this activity can be estimated. Table 10 illustrates these results.

Table 10 – State Tax Revenue Derived from Economic Activities of the MHTF

Category	Dollar Value
MHTF Current Annual Economic Output (including move-in effects)	\$4,843,051
Annual Tax Revenue Generated for South Carolina	\$101,704
MHTF Projected Economic Output (including move-in effects)	\$46,245,115
Projected Tax Revenue Generated for South Carolina	\$971,147

The total estimated increase in annual state tax revenue that arises from the ongoing operations of the MHTF is \$101,704. By extension, the construction and rehabilitation projects currently in the planning phases have the potential to generate almost \$1 million in additional revenue for the state of South Carolina. Of course, such a contribution has the potential to increase significantly as the operations of the MHTF expand over time.

22

<sup>&</sup>lt;sup>12</sup> This historical relationship between South Carolina nominal gross state product and the South Carolina general funds revenue (as measured and tracked by the South Carolina Board of Economic Advisors) was estimated using industry-standard time-series regression techniques.

#### Section V - Conclusion

An adequate supply of quality, affordable housing is a critical component of maintaining a healthy community. Not only do housing markets contribute a disproportionately large amount to overall economic activity at both the local and national levels, but stable housing environments also convey many economic and social benefits to individuals and to families. Since it was created in 2011, the primary mission of the MHTF has been to provide financing, technical assistance, and advocacy for the construction, rehabilitation, and preservation of affordable housing – and therefore to increase the number of Midlands residents who are able to take advantage of these many benefits. With over 151,000 people living in poverty in the seven-county Midlands region and over 95,000 households earning less than 80 percent of the median income in Lexington and Richland counties alone, there is a clear need for affordable housing initiatives in general and for the MHTF in particular.

The total current annual economic impact of the MHTF on the Midlands of South Carolina – including all new construction and rehabilitation projects it helps to fund – is nearly \$4.8 million. This impact is associated with approximately 33 jobs and an additional \$1.4 million in annual labor income for Midlands residents. In addition, another \$61,964 in annual economic activity arises from "move-in" effects – that is – from spending activities that typically accompany a household move from one housing unit to another.

Going forward, the MHTF hopes to expand this impact by continuing to build its loan portfolio and by becoming a Community Development Financial Institution (CDFI). This will provide the resources to access funding support from the CDFI Fund of the United States Department of the Treasury and to secure new, previously unavailable resources for Midlands affordable housing development. Based on current projections, the total economic impact of the MHTF on the Midlands region has the potential to expand to over \$43 million in total output over the next five years. This would also support nearly \$1 million in annual tax revenue for the state of South Carolina.

The housing industry is a key component of a healthy, thriving economy. Through helping to provide affordable housing options for low- and moderate-income citizens, the MHTF is creating more stable communities and positive economic and social returns for the Midlands region.

#### References

Burkam, David T., Valerie E. Lee, and Julie Dwyer (2009). "School Mobility in the Early Elementary Grades: Frequency and Impact from Nationally-Representative Data." Workshop on the Impact of Mobility and Change on the Lives of Young Children, Schools, and Neighborhoods, National Academies, Washington, DC.

Cohen, Rebecca (2011). "The Impacts of Affordable Housing on Health: A Research Summary." *Center for Housing Policy.* 

Lin, Zhenguo, Eric Rosenblatt, and Vincent W. Yao (May 2009). "Spillover Effects of Foreclosures on Neighborhood Property Values." *Journal of Real Estate Finance and Economics*. Vol. 38, No. 4.

Mantzicopoulos, Panayota and Dana J. Knutson (2000). "Head Start Children: School Mobility and Achievement in the Early Grades." *Journal of Education Research*, Vol. 93, No. 5, pp. 305-311.

Nguyen, Mai Thi (2005). "Does Affordable Housing Detrimentally Affect Property Values? A Review of the Literature." *Journal of Planning Literature*, Vol. 20, Number 1.

Rohe, W.M. and L.S. Stewart (1996). "Home Ownership and Neighborhood Stability." *Housing Policy Debate*, 7(1): 37-81.

Schuetz, Jenny, Jonathan Spader, and Alvaro Cortes (2015). "Have Distressed Neighborhoods Recovered? Evidence from the Neighborhood Stabilization Program." *Finance and Economics Discussion Series 2015-2016.* Washington: Board

Sharfstein, Joshua, et. al (2001). "Is Child Health at Risk While Families Wait for Housing Vouchers?" *American Journal of Public Health,* August, 91(8): 1191-1192.

Swanson, Christopher B. and Barbara Schneider (1999). "Students on the Move: Residential and Educational Mobility in America's Schools." *Sociology of Education*, Vol. 72, No. 1, pp. 54-67.

Wardrip, Keith, Laura Williams, and Suzanne Hague (2011). "The Role of Affordable Housing in Creating Jobs and Stimulating Local Economic Development". *Center for Housing Policy*.

Zielenbach, Sean. 2003 "Assessing Economic Change in HOPE VI Neighborhoods." *Housing Policy Debate* 14(4): 621-655.