THDA HOME Investment Partnerships Program
Beneficiary and Economic Impact Report

Beneficiary Analysis: July 1, 2016 – June 30, 2017

Economic Impact: January 1 – December 31, 2017

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Executive Summary

The 2016 - 2017 HOME Beneficiary and Economic Impact Report provides information regarding HOME allocations received by the State of Tennessee, the activities completed with HOME funding, the households served by the HOME Program, and the economic impact resulting from HOME spending. For the purpose of this report, beneficiary data presented is from July 1, 2016 through June 30, 2017 and the Economic Impact is calculated using HOME Program spending between January 1 and December 31, 2017.

General Data:

- Tennessee received an allocation of $9,582,153 in 2016-17, which is a very slight decrease from the 2015-16 allocation of $9,582,308 and a 6.6 percent increase from the 2014-15 allocation of $8,984,790.
- In total, THDA awarded $6,937,943 in program funds during 2016-17. This included $1,662,950 of Community Housing Development Organization (CHDO) program funds.
- A total of 149 housing units were assisted with HOME dollars, funded by previous allocations but completed during 2016-17. Of those 149 housing units, 48 percent were occupied by very low-income households.

Activities Data:

- During FY 2016-17, 149 affordable housing units were completed with HOME allocations ranging from program years 2012-2016[1]. Eighty-five percent of those projects (126 units) were rehabilitation-only projects. New construction and acquisition/rehabilitation followed with seven percent each (10 units each) and acquisition-only represented two percent of the completed units (three units). There were no acquisition/new construction projects completed during this reporting period.
- Thirty-five percent of the units were completed in East Tennessee, 41 percent were completed in Middle Tennessee, and 24 percent were completed in West Tennessee.

Beneficiary Data:

- During FY 2016-17, 43 percent of the households reporting beneficiary data were categorized as elderly and 30 percent as single/non-elderly. The remaining 27 percent of households were a combination of other types of household configurations.

[1] A program year refers to the year in which the program was funded by HUD and follows the federal fiscal year cycle, which is October 1 through September 30. THDA reports HOME activities and beneficiary data based on the state's fiscal year cycle, which is July 1 through June 30. Throughout this report, FY 2016-17 will refer to the state's fiscal cycle, July 1, 2016 – June 30, 2017, but will often be referred to by the first year in the cycle (i.e. 2016, or FY 2016), which is how Tennessee's HOME program refers to its program cycles.

- Thirty-six percent of the beneficiaries were very low-income households and 11 percent were extremely low-income households[2].
- Ninety-seven percent of the occupied households were owner-occupied while the remaining three percent were renter-occupied.
- Sixty-five percent of the households were reported as White, 32 percent reported Black/African American, one percent reported as Asian, and two percent reported as Other/Multi-Race. There was one beneficiary of Hispanic descent.

Economic Impact:

- In 2018[3], for every $100 in direct industrial output created through 2017 HOME Program activities, an additional $69 in business revenues were generated.
- The HOME Program activities also generated tax revenues for state and local governments. The model estimated tax revenues due to the HOME Program activities were $336,148.
- HOME Program spending in East Tennessee Development District generated an additional $4.8 million in business revenue, followed by Greater Nashville Regional Council (GNRC) with $2.9 million.
- Homeowner rehabilitation activity has a higher direct impact compared to other eligible activity types and its total impact is higher than other activity types. Additionally it has higher multipliers in every category (business revenue, income and employment).

[2] When rounded together, these figures equal 48 percent.
[3] The spending figures are in 2017 dollars, but results here are presented in 2018 dollar figures.

Introduction

The U.S. Department of Housing and Urban Development's (HUD) HOME program is the largest federal block grant to state and local governments designed exclusively to create affordable housing for low-income households. The HOME program is implemented through state and local governments called participating jurisdictions or "PJs." PJs may be states or units of general local government, including consortia and urban counties. The Tennessee Housing Development Agency (THDA) administers the HOME program for the State of Tennessee to promote the production, preservation, and rehabilitation of housing for low-income households. During this reporting period, the State of Tennessee's HOME funds were awarded for homeowner projects through a competitive application process for cities, counties, and non-profit organizations outside of local PJs, which receive their own HOME allocations directly from HUD.

The first part of this report provides information regarding HOME allocations received by the State of Tennessee, the households served by the HOME program, and the activities completed during FY 2016-2017 with funding from previous program years . HOME activities are required to be completed within four years of the date the State of Tennessee enters into a grant agreement with HUD; however, THDA limits its contracts with its sub-recipients to a three-year term. Therefore, projects are shown both as outcomes tied to the funding year and reported for all completed units in the active funding years, the latter of which may include projects funded prior to the current active grant years. The number of completed units and the beneficiary data available for program years 2012 – 2016 are reported as of June 30, 2017 but may not represent the final number of units or total beneficiary data from projects resulting from those program years.

Funding for the HOME program remained roughly the same from 2015 to 2016. Tennessee received an allocation of $9,582,153 in 2016, which is a very slight decrease from the 2015 allocation of $9,582,308. The State of Tennessee's HOME program has made substantial contributions to affordable housing for low-income Tennesseans. During FY 2016-17, HOME funds contributed to the completion of 149 housing units.

The second part of this report examines the annual economic impact of HOME Program spending. Dollars expended in calendar year 2017, regardless of the HOME grant year were used to conduct the analysis. Additional impacts that might result from HOME Program beneficiaries' living in stable, healthier and more affordable housing conditions were not included in this analysis.

This report measures and reports the economic impact of 2017 HOME Program spending both in the Tennessee economy and the regional economies, namely the development districts[4]. In Tennessee eight of the nine development districts expended HOME dollars in CY2017.

[4] Development districts are multi-jurisdictional entities, commonly composed of multiple counties and in certain cases even cross-state borders. These districts are used in this analysis solely as a geography.

State of Tennessee HOME Program

The State of Tennessee's HOME funds are made available to cities, counties and non-profit organizations outside of local Participating Jurisdictions (PJs) on a competitive basis. Current PJs, which receive their own HOME funds directly from HUD include: the Northeast Tennessee/Virginia Consortium (the cities of Bristol, Johnson City, Bluff City, Kingsport, Sullivan County and Washington County, excluding the town of Jonesborough), Chattanooga, Clarksville, Jackson, Knoxville, Memphis, Nashville-Davidson, Knox County, and Shelby County. Beginning in 2016, awards made to CHDOs are made available to any county in the state, without regard to PJ status. Map 1 below shows the State of Tennessee by jurisdiction type.

Map 1 State of Tennessee HOME Program

I. HOME Investments and Beneficiaries

HOME Allocations and Funds Available

Figure 1 shows Tennessee's federal HOME allocations for the past 10 years. Table 1 shows the federal HOME allocation for program years 2012 – 2016. The table additionally shows the year-to-year percent change in HOME funds over the reporting period. The HOME program may reallocate recaptured funds[5] or program income[6] from one HOME program year to the next. The "Funds Awarded" column represents the amount of funds awarded for HOME projects across the State, which may include program income and recaptured funds from previous rounds.

Figure 1 Annual Federal Allocations for the State of Tennessee's HOME Program, 2007-2016

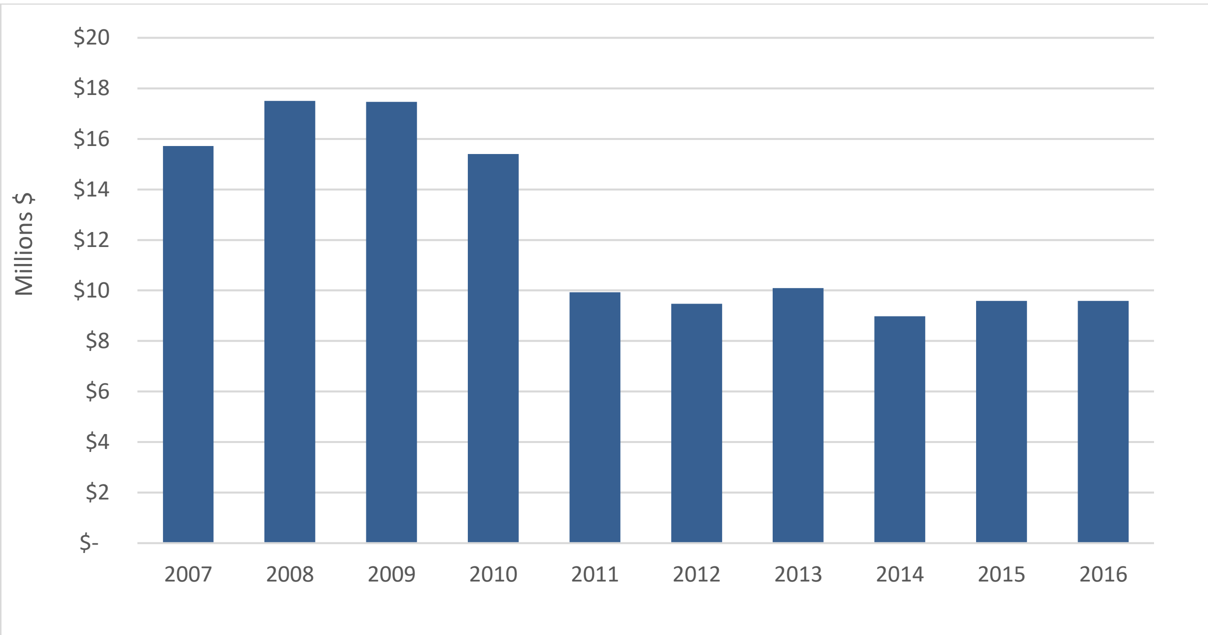

Table 1 Annual Allocations for the State of Tennessee's HOME Program, 2012-2016

Program Year	Federal Allocation	Change from Previous Year's Allocation	Funds Awarded	FY 2016-17 Additional Units Completed	Cumulative Units
2012-13	$9,474,797	-4.5%	$10,641,629	61	127
2013-14	$10,096,577	6.6%	$8,489,121	51	89
2014-15	$8,984,790	-11.0%	$9,255,466	36	38
2015-16	$9,582,308	6.7%	$8,605,740	0	0
2016-17	**$9,582,153**	**-0.002%**	**$6,937,943**	**1**	**1**

[5] Recaptured funds are funds from previous HOME rounds that have been unspent and reallocated to future HOME awards.

[6] The HOME program makes a small amount of program income from repayments made by homeowners who do not comply with the established terms of the period of affordability or compliance period.

The distribution of HOME funds across Tennessee's three grand divisions is represented in Table 2. During the reporting period, Middle Tennessee received 39 percent of HOME funds, followed by East Tennessee with 61 percent. HOME funds are distributed to rural and urban areas based on a set of criteria found in the HOME Manual. The allocation amounts do not include funds retained for the state's administrative costs or funds that were uncommitted at the time of this report.

Table 2 HOME Program Funds Awarded by Grand Division

Grand Division	2012	2013	2014	2015	2016[7]	*Total*
East	$2,393,015	$3,829,269	$3,490,220	$5,865,000	$4,264,993	*$19,842,497*
	22%	45%	38%	68%	61%	*45%*
Middle	$4,817,500	$3,548,904	$4,120,246	$1,640,000	$2,672,950	*$16,799,600*
	45%	42%	45%	19%	39%	*38%*
West	$3,431,114	$1,110,949	$1,645,000	$1,100,740	$0	*$7,287,803*
	32%	13%	18%	13%	0%	*17%*
Total	*$10,641,629*	*$8,489,121*	*$9,255,466*	*$8,605,740*	*$6,937,943*	*$43,929,899*

Distribution of HOME Funds by Funding Category

In 2012, the Urban/Rural Allocation replaced a regional allocation (based on the Development District regions). The Urban/Rural competition comprises 75 percent of the total HOME funds available. Thirty-six percent of the Urban/Rural Allocation funds were available to urban counties and 64 percent were available to rural counties.[8] At least 15 percent of the total allocation is reserved for CHDOs.

Table 3 represents the distribution of HOME funds across each of the program categories (Urban/Rural, Supportive Housing Development, and CHDO) for program years 2012 – 2016. The funding amounts in the table below do not include funds retained for the state's administrative costs or funds that were uncommitted at the time of this report.

[7] 2015 and 2016 Program year funds were awarded together in 2016. If the 2015 and 2016 totals are combined, 65 percent of funds were awarded in the East Grand Division, 28 percent in the Middle, and seven percent in the West.

[8] Urban counties include: Anderson, Blount, Bradley, Carter, Coffee, Dyer, Gibson, Hamilton, Hamblen, Haywood, Madison, Maury, Montgomery, Putnam, Roane, Rutherford, Sumner, Unicoi, Williamson and Wilson. All other counties, excluding the PJs that receive their own HOME funds directly from HUD, are considered rural counties.

Table 3 HOME Program Funds Awarded by Category, 2012 - 2016

Program	2012	2013	2014	2015	2016	*Total*
CHDO	$2,447,612	$1,431,172	$1,292,500	$1,865,000	$1,662,950	*$8,699,234*
Supportive Housing[9]	$969,914	$0	$0	$0	$0	*$969,914*
Urban/Rural	$7,224,103	$7,057,949	$7,962,966	$6,740,740	$5,274,993	*$34,260,751*
Total	*$10,641,629*	*$8,489,121*	*$9,255,466*	*$8,605,740*	*$6,937,943*	*$43,929,899*

HOME Activities

The HOME program funded various activities ranging from rehabilitating single-family homes and manufactured housing, to homeownership activities, to creating or improving supportive needs rental housing. Recipients of HOME funds are able to tailor the program to support the unique needs of each county. For reporting purposes, HOME activities are grouped under one of five broad categories including: rehabilitation, new construction, acquisition only, acquisition and rehabilitation, and acquisition and new construction. Table 4 shows the distribution of completed activities during FY 2016-17 and the program years from which they were originally funded. Table 5 shows the total number of activities completed with funding from each specified program year.

Table 4 HOME Units Completed during FY 2016-17 by Activity Type and Program Year

Program Year	Rehabilitation Only	New Construction Only	Acquisition Only	Acquisition and Rehabilitation	Acquisition and New Construction	*Total*
2012	57	0	0	4	0	*61*
2013	45	6	0	0	0	*51*
2014	24	4	2	6	0	*36*
2015	0	0	0	0	0	*0*
2016	0	0	1	0	0	*1*
Total	*126*	*10*	*3*	*10*	*0*	*149*

[9] Prior to 2012, the Supportive Housing Category was known as Special Needs that included projects designed for persons with unique needs due to a temporary or permanent disability. The Supportive Housing Category requires on-going, on-site services for persons with a disability that is either permanent or temporary. Ten percent of the total HOME funds available were reserved for the Supportive Housing Development category. The last Supportive Housing Funds were awarded in 2012.

Table 5 Cumulative HOME Units Completed by Activity Type and Program Year

Program Year	Rehabilitation Only	New Construction Only	Acquisition Only	Acquisition and Rehabilitation	Acquisition and New Construction	*Total*
2012	88	9	14	16	0	*127*
2013	76	13	0	0	0	*89*
2014	24	4	4	6	0	*38*
2015	0	0	0	0	0	*0*
2016	0	0	1	0	0	*1*
Total	*188*	*26*	*19*	*22*	*0*	*255*

Rehabilitation

A total of 126 rehabilitation only projects were completed during FY 2016-17. These units account for 85 percent of all projects completed during the reporting period. All of the 126 rehabilitation projects completed were homeowner rehabilitation projects.

New Construction

A total of 10 new construction only projects were completed during FY 2016-17. These units account for seven percent of all projects. All of the new construction projects completed were homeownership units.

Acquisition Only

There were three acquisition only projects completed during FY 2016-17, all of which were homeownership projects.

Acquisition and Rehabilitation

Ten acquisition and rehabilitation projects were completed during FY 2016-17. These units account for seven percent of all projects. Four of the acquisition and rehabilitation projects were rental projects and the remaining six accounted for homeownership projects.

Acquisition and New Construction

There were no acquisition and new construction projects completed during FY 2016-17.

HOME Units by Grand Division

During FY 2016-17, 149 units were completed, with the majority of completed HOME units taking place in East and Middle Tennessee. Of the total units completed, 35 percent occurred in East Tennessee, 41 percent occurred in Middle Tennessee and 24 percent took place in West Tennessee. Table 6 shows the completed units in FY 2016-17 by grand division.

Table 6 HOME Units Completed in FY 2016-17 by Grand Division and Program Year

Grand Division	2012	2013	2014	2015	2016	Total
East	18	19	14	0	1	*52*
Middle	20	24	17	0	0	*61*
West	23	8	5	0	0	*36*
Total	*61*	*51*	*36*	*0*	*1*	*149*

Table 7 shows the cumulative total activities completed from each program year that remained active during the reporting period and in each of the grand divisions.

Table 7 Cumulative HOME Units Completed by Grand Division and Program Year

Grand Division	2012	2013	2014	2015	2016	Total
East	39	36	14	0	1	*90*
Middle	39	42	19	0	0	*100*
West	49	11	5	0	0	*65*
Total	*127*	*89*	*38*	*0*	*1*	*255*

Details of HOME Beneficiaries

During FY 2016-17, 149 households were assisted with the State of Tennessee's HOME funds. Beneficiaries of HOME funds must be low- or very low-income households.[10] THDA provides income determination guidelines to grantees to ensure all recipients of HOME funds meet income limits. The income of HOME beneficiaries and other demographics for projects funded from 2012-2016 are included in the following sections.

Household Characteristics

The majority of households that received HOME assistance during the reporting period were elderly households, followed by single, non-elderly households. One-person households were served more frequently than any other size of household during the reporting period. Together, households with a single, non-elderly and elderly head of household comprised 73 percent of HOME Beneficiaries during FY 2016-17. Table 8 shows the beneficiary household sizes and types for activities completed during FY 2016-17. Table 9 shows the cumulative beneficiary characteristics from all completed activities during program years 2012 through 2016[11].

[10] Very low-income households are defined as those households whose annual income is 50 percent or less of the area median income (AMI) for the county in which the household resides. Low-income households are defined as those households whose annual income is between 50 percent and 80 percent of the AMI for the county in which the household resides.

[11] These cumulative totals derive from all completed units during the active program years, regardless of when the funding was awarded, which may include funding before 2012.

Table 8 Household Size of HOME Beneficiaries in FY 2016-17 by Household Type

Household Size	Single, Non-Elderly	Elderly	Related / Single Parent	Related / Two Parent	Other	Total
1	39	41	0	0	0	*80*
2	5	17	7	0	1	*30*
3	1	5	11	2	0	*19*
4	0	1	4	8	1	*14*
5	0	0	4	1	0	*5*
6	0	0	1	0	0	*1*
7	0	0	0	0	0	*0*
8	0	0	0	0	0	*0*
Total	*45*	*64*	*27*	*11*	*2*	*149*

Table 9 Cumulative Data on Household Size of HOME Beneficiaries by Household Type

Household Size	Single, Non-Elderly	Elderly	Related / Single Parent	Related / Two Parent	Other	N/A	Total
1	183	168	1	0	5	0	*357*
2	32	78	33	5	19	0	*167*
3	16	24	65	21	6	0	*132*
4	11	8	23	35	5	0	*82*
5	5	1	9	14	4	0	*33*
6	0	4	3	5	0	0	*12*
7	1	0	1	0	0	0	*2*
8	0	0	0	1	0	0	*1*
N/A	0	0	0	0	0	7	*7*
Total	*248*	*283*	*135*	*81*	*39*	*7*	*793*

Income, Occupancy Type and Other Forms of Assistance Received

Out of the 149 occupied households that received HOME assistance during FY 2016-17, 48 percent were very low-income and 52 percent were low-income households. Table 10 shows the number of very low- and low-income households served during FY 2016-17. Table 11 shows the cumulative total of beneficiaries served from program years 2012 through 2016.

Table 10 Distribution of HOME Program Beneficiaries in FY 2016-17 by Income

Beneficiary Income	Number of Households	Percentage of Households
Very Low-Income	71	48%
Low-Income	78	52%
Not Available	0	0%
Total	*149*	*100%*

Note: Of the 71 very low-income beneficiaries, 17 were considered extremely low income (0-30% AMI).

Table 11 Cumulative Distribution of HOME Program Beneficiaries by Income

Beneficiary Income	Number of Households	Percentage of Households
Very Low-Income	500	63%
Low-Income	286	36%
Not Available	7	1%
Total	*793*	*100%*

During FY 2016-17, three percent of the units created were occupied by renters and 97 percent of the units were occupied by owners. No units were vacant. Forty-eight percent of renter-occupied units and owner-occupied units were occupied by very low-income households. Table 12 shows the distribution of tenant type by income level during FY 2016-17. Table 13 shows the cumulative data for units funded from program years 2012 through 2016.

Table 12 Distribution of HOME Program Beneficiaries in FY 2016-17 by Tenant Type & Income

Tenant Type	Very Low-Income HHs	Low-Income HHs	Not Available	*Total*
Renter	1	3	0	*4*
Owner	70	75	0	*145*
Vacant	0	0	0	*0*
Total	*71*	*78*	*0*	*149*

Table 13 Cumulative Distribution of HOME Program Beneficiaries by Tenant Type & Income

Tenant Type	Very Low-Income HHs	Low-Income HHs	N/A	*Total*
Renter	140	42	0	*182*
Owner	360	244	0	*604*
Vacant	0	0	7	*7*
Total	*500*	*286*	*7*	*793*

The HOME Program included expenditures for both homeowner and rental activities. Forms of assistance that could support homeowners are not included in HOME beneficiary data. Of the four renter occupied units receiving HOME funds, none of the four households received any federal, state or local rental assistance.

Race and Ethnicity

Race and ethnicity data for the HOME program is determined by the race and ethnicity of the head of household. The majority of the HOME beneficiaries are Non-Hispanic White, followed by Black/African American. The breakdown of HOME beneficiaries by race and ethnicity is provided in the tables below. Table 14 shows the race and ethnicity for HOME beneficiaries during FY 2016-17. Table 15 shows the cumulative race and ethnicity data for all HOME beneficiaries that were funded from program years 2012 through 2016.

Table 14 HOME Beneficiaries in FY 2016-17 by Race and Ethnicity

Race		Number	Percentage
	White	97	65%
	Black/African American	48	32%
	Asian	1	1%
	American Indian/Alaska Native	0	0%
	Other Multi-Racial	3	2%
	N/A	0	0%
	Total	*149*	*100%*
Ethnicity		**Number**	**Percentage**
	Hispanic	1	<1%

Table 15 Cumulative HOME Beneficiaries by Race and Ethnicity

Race		Number	Percentage
	White	587	74%
	Black/African American	190	24%
	Asian	1	0%
	American Indian/Alaska Native	1	0%
	Other Multi-Racial	7	1%
	N/A	7	1%
	Total	*793*	*100%*
Ethnicity		**Number**	**Percentage**
	Hispanic	4	<1%

Data from FY 2016-17 and the cumulative data show that a majority of HOME beneficiaries are Non-Hispanic White. This percentage is generally consistent with the proportion of low-income White households with housing problems[12] in the Tennessee HOME service area. According to 2010 – 2014 Comprehensive Housing

[12] Housing problems are defined as spending more than 30 percent of household income on housing, lacking kitchen/plumbing facilities, or overcrowding.

Affordability Strategy (CHAS) data, approximately 77 percent of the households who are low-income and have housing problems in areas covered by the state's HOME program are White, 17 percent are Black/African American, three percent identified as Hispanic, and three percent are other races. The allocation of HOME funds are fairly proportional, based on race and ethnicity, to the low-income households with housing problems in Tennessee, although Hispanic and Asian households are slightly underserved compared to CHAS data.

Wrapping up Program Year 2011-2012

The federal HOME allocation for Program Year 2011-2012 was $9,924,071. A total of $15,673,264 was awarded across the state of Tennessee with the addition of reallocated funds from previous years and program income. Of this, $2,630,572 was awarded to CHDOs, $656,249 was awarded to Special Needs Projects, and the remaining $12,386,443 was awarded in the Regional Round (currently known as the Rural/Urban round). Three hundred twelve units/families were assisted using 2011-2012 funds. The majority (261 units) were rehabilitation projects. Forty-eight units were rentals and the rest were for first time and existing homebuyers, with the majority being existing homebuyers. Of the 312 families assisted, 265 beneficiaries were white (85 percent), 43 were black/African American (13.8 percent), one was American Indian/Alaskan Native, and three were other or multi-racial. Seven beneficiaries (2.2%) were Hispanic. 195 beneficiaries (62.5 percent) were considered very low income and 117 (37.5 percent) were considered low income. Of the 195 very low-income beneficiaries, 80 (41 percent) are considered extremely low income.

II. Economic Impact of HOME Program Spending in Calendar Year 2017

When a home is rehabilitated with the HOME grant, someone receives down payment assistance to purchase his/her first home, or a new home is built to provide affordable housing for a low-income household, the lives of those people will be improved. Studies have noted improvements in children's education[13] and increased overall health benefits[14] in both children and adults when their housing is safe and stable. Additionally, having affordable and predictable housing payments allow families to spend more of their income on healthy food and preventive medical services, as well as other necessities. Beyond those social impacts, economic impacts of affordable and stable housing provided with HOME program grants are sizeable: Grantees work with contractors who would purchase materials from the local stores and hire workers from the local workforce; and down payment assistance provided for a home purchase frees up income to spend on goods and services produced in the local economy and beyond. All this initial spending creates additional rounds of spending as the workers spend their income. In this report, we add all direct, indirect and induced impacts on output, employment and income to calculate the total economic impact of HOME Program.

In this analysis, we calculate additional rounds of spending generated from an initial HOME Program spending. Social impacts of HOME Program that create a financial gain for the family and the community are not considered. Called as social impacts of homeownership rehab by Simons et al. (2003), these impacts include providing low-income households with affordable housing, improved quality of housing and satisfaction, increased home equity and/or access to credit market, benefits of homeownership on the family and improved neighborhood stability. Rehabilitation of a dilapidated house improve the value of the nearby homes. For example Edmiston (2012) showed that proximity to housing investments by community development corporations (CDC) increased the appreciation of homes nearby. In this report, we did not make any attempt to measure the social impacts and/or change in the values of the homes close to the homes rehabilitated with HOME grant.

HOME Program grantees have multiple years to complete the proposed projects. Therefore, in any given year, HOME Program spending may come from different HOME grant years. In 2017, grantees from six

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[13] For more detail, see Coley. R. L., Leventhal, T., Lynch, A. D., & Kull, M. (2013). Relations between Housing Characteristics and the Well-Being of Low-Income Children and Adolescents. Developmental Psychology, 49(9), 1775-1789. A good research summary can be found at Maya, B. (2011). The Impacts of Affordable Housing on Education: A Research Summary. Insights from Housing Policy Research. Center for Housing Policy Research. A meta-analysis of 16 studies identifying the link between mobility and education outcomes can be found at Reynolds, A. J., Chen, C., & Herbers, J. E. (2009). School Mobility and Educational Success: A Research Synthesis and Evidence on Prevention, Paper presented at the Workshop on the Impact of Mobility and Change on the Lives of Young Children, Schools, and Neighborhoods, Board on Children, Youth, and Families, National Research Council, June 29-30, 2009, Washington, DC, http://www.nationalacademies.org/hmd/~/media/E82266FA9F9B4D6C87535F1E2FC1B1D9.ashx

[14] For more information about health benefits of affordable housing see: Cohen, R. (2011). "The Impacts of Affordable Housing on Health: A Research Summary," Center for Housing Policy and for more information about education benefits of affordable housing see: Brennan, M. (2011). "The Impacts of Affordable Housing on Education: A Research Summary," Center for Housing Policy. See, also Newman, S. (2008). "Does Housing Matter for Poor Families? A Critical Summary of Research and Issues Still to be Resolved," Journal of Policy Analysis and Management, vol. 27, no. 4, pp. 895-925.

different grant years spent a total of $7.3 million[15]. Thirty-two percent of total program spending was by the sub-grantees with 2014 grant year, followed by 2013 grant year with 23 percent of total spending. The following table provides the total spending in 2017, distributed by the grant years.

Table 16 Program Spending in 2017 by Grantees with various Grant Years

HOME Grant Year	Spending Amount	% of Total 2017 Spending
2012	$1,523,758	21%
2013	$1,689,466	23%
2014	$2,320,636	32%
2015	$1,016,316	14%
2016	$676,695	9%
2017	$105,276	1%
Total Spending in 2017	*$7,332,147*	*100%*

In 2017, program spending is combined in three eligible activities: homeowner rehabilitation, down payment assistance (DPA)) and homeownership development (either new construction or rehabilitation for sale to low- and moderate-income (LMI) buyers). A majority of spending (81 percent of total spending) in 2017 was for homeowner rehabilitation projects, followed by homeownership development projects with 17 percent of total spending. Only one percent of total spending in 2017 was provided as down payment assistance. Spending in these eligible activities can be for acquisition, rehabilitation, new construction, down payment assistance, site improvement and for soft costs.

Table 17 Spending in Different Categories by Eligible Activity, 2017

	Spending Categories						*TOTAL SPENDING*
Eligible Activities	*Acquisition*	*Rehab*	*New Construction*	*DPA*	*Site Imp.*	*Soft Costs*	
HO-Development	$750,705	$277,157	$224,172	$0	$0	$14,325	*$1,266,358*
HO-DPA Only	$0	$0	$0	$98,491	$0	$250	*$98,741*
HO-Rehab	$0	$5,446,025	$0	$0	$6,287	$514,736	*$5,967,048*
Total	*$750,705*	*$5,723,181*	*$224,172*	*$98,491*	*$6,287*	*$529,311*	*$7,332,147*

Table 18 provides the spending in various program categories by development district. Sub-grantees across all of the development districts spent relatively more for rehabilitation activities; 78 percent of total spending in the state during 2017 were for rehabilitation. East Tennessee Development District (ETDD) spent a total of $2.8 million in 2017 and 68 percent of it was for rehabilitation. The Greater Nashville Regional Council (GNRC) region followed ETDD with $1.4 million in total spending, and 87 percent of it was for rehabilitation.

[15] This total spending amount does not include the administrative spending. In 2017, in addition to the program spending of $7.3 million, there was $415,445 spent for administrative expenses. Although not presented in the table, administrative expenses are included in economic impact calculation.

In 2017, there was no HOME Program spending in the region served by the Memphis Area Association of Governments (MAAG).

Table 18 Spending in Different Categories by Development District, 2017

	Spending Categories						TOTAL SPENDING
Development Districts	***Acquisition***	***Rehab***	***New Construction***	***DPA***	***Site Imp.***	***Soft Costs***	
ETDD	$542,613	$1,961,080	$184,462	$14,640	$3,487	$174,620	$2,880,901
FTDD	$0	$380,549	$39,710	$0	$0	$18,550	$438,809
GNRC	$0	$1,184,555	$0	$71,545	$1,250	$101,298	$1,358,648
NWTDD	$0	$50,300	$0	$0	$0	$8,379	$58,679
SCTDD	$208,092	$470,673	$0	$0	$0	$63,529	$742,295
SETDD	$0	$67,650	$0	$0	$0	$11,311	$78,961
SWTDD	$0	$776,324	$0	$0	$1,550	$84,297	$862,171
UCDD	$0	$832,050	$0	$12,306	$0	$67,327	$911,683
TOTAL	*$750,705*	*$5,723,181*	*$224,172*	*$98,491*	*$6,287*	*$529,311*	*$7,332,147*

Results

The following table represents the direct, indirect, induced and total impacts of 2017 HOME program spending in Tennessee economy. The impacts are provided for the employment, labor income (wages and salaries) and output (business revenue). For each of the economic impact categories, we present the direct, the indirect and the induced impacts, in addition to the total impact and the multiplier (when applicable). Multipliers are calculated by dividing the total impact by the direct effect. In 2018[16], for every $100 in direct industrial output created through 2017 HOME Program activities an additional $69 in business revenues were generated.

Table 19 The Economic Impact of HOME Program Spending on Tennessee Economy, 2017

	Direct	Indirect	Induced	*Total*	Multiplier*
Business Revenue	$6,848,754	$2,521,246	$2,204,359	*$11,574,359*	1.69
Personal Income	$1,899,667	$839,158	$701,954	*$3,440,778*	1.81
Employment	27	21	15	*63*	2.32
State and Local Taxes**	NA	NA	NA	*$336,148*	NA

**Multipliers are calculated by dividing total impact by direct impact*

***State and Local taxes are estimated from the model.*

In 2017, the HOME Program injected into the economy a total of $6,848,754 in demand for regionally supplied construction, real estate services, and financial and other services inputs (reflected in the table as 'Direct' impact from business revenues). To provide that business revenue into the state's economy, all of the

[16] The spending figures are in 2017 dollars, but results here are presented in 2018 dollar figures.

affected firms provided 27 employment opportunities with a collective $1,899,667 in wages and salaries. These were direct impacts of 2017 THDA-related activities.

Next, all of the firms with direct impacts required increased inputs of $2,521,246 from the local economy, which further stimulated 21 jobs and $839,158 in labor income.

When the workers in the sectors with forward and backward linkages converted their paychecks into household spending, they induced $2,204,359 in industrial output from industries that served these households, yielding 15 more jobs making $701,954 in wages and salaries. Added together, the HOME Program activities supported $11.5 million in area industrial output, $3.4 million in labor income and 63 jobs. Every dollar injected into the Tennessee economy by the HOME program grantees generated an additional $0.69 in business revenue, an additional $0.81 in wages and salaries and an additional 1.32 jobs.

The HOME Program activities also generated tax revenues for state and local governments. The model estimated tax revenues due to the HOME Program activities were $336,148.

In the following table, the economic impact of 2017 HOME program spending on the Tennessee economy is further broken down by the eligible activity. As it can be seen from the table, homeowner rehabilitation (HO-Rehab) activity had the highest impact in business revenue, income and employment. Given the fact that 81 percent of total HOME Program spending in 2017 went to homeowner rehabilitation (which has a higher direct impact compared to other eligible activity types), it is not surprising to see total impact to be higher than other activity types. What is noteworthy is the higher multipliers for homeowner rehabilitation activity in every category (business revenue, income and employment). In economic impact models, multipliers measure the secondary effects of initial spending on local economies. Initial new spending in a local economy creates subsequent rounds of re-spending within the region's economy and multipliers[17] capture those rounds of spending. A higher multiplier means that for every dollar of initial spending, more business, income and jobs are created. Homeowner rehabilitation relies more on local inputs and labor compared to new construction, therefore, it has less leakage, which ensures that initial spending supports more rounds of subsequent spending, producing higher multiplier.

Table 20 The Economic Impact of HOME Program Spending on Tennessee Economy, by Eligible Activity, 2017

	Business Revenue		Personal Income		Employment	
Activity	***Total Impact***	***Multiplier***	***Total Impact***	***Multiplier***	***Total Impact***	***Multiplier***
HO-Development	$1,138,354	1.59	$382,444	1.56	6	1.97
HO-DPA Only	$123,000	1.68	$39,472	1.68	1	1.60
HO-Rehab	$10,313,006	1.70	$3,018,862	1.85	56	2.38
Total	*$11,574,359*	*1.69*	*$3,440,778*	*1.81*	*63*	*2.32*

[17] Multipliers are estimated by dividing the total impact by the initial direct spending in the economy. The income multiplier, for example, represents a change in total income for every dollar change in income in any given sector. The employment multiplier represents the total change in employment resulting from the change in employment in any given sector. An income multiplier of 1.90, for example means that for every $1 of personal income generates an additional $0.90 of wages and salaries in the local economy.

In this report, we also looked at the economic impact of the HOME Program spending on regional economies, namely development districts. Following Table 21 displays the total impact and multipliers for each category (business revenue, income and employment) by development district. According to the table, in East Tennessee Development District (ETDD), HOME Program spending generated an additional $4.8 million in business revenue, followed by Greater Nashville Regional Council (GNRC) with $2.9 million. Even though East Tennessee Development District (ETDD) had the highest total impact in each category, Greater Nashville Regional Council (GNRC) had the highest multiplier among eight development districts. The size of the regional multipliers depends on various factors such as backward and forward linkages in the industries across the region, the size of the region, whether the industries in the region are more labor or capital intensive and so on[18].

Table 21 The Economic Impact of HOME Program Spending on Tennessee Economy, by Development District, 2017

	Business Revenue		Personal Income		Employment	
Geography	***Total Impact***	***Multiplier***	***Total Impact***	***Multiplier***	***Total Impact***	***Multiplier***
ETDD	$4,885,376	1.95	$1,717,973	1.85	34	2.41
FTDD	$743,778	1.72	$231,575	1.68	6	2.11
GNRC	$2,919,872	2.06	$1,128,778	1.95	19	2.55
NWTDD	$75,722	1.65	$23,301	1.58	1	2.00
SCTDD	$834,152	1.65	$246,553	1.62	6	2.00
SETDD	$167,279	1.81	$64,897	1.64	1	2.40
SWTDD	$1,297,778	1.72	$420,629	1.58	9	2.07
UCDD	$1,576,005	1.72	$417,920	1.80	12	2.20
TENNESSEE	$11,574,359	1.69	$3,440,778	1.81	63	2.32

Conclusion

A total of 610,655 households in the areas covered by the state's HOME Program are extremely low-, very low-, and low-income and fit the criteria for having housing problems, according to the CHAS data. The HOME program is designed to help those most in need, including those households with very low- and low-incomes with housing problems. HOME funds have contributed to assisting an additional 149 households in FY 2016-17 and 793 households over the last five years. The HOME program will continue to target funds to promote the production, preservation and rehabilitation of housing for low-income households in Tennessee.

HOME Program, in addition to directly benefitting those households by providing affordable and safe housing options, impacts the regional economies where the program activities takes place. Just looking at the program spending in 2017, HOME Program generated more than $11 million in additional business revenue

[18] For more explanation about the size of the multipliers by region, please see Impact THDA: The Economic Impact of THDA Activities on the Tennessee Economy, 2017 at https://s3.amazonaws.com/thda.org/Documents/Research-Planning/Economic-Impact-Reports/2017-THDA-Activities-Economic-Impact.pdf

in Tennessee, which translates into an additional $69 in business revenues for every $100 in direct industrial output created through 2017 HOME Program activities.

APPENDIX

Economic Impact Analysis – Methodology

In this report, we used IMPLAN input-output model to calculate the ripple effects of HOME Program spending in 2017 on the Tennessee economy and regional economies (development districts). The IMPLAN model calculates total business revenues, personal incomes, and total employment. For each of these categories, the IMPLAN model provides the direct, the indirect, and the induced impacts. Direct impact is the dollar amount of the initial spending because of the HOME program grants. We also report the corresponding direct personal income and employment figures.

Indirect impact is the economic impact that is generated because of the subsequent rounds of business to business transactions in Tennessee's economy. For example, a grantee who receives a grant to repair a critical structural problem for a homeowner buys materials from a local supplier who would in turn purchase additional material, labor, etc. from other businesses. This spending will create additional rounds of spending in the local and regional economies.

Induced impact is the economic impact that is generated through employee spending in the economy. A portion of the direct and indirect program spending goes to individuals as wages and salaries. Then, these individuals spend these wages and salaries in the economy depending on their consumption patterns. Each round of spending creates ripple effects in the economy.

Calculation of economic impact of homeowner development and rehabilitation activities are similar as these represent direct spending increase for appropriate sectors (i.e. new construction, maintenance and rehabilitation, soft costs and so on). However Homeowner Downpayment Assistance Program's economic impact requires a different treatment. Receiving down payment assistance for home purchase frees up household's income that would be saved for this purpose. When they do not have to save for down payment, the homebuyers taking advantage of HOME program's down payment assistance program can spend the money on other goods and services based on their spending patterns, which depend on their income level (usually lower income households spend more on necessities and high-income households spend more on discretionary items).

Tennessee Housing Development Agency (THDA)

As the State's housing finance agency, the Tennessee Housing Development Agency (THDA) is a self-sufficient, independently funded, publicly accountable entity of the State of Tennessee. THDA's mission is to meaningfully expand safe, sound, affordable housing opportunities for low and moderate income Tennesseans as the state's leading resource. More information about THDA programs can be found online at www.thda.org.

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