

ECONOMIC IMPACT

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Executive Summary

Nonprofit organizations play a vital role in their communities, acting as a source of empowerment and hope for individuals while creating both economic and fiscal impacts on the community as a whole. Habitat for Humanity in Tennessee has had tremendous economic and social impacts on the state as well as the cities and counties where it is active. This study focuses primarily on the organization's economic impact, measured by observing the direct, indirect, and induced effects of Habitat for Humanity's spending on the regional economy.

The Business and Economic Research Center (BERC) in Jennings A. Jones College of Business at Middle Tennessee State University, in cooperation with Habitat for Humanity of Tennessee, compiled and analyzed detailed information about Habitat-related expenditures in Tennessee for each of the four districts in which Habitat affiliates operate. Below are the key findings of this study.

Key Findings

A) Construction Operations Impact

- Habitat for Humanity in Tennessee has built a total of 4,590 homes since its first affiliate was established in 1978.
- In 2018, a total of 154 homes were built, and an additional 124 were repaired.
- In the past four years (2015-2018), on average, 145 new homes were built, and 265 homes were repaired.
- A total of 27,914 volunteers contributed to Habitat operations in 2017, equivalent to 164 full-time employees.

B) Employment Impact

- Habitat for Humanity in Tennessee supported a total of 1,234 jobs.
 - 602 employed directly
 - 206 employed indirectly
 - Induced employment totaling 262
 - Volunteer contributions equaling 164 full-time employees

C) Business Revenue Impact

- In total, Habitat for Humanity in Tennessee generated more than \$107 million in business revenue in 2018.
 - \$54.56 million in direct business revenue
 - \$20.19 million in indirect business revenue

- \$25.53 million in induced business revenue
- Volunteer-generated total business revenue of over \$7.34 million
- Habitat-homeowner-generated added business revenue of \$1.48 million

D) Fiscal Impact

- Habitat for Humanity in Tennessee was the catalyst for over \$3.8 million in local and state taxes.
 - \$1.02 million in property taxes
 - \$2.04 million in sales tax
 - \$0.78 million in other taxes
- E) Habitat for Humanity in Tennessee and the Tennessee Housing Development Agency (THDA) Housing Trust Fund Program
 - A total of 247 homes have been constructed since the program's inception; 114 of those homes were built for the elderly or those with special needs.
 - Over \$19.2 million has been produced in personal income and \$50.6 million in business revenue since 2008.
 - On average, Housing Trust Fund spending generates 37 jobs per year.
 - Approximately \$1.5 million has been contributed to state and local taxes since 2008.
- F) Habitat for Humanity in Tennessee and the Tennessee Housing Development Agency (THDA) New Start Program
 - A total of 1,001 homes have been constructed between 1999 and 2017.
 - Approximately \$108.3 million has been created in personal income and \$283.36 million in business revenue between 1999 and 2017.
 - On average, the New Start Program generates 117 jobs per year.
 - Approximately \$10.8 million has been contributed to state and local taxes and fees between 1999 and 2017.

I. Introduction

The first Habitat for Humanity affiliate in Tennessee, the Appalachia Habitat for Humanity, opened its doors in 1978, serving Morgan and Scott counties. The Appalachia Habitat was also only the second affiliate in the world. Forty years later, a total of 45 affiliates are spread across the state, all working toward Habitat for Humanity's common vision of "a world where everyone has a decent place to live." According to Habitat for Humanity International, the Tennessee sector has established itself as the nation's fourth-largest builder of Habitat homes and ranks first in homes built per capita. Habitat for Humanity's regional economic and fiscal impacts throughout the state are significant. Since its inception, Habitat for Humanity in Tennessee has built nearly 4,600 homes, and that number continues to grow. Moreover, the homes built by Habitat for Humanity are affordable. In the Nashville Metropolitan Statistical Area (MSA), for instance, Habitat homes have an average price of \$100,000 less than the MSA's average. Combined with a reasonable mortgage rate, Habitat for Humanity enables home ownership to become a reality for its partner individuals and families.

Habitat for Humanity goes beyond building new homes by also working on repairs and renovations to existing homes, advocating for fair housing policies, and reselling materials through its ReStore operations. Along with providing almost 400 jobs, the various Habitat for Humanity undertakings utilize vital volunteer efforts, with approximately 28,000 volunteers accounted for last year. These individuals completed a total of 328,000 service hours and had a substantial impact on the volume of work Habitat for Humanity accomplished in 2017, for which BERC has the latest data.

The goal of this study is to analyze the economic role Habitat for Humanity in Tennessee has played and continues to play within the state. The study begins with a review of the literature on similar studies of Habitat groups' overall regional economic and fiscal activity. The literature review is followed by a more detailed explanation of our goals and methodology. The study then identifies the Habitat for Humanity districts and affiliates and goes on to provide a detailed analysis of economic contributions and impacts by district and activity. Following a review of the organization's economic impact through the results of the IMPLAN analysis, BERC calculates the impact of Habitat homeowners' additional savings from owning a home as opposed to renting. Then the economic impact of Habitat's trust fund partnership with the Tennessee Housing Development Agency (THDA) is evaluated. A discussion follows on the scope of this study, a few

of the immeasurable benefits Habitat has on the community, and possible expansions in future iterations of the current study. Finally, a conclusion summarizes the results.

II. Study Goals and Methodology

A. Literature Review

The economic impact of nonprofit organizations such as Habitat for Humanity is a frequently explored topic, as researchers and practitioners alike require information to quantify the economic benefits that accompany the social good. Nonprofit organizations can use this information to promote fundraising to help better fulfill their mission and achieve their goals. A common observation made by previous economic studies of this kind is that communities with a Habitat affiliate typically experience growth in jobs, community development, and homeownership. In a 2011 study, Bruce et al. noted that Habitat spent an average of \$78,000 per new home and built 217 new homes in Tennessee. Donations, discounted materials, volunteer labor, and reduced costs for land have enabled the organization to pay less for building houses than would otherwise be required. Habitat also provides education and training for its carefully selected homeowners about how to maintain their properties and be responsible neighbors. For this reason, Habitat for Humanity homeowners often take better care of their homes, leading to an increase in the value of nearby properties around Habitat for Humanity homes. Each Habitat homeowner completes classes on assessing readiness to buy, budgeting and credit, mortgage funding, home maintenance, and personal finances (Donald J. Bruce 2011).

According to an analysis made in 2013 by Colin Christensen, Habitat for Humanity of Winchester–Frederick County in Virginia provided 52 families with decent, affordable housing while injecting a little over \$4.8 million in direct spending into the local economy from the years 2006 to 2012. During this period, the cumulative impact of Habitat in the community included 125 jobs, nearly \$8 million in output, and almost \$112,000 in sales tax revenue. Although the initial overall expenditures totaled about \$4.8 million, the resulting economic output generated in the local economy totaled over \$7.9 million. In addition to the 125 full-time jobs created directly and indirectly within the county, Habitat also reported over 51,000 volunteer hours from 2006 to 2012. According to Virginia Service Volunteer Statistics, the value of a single volunteer hour for Habitat for Humanity projects was estimated at \$24.64 in the Commonwealth of Virginia (Christensen 2013). With sweat equity totaling \$178,000, the valuable role of volunteers in this

organization comes to light. Furthermore, the total value of interest savings from the zero-interest mortgage program between 2006 and 2012 is estimated to be over \$900,000.

Terance Rephann conducted an analysis of Habitat for Humanity of Greater Charlottesville In in 2013 to quantify its economic impact on the region. His findings on employment indicated that Habitat operations supported 27 jobs in the service region as well as 31 on the Habitat payroll. Habitat had a labor-income impact of about \$2.29 million and an industry output of about \$8.46 million (Rephann 2015). The study showed that Habitat effects are not limited to construction, direct employment, labor income, and output impacts. Habitat activities also affect the retail-trade market, real estate, rental properties, and health and social services industries. "Habitat procurement spending and related employee spending on local goods and services indirectly support seven jobs in the construction sector, three jobs in professional, scientific, and technical services sector, three in health and social services and retail trade industries, two in finance and insurance and six total jobs in various other sectors" (Rephann 2015).

In the report "Estimated Economic Impacts of the Activities of East St. Tammany Habitat for Humanity," Holloway et al. discussed building and renovating houses in the Greater New Orleans (GNO) area for post-Katrina victims who were without access to traditional financing. A comparison between homes built by Habitat and non-Habitat homes showed the value of homes built by Habitat ranged from 2.1 to 4.7 times greater than non-Habitat homes. Moreover, non-Habitat homeowners paid an average of eight times more than Habitat homeowners per year in property taxes. Habitat had eight full-time employees plus 607 non-local and 130 local volunteers, who completed 29,480 hours of volunteer labor in building Habitat homes in the GNO area (Herb Holloway 2012).

Washington University in St. Louis reported its Habitat for Humanity research, "Economic Impact: Building More Than Houses," looking at the economic impact of Habitat on the East Bay/Silicon Valley region. This study found that investment supported 1,591 jobs from inception in 1986 to 2013. Over this same period, Habitat sold 386 new and renovated homes, housed more than 1,500 people, and invested over \$175 million in the area. Using data on donor dollars, non-donor dollars, indirect impact, historical induced impact, future-induced impact, and leverage impact, the study concluded that the Habitat affiliate in the East Bay/Silicon Valley region produced a residual impact expected to reach \$897 million as partner families spend their income in the service area over a multi-year period.

B. Modeling Approach and Methodology

Habitat for Humanity in Tennessee enhances economic and social well-being by inducing spending, volunteering, and civic participation in community affairs. BERC, under the sponsorship of Habitat for Humanity of Tennessee, has produced a detailed economic impact assessment of the contributions made to the state and regional economies by Habitat for Humanity. In order to fully capture the impact of Habitat's activities, the study addresses the following major questions:

- What role does Habitat for Humanity in Tennessee play in Tennessee's economy?
- What is the economic and fiscal impact of economic activities associated with Habitat for Humanity in Tennessee?
- What is the regional breakdown of the economic and fiscal impact of Habitat for Humanity in Tennessee?

To answer these questions, BERC used an input-output modeling system, IMPLAN, to track how spending flows through a region, impacting the area both economically and socially. Details follow in the methodology section below.

Data Sources. To estimate the economic and fiscal impacts of Habitat for Humanity affiliates, BERC collected expenditure data from IRS Form 990 and financial statements in addition to data supplied by Habitat for Humanity of Tennessee. This data was used to calculate the direct, indirect, and induced impacts of the organization's various activities.

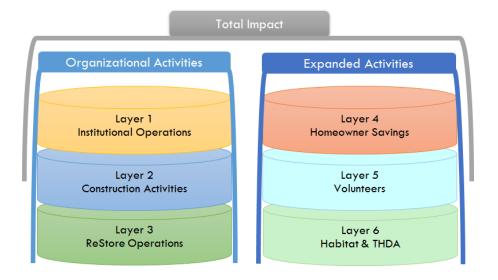
Study Year. Unless otherwise noted, the data year for this assessment is the 2017 fiscal year. BERC obtained new homes built and repair data for 2018 from Habitat for Humanity in Tennessee. However, all monetary values are not yet available in published reports for 2018. In order to provide reporting consistency, BERC converts all monetary values to 2018 dollars, assuming that changes in monetary values primarily reflect inflationary pressure.

Geography and Scope of Habitat for Humanity in Tennessee. The geographical scope of this study is the state of Tennessee, which includes the 45 Habitat affiliates across the state for which data was available. Defining the study area was important, as it allowed us to create regional assessments used to examine economic impacts by district.

Analysis by Parts. In this study, BERC utilizes five layers of analysis similar to the studies referenced in the literature review. By breaking down Habitat's activities into industries (layers) and then modeling each component within those industries, BERC is better able to model how Habitat affects the economy. We are then able to create a much more accurate picture of the total effects of its activities. Layers 1 through 5 are broken down further into regional districts within Tennessee to illustrate the locality of operations. Layer 6 is a Tennessee-wide initiative and thus presented solely at the state level. The layers are described below.

- Layer 1 represents the economic impact of the institutional operations of Habitat for Humanity (narrow category: employees, payroll, operation costs, etc.).
- Layer 2 represents the economic impact of the construction activities of Habitat for Humanity (narrow category: homes built, homes repaired, supply and demand for materials).
- Layer 3 captures the impact of Habitat for Humanity ReStore activities (narrow category: store income as representative of stores' expenditures).
- Layer 4 evaluates the economic impact of housing cost saving by homeowners
 (broader category: money saved through homeownership as opposed to renting).
- Layer 5 represents volunteer contributions and their induced impacts (broader category: volunteers in terms of full-time employees).
- Layer 6 evaluates the impact of Habitat's joint efforts with the THDA (broader category).

These layers are first examined independently to better quantify their effects on their respective industries. Layers 1, 2, and 3 together represent the impact of organizational activities in the strictest sense. Layers 4, 5, and 6 help to capture the extended impact of Habitat's expanded activities across Tennessee. BERC then was able to aggregate the results of these categories to estimate the total impact.

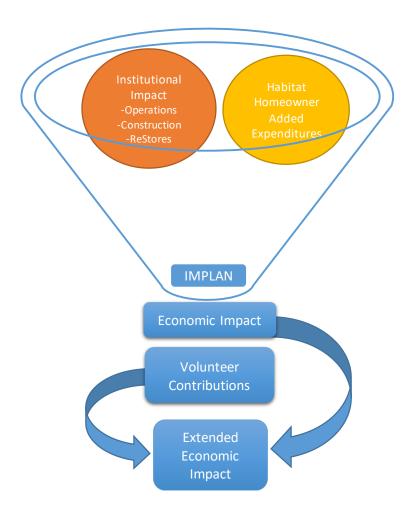


Economic Impact Definition. Economic impact refers to the economic activities that are net new additions to the local economy. In relation to Habitat for Humanity in Tennessee, the direct economic impact is the monetary flow into the local economy as a result of the organization's operations and its expanded activities. Examples of such operations include the direct hiring of construction professionals, the hiring of office employees, or the direct purchasing of materials used in building homes. Indirect effects are inter-business exchanges including third-party contractors and the materials purchased by those hired contractors. Induced effects measured in this study are employee-related effects including spending and resulting revenue. This study shows the economic activities associated with Habitat for Humanity are possible due to their hired employees in addition to other associates. Volunteers are essential to this institution and play a huge role in Habitat for Humanity's substantial impact on the quality of life in hundreds of communities across Tennessee.

IMPLAN Model. IMPLAN is a nationally recognized and commonly used input-output model to measure the economic and fiscal impacts of economic development projects. To estimate indirect and induced effects of economic activities, BERC created IMPLAN models developed using inputs specifically for Habitat for Humanity of Tennessee. These models allow us to calculate the revenue and jobs that Habitat's activities generate and their ripple effect on the local economy. These models also account for leakages, or money that flows outside the area of study. To understand better the significance of the loss the regional economy would suffer if Habitat operations ceased to exist, Habitat for Humanity operations are counterfactually removed.

C. Conceptual Framework Summary

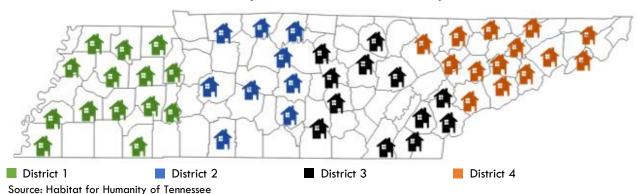
At the aggregate level, the economic impact analysis of Habitat for Humanity of Tennessee may be conceptualized as in the figure below. BERC disaggregated the data and used the analysis by parts approach described above in the calculations of the economic impact of Habitat for Humanity of Tennessee.



III. Habitat for Humanity of Tennessee: Districts and Affiliates

Habitat for Humanity of Tennessee divides the state into four distinct districts, as seen in the map below. The green homes represent District 1, the blue District 2, the black District 3, and the orange District 4. Each sector has at least nine Habitat affiliates, all working toward the same international mission: "Seeking to put God's love into action, Habitat for Humanity brings people together to build homes, communities, and hope." These regions are impacted heavily by the work performed by each of the district affiliates, both economically and fiscally.

Habitat for Humanity of Tennessee's Affiliates by District



Habitat for Humanity of Tennessee's Affililates by District

	Houses Built		Houses Built		Houses Built		Houses Built
District 1	Since Inception	District 2	Since Inception	District 3	Since Inception	District 4	Since Inception
Greater Memphis	499	Greater Nashville	757	Greater Chattanooga	284	Greater Knoxville	577
Jackson Area	105	Williamson-Maury	260	Cleveland Area	131	Holston Area	244
Obion County	48	Rutherford County Area	155	Loudon County	111	Appalachia Area	218
Northwest Area	27	Montgomery County	101	Putnam County	81	Blount County	151
Tipton County	24	Sumner County	63	Cumberland County	70	Anderson County	66
Carroll County	22	Bedford Builds	47	Highland Rim	35	Lakeway Area	61
Weakley County	17	Robertson County	13	Roane County	34	Hawkins Area	44
Paris/Henry County	16	Hickman County*	9	Warren County	31	Greene County	41
Lexington/Henderson County	11	Lawrence County*	7	Monroe County	30	Campbell County	33
Gibson County	10			McMinn County	21	Jefferson County	33
Haywood County	10			Smith County	11	Cocke County	23
McNairy County	8			Overton County*	6	Claiborne County	16
Benton County*	5			DeKalb County	5	Unicoi County	8
Decatur County*	4					Sevier County*	7

^{*}Habitat for Humanity locations that are no longer open

Souce: Habitat for Humanity of Tennessee

IV. Institutional Operations

Habitat for Humanity in Tennessee goes beyond building homes by fostering a positive workplace as well. Habitat for Humanity has become an important part of the state's economy by providing 379 full- and part-time positions for Tennesseans, with District 4 being responsible for generating 33% of those jobs. These employees are focused on a variety of areas throughout the organization including management, construction, and office administration. While the majority of the Habitat for Humanity workforce is volunteer, it is necessary for the organization to hire paid employees in order to operate efficiently. The table below shows the number of employees, payroll expenses, and overall operating expenses of Habitat for Humanity. Operating expenses include such items as office space rent, office utilities, insurance for employees, and other miscellaneous office expenditures. It is important to consider the expenses needed to run Habitat for Humanity on a daily basis in order to fully understand its economic impact on the state. It is assumed that employees will spend the majority of their salaries within the state. It is also assumed that each Habitat affiliate's operating expenses will be spent within the state. This means the institutional operation of each district is instrumental in generating revenue for Tennessee.

Institutional Operations* (in 2018 \$)

	-	, ,,	
	Number of Employees		
	(2017)	Payroll Expenses*	Operating Expenses*
District 1	54	\$2,731,748	\$6,024,956
District 2	100	\$5,678,041	\$2,370,946
District 3	99	\$2,889,332	\$630,020
District 4	126	\$3,472,233	\$1,068,615
Tennessee Total	379	\$1 <i>4,77</i> 1,354	\$10,094 , 537

Sources: Habitat for Humanity of Tennessee and Internal Revenue Service

^{*}All monetary figures are in 2018 dollars.

V. Construction Activities

A. New Homes Built

Habitat for Humanity is most widely known for its mission to provide all with a decent place to live, and Habitat for Humanity in Tennessee was an outstanding contributor to that mission in 2018. Each district worked diligently to build new homes. District 2 led construction with 244 homes built over the past four years. The table below reports each district's new-home construction since 2015 and average annual homes built between 2015 and 2018. All Habitat for Humanity homes incorporate energy-efficient features to lower overall utility costs. Habitat then works with donations and outside partners to provide new homeowners with lower mortgages and interest rates.

	New Houses Built (2015-2018)					
	2015	2016	2017	2018	Total New Homes (2015- 2018)	Averge Annual New Homes (2015-2018)
District 1	14	13	33	13	73	18
District 2	58	58	58	70	244	61
District 3	25	24	28	27	104	26
District 4	48	36	32	44	160	40
Tennessee	145	131	151	154	581	145

Source: Habitat for Humanity of Tennessee

Before building any home, Habitat for Humanity thoroughly reviews the applications of potential homeowner partners. This review process is important, as Habitat for Humanity wants to ensure longevity and commitment. In order to achieve long-term sustainability among new homeowners, Habitat for Humanity provides significant training on home ownership, maintenance, and finance. The impact of this training can be seen in the rareness of foreclosures among Tennessee Habitat homes: only 3% of the almost 4,600 homes built since inception have undergone foreclosure. Low foreclosure rates coupled with a comprehensive understanding of homeownership ensure that these individual and family partners are on a path to success and will eventually become important contributors to their community as well as to the local and state economies.

B. Existing Homes Repaired

Habitat for Humanity in Tennessee also went beyond new home construction in 2018 by repairing 124 existing homes. These repairs entailed painting, landscaping, fixing code violations, creating community gardens, and much more. District 1 had an impressive increase from 12 homes repaired in 2015 to 59 in 2018. Tennessee as a whole has seen more than 1,000 homes repaired since 2015. The table below shows each district's average annual and total home repairs between 2015 and 2018.

Homes Repaired (2015-2018)						
	2015	2016	2017	2018	. ,	Average Annual Numebr of Homes Repaired (2015-2018)
District 1	12	122	302	59	495	124
District 2	17	22	23	9	<i>7</i> 1	18
District 3	58	30	45	27	160	40
District 4	79	113	111	29	332	83
Tennessee	166	287	481	124	1,058	265

Source: Habitat for Humanity of Tennessee

The number of homes repaired has had an enormous impact on revitalizing neighborhoods. By focusing on existing houses, Habitat for Humanity has enabled neighbors to take pride in their community by reducing the number of abandoned and vacant homes and thus making the area safer overall. Habitat for Humanity has embraced renovating each neighborhood from the ground up, taking into account the individuality of each, and inviting the neighbors to work together to create an improved living space for the community. Through the revitalization of neighborhoods, Habitat for Humanity of Tennessee has not only improved the quality of life for thousands of individuals but also enabled this community-building process.

C. ReStore

In addition to donations, one of the major means by which Habitat for Humanity in Tennessee generates funds is through its ReStore operations, nonprofit stores and donation centers that sell new and used home-improvement goods at economical prices. Twenty-nine of these stores are located across the state. Cumulatively these locations generated \$11.1 million in gross sales in 2017 (in 2018 \$), an overall increase of 7% since 2015. ReStore locations are directly responsible for generating 178 jobs in Tennessee, typically including management and other supervisory positions, including coordinating ReStore volunteers.

Gross Sales for ReStores* (2015-2017) (in 2018 \$)

	2015	2016	2017	Total	Average 2015- 2017	Growth 2015-201 <i>7</i>
District 1	\$1,541,312	\$1 , 572 , 592	\$1 , 467 , 397	\$4,581,301	\$1,527,100	-5%
District 2	\$3,619,774	\$3,687,914	\$3,781,523	\$11,089,212	\$3,696,404	4%
District 3	\$2,757,90 1	\$2,796,605	\$2,953,813	\$8,508,318	\$2,836,106	7%
District 4	\$2,430,062	\$2,508,320	\$2,908,722	\$ 7, 84 7, 104	\$2,61 <i>5,7</i> 01	20%
Tennessee	\$10,349,049	\$10,565,432	\$11,111,455	\$32,025,935	\$10,675,312	7%

Source: Habitat for Humanity of Tennessee

ReStore operations not only provide jobs but also contribute to sustaining the environment. By accepting donations of furniture, appliances, building materials, and more, Habitat for Humanity is able to divert hundreds of tons of material from landfills while also providing a second life to the goods. This donation process helps others in need of specific materials while saving money otherwise spent on trash removal. Many ReStore locations make donating even easier by offering free pick-up for large items and deconstruction services to bigger projects. As the average Habitat home is 1,200 square feet and requires approximately 400 two-by-fours and 150 pounds of nails, donated building supplies are desperately needed, and ReStore serves as the perfect connection for filling this need.

^{*}All monetary figures are in 2018 dollars.

VI. Volunteer Activities

Habitat for Humanity in Tennessee manages to price its homes affordably because it is able to call on a large volunteer base for cost savings. In addition, the new homeowner's own sweat equity is a factor on all job sites. This required owner contribution both guarantees a volunteer source for building the home and ensures that homeowners feel pride in their new homes. In turn, this sense of pride and investment ensures the property is maintained long after Habitat for Humanity has left.

The average value of volunteer contributions has continued to grow. If Habitat for Humanity were to pay volunteers for the work they do, on average, those workers would receive approximately \$22.40 per hour (www.independentsector.org) in 2018. This is where the volunteer is vital to a nonprofit. By employing only 45 construction workers, Habitat for Humanity is able to lower operating costs and deliver the most affordable housing for communities.

Estimated Value of Volunteer Labor per District						
				Potential Labor		
		Hours	Avg. Hours per	Costs Saved* in	FTE Employment	
	Volunteers	Volunteered	Volunteer	2018 \$	E quivalency**	
District 1	2,086	15,083	7.23	\$337,831	8	
District 2	12,219	83,996	6.87	\$1,881,351	42	
District 3	5,707	93,289	16.35	\$2,089,497	47	
District 4	7,902	135,724	17.18	\$3,039,960	68	
Tennessee	27,914	328,092	47.63	\$7,348,639	164	

Source: Habitat for Humanity of Tennessee

Habitat for Humanity values volunteerism, beyond its benefits in lowering operating costs, as a teaching tool for community members across Tennessee. Welcoming contributors of all levels and skill sets, the organization works diligently to find the best fit to maximize individual talents. Some may shine working in the ReStore, providing customer service or furniture repair, while others may feel at home on a construction site. Habitat for Humanity hopes that each volunteer, regardless of placement, will feel empowered in the community. Habitat for Humanity in Tennessee seeks to include all community members in its volunteer forces, including veterans, women, and youth. For veterans, the goal is to provide a healthy transition from military service to civilian life, in part through valuable connections on the job site. Women are encouraged to

^{*}Labor costs saved estimated using independent sector.org data for 2017.

^{**} Calculated using 2,000 work hours/year

deepen and broaden skills as they make valuable contributions to the process. Youth are motivated to build their resumes by gaining real-world experience and community connections. While volunteers are not directly responsible for the economic impact of Habitat for Humanity, the importance of their contributions is reflected in its extended impact.

VII. Economic Impact of Habitat for Humanity in Tennessee

To explain Habitat for Humanity's economic impact on the state of Tennessee, BERC first provided a detailed table reporting factors contributing to the total impact. This table is broken down into the previously discussed layers—institutional operations, construction, Habitat ReStore, household saving impact, and volunteering—and shows Habitat for Humanity's direct, indirect, and induced impact via employment, personal income, and total business revenue for all of Tennessee. BERC then supplied a smaller table for each segment explaining the total impact of the districts on the community. These totals were calculated by adding the direct, indirect, and induced results. Going a step further, this study also analyzed the local and state taxes generated by Habitat for Humanity that go back into the state economy. To do so, BERC looked at sales and property taxes. For more information regarding how BERC defined each layer of analysis, please refer to the Study Goals and Methodology section.

A. Overall Economic Impact for Tennessee

Habitat for Humanity in Tennessee had a significant impact on the state of Tennessee in 2018 with over \$107 million in total business revenue, more than \$46 million in personal income, and 1,234 in employment. The following table shows how each layer of Habitat for Humanity added to that impact.

Overall Economic Impact for Tennessee in 2018**

Component	Effect	Employment	Personal Income	Total Business Revenue
Operations	Direct	379	\$1 <i>4,77</i> 1,354	\$24,865,891
	Indirect	139	\$4,829,185	\$10,527,631
	Induced	160	\$5,718,682	\$11,073,276
	Total	678	\$25,319,221	\$46,466,798
Home Construction	Direct	45	\$8,485,765	\$20,654,146
	Indirect	47	\$2,410,523	\$6,539,222
	Induced	65	\$3,242,231	\$9,128,713
	Total	156	\$14,138,520	\$36,322,081
Habitat ReStore	Direct	1 <i>7</i> 8	\$3,739,898	\$9,049,382
	Indirect	20	\$1,023,030	\$3,124,251
	Induced	28	\$1,348,189	\$3,841,552
	Total	226	\$6,111,11 <i>7</i>	\$16,015,185
Household				
Cost Saving Impact	Induced	10	\$513 , 709	\$1,488,124
Volunteer Impact*	Direct	164	·	\$7,348,639
Total		1,234	\$46,082,567	\$107,640,827

^{*}Value of volunteering and calculated FTE equivalency of volunteer hours, which are reflected in the appraised market value of houses constructed.

Each layer of Habitat for Humanity's activities in Tennessee helps generate not only employment and business revenue but also millions of dollars in taxes for the state. In fiscal year 2018, the total fiscal impact of Habitat for Humanity in Tennessee was nearly \$4 million in state and local taxes. Habitat ReStore accounted for more than \$1.2 million in state and local taxes and fees.

Overall Taxes Generated for Tennessee: State and Local in 2018*

0.0.0							
		All Other Taxes and					
	Sales Tax	Property Tax	Fees	Total			
Institutional Operations	\$734 , 553	\$376,335	\$31 7, 399	\$1,428,287			
Construction	\$560 , 177	\$284,335	\$263,790	\$1,108,302			
Savings	\$44,230	\$21,207	\$14,633	\$80,070			
Habitat ReStore	\$706,749	\$342,368	\$188,140	\$1,237,257			
Total	\$2,045,709	\$1,024,244	\$783,962	\$3,853,915			

^{*}All monetary figures are expressed in 2018 dollars.

^{**}All monetary figures are expressed in 2018 dollars. Data year for monetary values for most indicators is 2017. Many of the monetary indicators were not available for 2018 at the time this report is issued.

B. Institutional Operations Impact by District

This study analyzes the economic impact Habitat for Humanity made on the district-level and state economies. Habitat for Humanity's direct spending into the economy from operational expenses in 2018 was estimated at around \$25 million. The business revenue generated from operational spending totaled over \$46 million. Economic impact related to institutional operations accounted for the largest share of the total economic impact made by Habitat for Humanity.

Institutional Operations Total Economic Impact in 2018*

	Employment	Personal Income	Business Revenue
District 1	103	\$4,678,031	\$16,304,280
District 2	249	\$10,512,046	\$16,470,500
District 3	143	\$4,588,388	\$5,871,130
District 4	183	\$5,540,756	\$7,820,887
Tennessee	678	\$25,319,221	\$46,466,798

^{*}All monetary figures are in 2018 dollars. Employment, payroll expenditure and non-payroll expenditure for several Habitat units were collected from the latest IRS filings.

With institutional operation taxes accounting for 37% of the total taxes generated for Tennessee, it is important to note how each district contributed to this percentage. District 2 is the largest contributor, adding over \$500,000 to state and local government revenue, of which the sales tax was \$267,591.

Institutional Operations Taxes Generated: State and Local in 2018*

	•		All Other	
	Sales Tax	Property Tax	Taxes and Fees	Total
District 1	\$238,658	\$142,361	\$116,230	\$497,249
District 2	\$26 7, 591	\$129,401	\$120,278	\$51 7, 270
District 3	\$97,419	\$45,632	\$34,296	\$1 <i>77,</i> 347
District 4	\$130,885	\$58,941	\$46,595	\$236,421
Tennessee	\$734,553	\$376,335	\$31 <i>7,</i> 399	\$1,428,287

^{*}All monetary figures are in 2018 dollars.

C. Construction Impact

After taking into account the direct, indirect, and induced economic impact, BERC reports more than \$36 million in business revenue resulting from construction. It is not surprising that Districts 1 and 2, home to Memphis and Nashville, contributed the largest share of Tennessee's total at \$10.3 million and \$15.9 million, respectively. The table also reports a total impact of 156 jobs and \$14 million in personal income across districts in Tennessee.

Construction Total Economic Impact in 2018*

	Employment	Personal Income	Business Revenue
District 1	40	\$3,916,740	\$10,369,016
District 2	59	\$6,442,675	\$15,875,188
District 3	25	\$1,854,225	\$4,884,253
District 4	32	\$1,924,880	\$5,193,625
Tennessee	156	\$14,138,520	\$36,322,081

^{*}All monetary figures are in 2018 dollars. The latest available data for construction spending was 2017.

How great is the effect on state and local taxes? Total state and local taxes and fees associated with Habitat's construction activities were estimated at around \$1.1 million in 2018. More than half of these taxes and fees generated were from sales tax.

Construction Taxes: State and Local in 2018*

			All Other	
	Sales Tax	Property Tax	Taxes and Fees	Total
District 1	\$151,064	\$90,1 <i>7</i> 8	\$79,061	\$320,303
District 2	\$247,652	\$119,932	\$120,056	\$487,640
District 3	\$76 , 938	\$36,123	\$31,140	\$144,202
District 4	\$84,523	\$38,101	\$33,533	\$156 , 1 <i>57</i>
Tennessee	\$560,1 <i>77</i>	\$284,335	\$263,790	\$1,108,302

^{*}All monetary figures are in 2018 dollars.

D. ReStore Impact

ReStore operations are a vital aspect of Habitat for Humanity's financial well-being. The same can be said of ReStore operations' relevance to the state economy. Accounting for \$16 million in total business revenue and 226 jobs, ReStore within each district of Habitat for Humanity has had an enormous influence on Tennessee. Business revenue, jobs, and personal income are not the only impact figures associated with ReStore. The environmental impact may be as significant as the economic impact, as these venues recycle a significant amount of construction material.

ReStore Total Economic Impact in 2018*

	Employment	Personal Income	Business Revenue
District 1	27	\$949,796	\$2,522,350
District 2	72	\$2,268,036	\$5,624,282
District 3	62	\$1,742,189	\$4,750,298
District 4	65	\$1,151,095	\$3,118,255
Tennessee	226	\$6,111,11 <i>7</i>	\$16,015,185

^{*}All monetary figures are in 2018 dollars. The latest available data for ReStore was 2017.

Accounting for the largest portion of total taxes generated by Habitat for Humanity for the state, ReStore operations contributed more than \$1.2 million to state and local government. District 2 had the largest fiscal impact on the total, generating over \$395 thousand.

ReStore Taxes: State and Local in 2018*

			All Other	
	Sales Tax	Property Tax	Taxes and Fees	Total
District 1	\$104 , 962	\$62,019	\$29,849	\$196,830
District 2	\$221,344	\$106,180	\$68,288	\$395,812
District 3	\$231,112	\$107 , 459	\$54 , 918	\$393,489
District 4	\$1 <i>4</i> 9 , 331	\$66 , 710	\$35,085	\$251,126
Tennessee	\$706 , 749	\$342,368	\$188,140	\$1 , 237 , 257

^{*}All monetary figures are in 2018 dollars

VIII. Added Value of Homeownership

In addition to the institutional effects Habitat for Humanity in Tennessee has on local economies, the people it empowers with homeownership have a tremendous impact on their communities. This is evident in the difference between the cost of a Habitat for Humanity mortgage and that of rent for comparable properties. Habitat for Humanity homeowners on average pay less for a mortgage than the cost of rent for a similarly sized home, creating a costsaving impact. The table below shows the amount saved per month by Habitat for Humanity homeowners paying a mortgage compared to renting (based on the calculated average mortgage for Habitat homeowners in Tennessee). Those homeowners are then able to spend this saved income within their communities, creating a ripple effect on the local economy. As a result of these savings alone, new Habitat for Humanity homeowners have contributed nearly \$1.5 million in business revenue for the state. It is important to note, however, that these figures are conservative, as the average appraised home value was used as a proxy for an actual purchase price in calculating the average monthly mortgage. Furthermore, BERC assumed these homeowners were already living in the districts rather than net new households. In measuring household spending impact, some studies treat the households occupying the Habitat-built homes as net new to the economy.

Average Cost of Renting vs. Homeownership in 2018**

	<u> </u>			
			Total Money	
		Average	Saved Per	Total Money
Area	Average Rent	Mortgage	Month*	Saved in 2017
Memphis MSA	\$1,149	\$519	\$8,200	\$98, 401
Nashville MSA	\$1,251	\$519	\$51,287	\$615 , 449
Chattanooga MSA	\$1,038	\$519	\$14,032	\$168,383
Knoxville MSA	\$1,071	\$519	\$24,302	\$291,620
Tennessee	\$1,128	\$519	\$24,455	\$1,1 <i>7</i> 3,8 <i>5</i> 2

^{*&}quot;Total Money Saved Per Month" reflects the average monthly savings multiplied by the total number of new homeowners in the district.

^{**}All monetary figures are in 2018 dollars.

In calculating average rents, BERC used HUD Fair Market Rent value for a three-bedroom apartment for the core MSA in each of the four Habitat Districts. Average monthly mortgage amounts are estimated by assuming that the mortgage amount is equivalent to the average appraised value of homes built by Habitat for each district and the interest rate for the mortgage is zero with no private mortgage insurance. Total economic impact of household cost savings amounts to about \$1.5 million in business revenue and \$0.54 million in personal income through the induced impact of these households' spending in the districts across Tennessee.

Economic Impact of Household Cost Savings: For New Homes Only in 2018*

	E mployment	Personal Income	Business Revenue
District 1	1	\$40,927	\$120 , 137
District 2	6	\$330,580	\$887,783
District 3	1	\$55 , 512	\$164,830
District 4	3	\$107,717	\$315,375
Tennessee	11	\$534,736	\$1,488,124

^{*}All monetary figures are in 2018 dollars.

Homeowner cost savings contribute to state and local government revenues, too. According to BERC estimates, a total of \$80,070 was generated in the form of sales, property, and all other taxes and fees throughout Tennessee because of the cost savings of households occupying the homes built by Habitat for Humanity in 2018. It is important to note this study takes into account only homes built in 2018. In reality, all Habitat homeowners continue to enjoy the same cost-saving effect until they have fully paid their mortgages.

Household Cost Savings: State and Local Fiscal Impact in 2018*

			All Other	
	Sales Tax	Property Tax	Taxes and Fees	Total
District 1	\$3,355	\$1,986	\$1,184	\$6,524
District 2	\$25,116	\$12,070	\$9,052	\$46,238
District 3	\$5,479	\$2,551	\$1,538	\$9,568
District 4	\$10,280	\$4,600	\$2,860	\$17,740
Tennessee	\$44,230	\$21,207	\$14,633	\$80,070

^{*}All monetary figures are in 2018 dollars.

IX. Economic Impact of Volunteering

Volunteering plays a critical role in the success of Habitat for Humanity in Tennessee. BERC included two data points in the economic impact calculations for Habitat for Humanity in Tennessee regarding volunteering: (1) full-time equivalency of the total volunteer hours and (2) total value of volunteering for Habitat for Humanity in Tennessee in 2017. BERC assumes the value of volunteering is reflected in the appraised market value of the Habitat homes. Therefore, it is appropriate to include volunteering under the total employment and business revenue impacts. The literature suggests, for example, that in certain states, volunteering accounts for more than \$25,000 of the appraised market value of the Habitat homes.

In 2017, nearly 28,000 volunteers spent 328,092 hours to help Habitat build new homes and repair existing ones across Tennessee. The FTE equivalency of these hours is calculated as 164 jobs using 2,000 hours per year as total work hours. Regarding business revenue, BERC estimated a total of \$7 million in the form of home value increases across the Habitat districts.

Economic Impact of Habitat for Humanity Volunteers (2017)*

	Total Number		Value of	
Area	of Volunteers	Volunteer Hours	Volunteering***	FTE Equivalent**
District 1	2,086	15,083	\$33 7, 831	8
District 2	12,219	83,996	\$1,881,351	42
District 3	5,707	93,289	\$2,089,497	47
District 4	<i>7,</i> 902	135,724	\$3,039,960	68
Tennessee	27 , 914	328,092	\$7,348,639	164

^{*}All monetary figures are in 2018 dollars.

X. Tennessee Housing Development Agency

X.1. Housing Trust Fund Impact

Habitat for Humanity of Tennessee has had numerous partnerships over the years that have contributed to the building of hundreds of homes across the state. One of the most valuable partnerships is with the Tennessee Housing Development Agency (hereafter referred to as THDA). Since the first initiative in 2008, THDA has enabled Habitat for Humanity of Tennessee to build 247 homes, 46% of which have gone directly to the elderly or those with special needs. Over the

^{*}FTE equivalent is calculated using 2,000 work hours/year.

^{**}Calculation based on Independent Sector's report: \$22.40 per volunteer hour

past nine years, THDA has contributed over \$5 million, and Habitat for Humanity has been fortunate to raise approximately \$21.1 million, to make a difference for hundreds of individuals and families throughout Tennessee. The table below shows the important history of collaboration between the two organizations and an analysis of how these funds were distributed.

HFHT and THDA Trust Fund Partnership History*

Initiative Name	Grants Awarded by THDA	Funds Matched by Habitat	New Homes Built	Homes for Elderly and Special Needs
2008: Homes for Tennessee	\$509,511	\$1,222,826	20	11
2009: 20 Houses, 20 Dreams	\$356,658	\$1,426,631	20	7
2010-2012: Coming Back Home	\$1,019,022	\$3,108,01 <i>7</i>	45	26
2012-2014: Building Tennessee	\$1,426,631	\$5,784,275	65	36
2014: 1st Mini Round	\$407,609	\$1,564,504	1 <i>7</i>	6
2015: Budget	\$509,511	\$2,975,544	30	17
2016: Budget	\$305,707	\$1,997,283	20	5
2017: Budget	\$509,511	\$3,006,115	30	6
Total	\$5,044,159	\$21,085,196	247	114

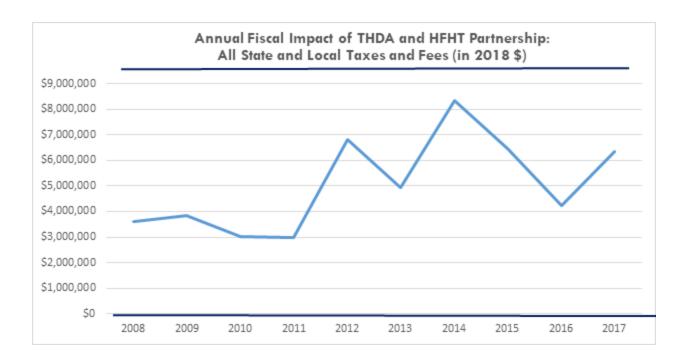
Source: Habitat for Humanity of Tennessee

The Housing Trust Fund is designed to help households earning far below the area's median income, and Habitat for Humanity of Tennessee has focused much of its effort on supporting those most vulnerable in the state's population by providing 30 homes for the elderly and 84 for those with special needs. These homes are designed to allow independence to hundreds. For those using wheelchairs, Habitat for Humanity focuses on lowering light switches and cabinets, installing roll-in showers and front-loading washers and dryers, and building zero-grade entrances and decks. These changes can drastically improve quality of life for those in the community who often are overlooked. By investing in these community members, Habitat for Humanity hopes to enable the elderly and those with special needs to live independently and take pride in their homes.

^{*}All monetary figures are in 2018 dollars.

In order to analyze the effects of the joint efforts of THDA and Habitat for Humanity, IMPLAN was used to measure the impact of the combined grants and matching funds from the program's inception in 2008 until 2017. It is important to note the figures in the table below represent the aggregate impact of these initiatives in 2018 dollars. Overall, the partnership has generated over \$50 million in business revenue for the state. In the same period, the total personal income impact of the partnership is \$19.2 million. Since 2008, this partnership has created average annual sustained job opportunities for 37 people across Tennessee.

The following chart gives a different perspective on the annual business revenue impact of THDA and Habitat for Humanity over the years.



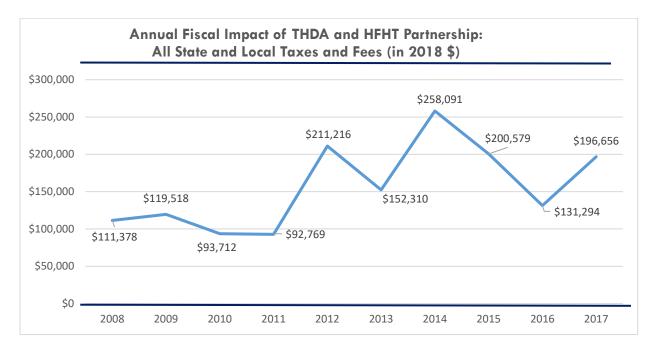
Total Economic Impact of HFHT and THDA Trust Fund Partnership* (2008-2017)

	Annualized Average Employment**	Personal Income (Cumulative from 2008 to 2017)	Business Revenue (Cumulative from 2008 to 2017)
Direct	21	\$11,1 <i>5</i> 8,3 <i>5</i> 6	\$27,757,781
Indirect	7	\$3,508,742	\$9,896,389
Induced	9	\$4,543,126	\$12,957,393
Tennessee	37	\$19,210,224	\$50,611,564

^{*}All monetary figures are in 2018 dollars.

^{**}Employment impact reflects average annual jobs associated with the annual construction activities.

Regarding the fiscal impact of the THDA and Habitat for Humanity partnership, it is estimated that state and local governments have received more than \$1.5 million in taxes and fees with an annual average of \$156,000. The chart below presents the annual fiscal impact of the THDA and Habitat for Humanity partnership over the 10-year period.



X.2. New Start Program Impact

Along with the Housing Trust Fund element of the partnership between Habitat for Humanity of Tennessee and the Tennessee Housing Development Agency (profiled in Section X), we will consider a second significant initiative, the New Start Program. The current section analyzes the economic and fiscal impact of this New Start Program, which began in 1999 and continues to be one of the most stable partnership programs, producing on average of 56 mortgages per year.

Since its inception, mortgages associated with the New Start Program totaled 1,001, with nearly half (459) from District 2. The district with the second-largest number of New Start Program mortgages is District 4, with 259 mortgages. In 2008 a total of 91 mortgages were associated with the New Start Program, more than in any other year since the start of the program.

THDA and Habitat for Humanity of Tennessee: Number of Loans per District for New Start (1999-2017)

Year	District 1	District 2	District 3	District 4	Total
1999				1	1
2000				8	8
2001	8	11	9	6	34
2002		11	12	7	30
2003	4	8	8	5	25
2004		12	13	4	29
2005	6	13	8	11	38
2006	8	27	1 <i>7</i>	25	77
2007	9	35	14	11	69
2008	10	33	18	30	91
2009	8	41	10	23	82
2010	6	36	11	19	72
2011	3	41	14	24	82
2012	10	44	9	23	86
2013	4	39	12	28	83
2014	10	40	8	15	73
2015	6	16	5	7	34
2016	8	24	6	6	44
2017	5	28	4	6	43
Total	105	459	1 <i>7</i> 8	259	1,001
Average	7	27	10	14	56

Note 1: Average annual mortgage does not include the year 1999.

Source: BERC, Habitat for Humanity of Tennessee, and THDA

From 1999 to 2017, households that were beneficiaries of the New Start Program had an average household income of less than \$30,000 (in 2018 dollars) across districts, ranging from \$24,648 (in 2018 dollars) in district 4 to \$29,889 in district 2.

THDA and Habitat for Humanity of Tennessee:

Average Household Income per District for New Start Program (In 2018 Dollars)

Year	District 1	District 2	District 3	District 4
1999				\$28,194
2000				\$20,860
2001	\$26,012	\$26,566	\$28,316	\$25,025
2002		\$28,033	\$28,249	\$22,618
2003	\$28,444	\$28,646	\$26,623	\$22,422
2004		\$28,941	\$25,401	\$16,332
2005	\$29,796	\$27, 891	\$27,626	\$22,266
2006	\$30,665	\$28,190	\$26,834	\$26,198
2007	\$25,285	\$29,767	\$30,378	\$21,196
2008	\$25,188	\$28,657	\$26,679	\$24,860
2009	\$27,128	\$29,368	\$28,169	\$21,805
2010	\$30,775	\$30,492	\$25,384	\$24,886
2011	\$27,341	\$28,098	\$24,901	\$26,788
2012	\$28,551	\$28,099	\$28,861	\$24,519
2013	\$31,240	\$31,131	\$26,060	\$25,145
2014	\$25,989	\$33,896	\$26,360	\$27,606
2015	\$33,012	\$34,266	\$26,941	\$26,014
2016	\$29,998	\$32,414	\$31,833	\$29,312
2017	\$27,861	\$33,663	\$26,215	\$32,259
Overall Average	\$28,486	\$29,889	\$27,343	\$24,648

Source: BERC, Habitat for Humanity of Tennessee, and THDA

The New Start Program targets low-income families that may not have any other opportunities for a stable home in Tennessee.

The acquisition value of homes associated with this program totaled nearly \$117 million (in 2018 dollars) between 1999 and 2017. When we look at the total acquisition cost for the entire period by district, there is significant variation: district 2 has the largest program acquisition cost of \$62.5 million (in 2018 dollars). Similarly, the average annual acquisition cost for the whole program by district ranges from \$576,962 (in 2018 dollars) in district 1 to \$3.7 million in district 2. For the entire program, the inflation-adjusted acquisition cost per mortgage is \$116,626 (in 2018 dollars).

THDA and Habitat for Humanity of Tennessee:
Acquisition per District for New Start Program (In 2018 Dollars)

			J 1	,	
Year	District 1	District 2	District 3	District 4	Total
1999				\$54,220	\$54,220
2000				\$472,774	\$472,774
2001	\$495,355	\$961,879	\$823,456	\$368,867	\$2,649,557
2002		\$1,157,230	\$993,954	\$485,556	\$2,636,740
2003	\$268,653	\$895,464	\$675,729	\$459,108	\$2,298,955
2004		\$1,240,608	\$1,145,304	\$243,846	\$2,629,758
2005	\$436,845	\$1,249,177	\$699,938	\$896,826	\$3,282,785
2006	\$613,652	\$3,388,778	\$1,894,553	\$2,075,548	\$7,972,531
2007	\$689,196	\$4,698,467	\$1,306,943	\$1,011,563	\$7,706,169
2008	\$728,637	\$4,689,774	\$1,950,966	\$3,101,951	\$10,471,327
2009	\$575,441	\$5,941,807	\$1,161,254	\$2,682,000	\$10,360,501
2010	\$517,334	\$5,206,688	\$1,269,239	\$2,131,503	\$9,124,765
2011	\$244,961	\$5,921,613	\$1,651,661	\$2,768,901	\$10,587,137
2012	\$793,724	\$6,254,948	\$1,008,136	\$2,754,998	\$10,811,806
2013	\$316,995	\$5,441,535	\$1,417,145	\$3,112,997	\$10,288,672
2014	\$1,029,285	\$5,512,778	\$998,712	\$1,832,508	\$9,373,283
2015	\$604,612	\$2,299,539	\$657,238	\$876,953	\$4,438,342
2016	\$865,888	\$3,420,416	\$707,747	\$689,368	\$5,683,420
2017	\$473,845	\$4,258,238	\$467,116	\$700,578	\$5,899,777
Total	\$8,654,424	\$62,538,940	\$18,829,091	\$26,720,063	\$116,742,518
Average Annual*	\$576,962	\$3,678,761	\$1,107,594	\$1,481,436	\$6,482,683

^{*}Average calculations exclude the following years: 1999 for district 4, and 1999 and 2000 for the total. Source: BERC, Habitat for Humanity of Tennessee, and THDA

The total loan amount, \$84.7 million (in 2018 dollars), is substantially lower than the total mortgage acquisition (27.47% less). Average loan amount per district is \$64,138 in district 1, \$73,758 in district 3, \$74,127 in district 4, and \$99,362 in district 2. Overall the inflationadjusted average mortgage loan amount for the entire program is \$84,585 (in 2018 dollars).

The substantial difference between acquisition cost and loan amount suggests that significant resources are provided through Habitat's efforts in the form of donated goods and lands, volunteering, sweat equity of owners, and others. The table below gives a detailed picture of annual loan amounts by year and district.

THDA and Habitat for Humanity of Tennessee:

Loan Amount per District for New Start Program (In 2018 Dollars)

Year	District 1	District 2	District 3	District 4	Total
1999				\$49,729	\$49,729
2000				\$451,067	\$451,067
2001	\$469,127	\$694,009	\$574,210	\$361,797	\$2,099,143
2002		\$882,198	\$771,410	\$398,567	\$2,052,175
2003	\$237,780	\$594,919	\$499,292	\$287,138	\$1,619,129
2004		\$891,607	\$802,546	\$210,854	\$1,905,007
2005	\$356,519	\$945,140	\$527,474	\$719,037	\$2,548,170
2006	\$485,920	\$2,493,225	\$1,137,986	\$1,720,411	\$5,837,541
2007	\$580,392	\$3,357,464	\$992,014	\$744,326	\$5,674,195
2008	\$577,693	\$3,366,171	\$1,352,147	\$2,222,023	\$7,518,034
2009	\$430,995	\$4,092,412	\$823,046	\$1,937,002	\$7,283,454
2010	\$388,001	\$3,756,034	\$848,538	\$1,466,316	\$6,458,888
2011	\$180,687	\$4,383,872	\$1,094,014	\$1,934,735	\$7,593,308
2012	\$592,400	\$4,621,275	\$721,229	\$1,845,028	\$7,779,932
2013	\$237,746	\$3,970,163	\$970,187	\$1,986,715	\$7,164,811
2014	\$770,112	\$4,097,733	\$738,926	\$1,228,690	\$6,835,462
2015	\$446,841	\$1,707,050	\$412,455	\$603,466	\$3,169,812
2016	\$624,871	\$2,562,088	\$530,808	\$513,109	\$4,230,876
2017	\$355,384	\$3,191,704	\$332,595	\$518,937	\$4,398,620
Total	\$6,734,467	\$45,607,065	\$13,128,875	\$19,198,945	\$84,669,353
Average per Mortgage	\$64,138	\$99,362	\$73,758	\$74,127	\$84,585

Source: BERC, Habitat for Humanity of Tennessee, and THDA

What is the economic and fiscal impact of the New Start Program on the state economy? To estimate the impact of the New Start Program, BERC created a district-level IMPLAN model for each of four Habitat districts. Two types of inputs are used to calculate the cumulative impact of the New Start Program: total construction activities associated with the New Start Program, and total savings of households moving from rental units.

Total Construction Spending. Total construction spending associated with the New Start Program is estimated using the following formula:

Total Construction Spending: Total Acquisition Cost – Total Cost Associated with the Lot BERC assumed that about 10 percent of the total acquisition cost is associated with the lot value.

Total Savings of Households. From its inception to 2018, 1,001 families benefited from the New Start Program. These families had lived in rental units and moved to own their own homes. Given

their household income level, the money saved by these households through homeownership is likely to be spent in the local economy. To calculate the household savings associated with homeownership, BERC made several assumptions: (1) HUD rental unit rates for the core MSAs associated with each Habitat district are valid across the district; (2) no interest rate or private mortgage insurance is related to the mortgage; and (3) total mortgage amount includes (a) principle payment, (b) property taxes, and (c) home insurance. The table below shows BERC's calculations for each district.

Average Cost of Renting vs. Homeownership in 2017 (New Start)

Habitat District	Proxy MSA	Average Rent	Average New Start Monthly Mortgage	Monthly Difference	New Start Mortgages (1999-2017)	Mortgage Savings per Month	Annual Additional Disposable Income in 2017
1	Memphis MSA	\$1,149	\$313	\$837	105	\$87 , 845	\$1,054,138
4	Knox MSA	\$1,071	\$346	\$725	259	\$18 7, 652	\$2,251,823
3	Chattanooga	\$1,038	\$346	\$692	1 <i>7</i> 8	\$123,161	\$1 <i>,477</i> ,932
2	Nashville	\$1,251	\$439	\$812	459	\$372,782	\$4,473,380
Tennesse	e	\$1,128	\$216	\$912	1,001	\$912 , 937	\$9,257,273

Note 1: Average monthly mortgage is calculated as "(Average Mortgage+ Taxes + Insurance)/360."

Note 2: All dollar figures are converted to 2018 dollars.

Note 3: Estimates are for year 2017.

Note 4: Average annual savings per New Start mortgage is \$9,195.

Average Annual Mortgage Savings per District

Average Savings per

District	Mortgage
District 1	\$10,039
District 2	\$9,746
District 3	\$8,303
District 4	\$8,694

Source: BERC, Habitat for Humanity of Tennessee, HUD, Zillow, and THDA

According to BERC's calculations, additional disposable income generated by the program in 2017 alone totaled \$9.26 million. Cumulative savings between 1999 and 2017 totaled \$77.4 million in 2018 dollars. The table below shows annual calculations by district.

THDA and Habitat for Humanity of Tennessee:
Average Annual Cost Savings by Years (New Start)

Year	District 1	District 2	District 3	District 4	Total
1999				\$8 , 694	\$8,694
2000				\$78 , 249	\$78,249
2001	\$80,315	\$107,205	\$74,727	\$130,414	\$392,662
2002	\$80,315	\$21 <i>4,</i> 410	\$1 <i>74</i> , 363	\$191,275	\$660,363
2003	\$120,473	\$292,378	\$240,787	\$234,746	\$888,383
2004	\$120,473	\$409,329	\$348,726	\$269,523	\$1,148,051
2005	\$180,709	\$536,026	\$415,150	\$365,160	\$1,497,045
2006	\$261,025	\$799,166	\$556,300	\$582 , 518	\$2,199,009
2007	\$351,379	\$1,140,273	\$672,542	\$678,155	\$2,842,350
2008	\$451 <i>,77</i> 3	\$1,461,889	\$821,996	\$938,984	\$3,674,642
2009	\$532,088	\$1,861, <i>4</i> 72	\$905,026	\$1,138,953	\$4,437,539
2010	\$592,325	\$2,212,325	\$996,359	\$1,304,144	\$5,105,154
2011	\$622,443	\$2,611,908	\$1,112,601	\$1 , 512 , 807	\$5,859,760
2012	\$722,837	\$3,040,729	\$1,187,328	\$1,712,776	\$6,663,670
2013	\$762,995	\$3,420,820	\$1,286,964	\$1,956,21 <i>7</i>	\$7,426,995
2014	\$863,389	\$3,810,6 <i>57</i>	\$1,353,388	\$2,086,631	\$8,114,065
2015	\$923,625	\$3,966,592	\$1,394,903	\$2, 1 <i>47,</i> 491	\$8,432,611
2016	\$1,003,940	\$4,200,494	\$1,444,720	\$2,199,6 <i>57</i>	\$8,848,812
2017	\$1,054,138	\$4,473,380	\$1 , 477 , 932	\$2,251,823	\$9,257,273
Total	\$8,724,243	\$34,559,055	\$14,463,811	\$19,701,274	\$77,448,383

Source: BERC calculations

^{*}All monetary figures are in 2018 dollars.

Economic and Fiscal Impacts of the New Start Program. BERC prepared two types of assessments of the New Start Program: economic and fiscal assessment for 2017, and cumulative economic and fiscal assessment between 1999 and 2017.

Economic and Fiscal Assessment for 2017. For the year 2017, total construction spending for the New Start Program was \$5.3 million (43 new homes) across four districts. In the same year, total household saving associated with the New Start Program was estimated at around \$9.3 million (1,001 households).

The table below gives a detailed assessment of the annual economic and fiscal impact in 2017. According to BERC estimates, the New Start Program had a total business revenue impact of \$21.2 million, a personal income impact of \$8 million, a job impact totaling 151, and a total impact of \$0.911 million in taxes and fees.

	Impact of the New Start Program by Habitat District in 2017*				
	Acquisition Cost	Direct Construction	Household Cost		
District	(2017)	Spending (2017)	Savings (2017)		
District 1	\$473,845	\$426,461	\$1,054,138		
District 2	\$4,258,238	\$3,832,414	\$4,473,380		
District 3	\$467,116	\$420,404	\$1, <i>477</i> ,932		
District 4	\$700,578	\$630,520	\$2,251,823		
Total	\$5,899,777	\$5,309,799	\$9,257,273		

Construction

				Total Fiscal Impact
	Business Revenue	Personal Income	Employment	(Taxes and Fees)
District	Impact (2017)	Impact (2017)	Impact	(2017)
District 1	\$733,943	\$277,236	5	\$22,724
District 2	\$7,176,882	\$2,912,616	49	\$220,985
District 3	\$676,761	\$256,921	5	\$20,024
District 4	\$1,049,710	\$388,279	8	\$31,553
Total	\$9,637,297	\$3,835,052	67	\$295,286

Household Savings

				Total Fiscal Impact
	Business Revenue	Personal Income	Employment	(Taxes and Fees)
District	Impact (2017)	Impact (2017)	Impact	(2017)
District 1	\$1,264,634	\$446,012	10	\$68,274
District 2	\$6,381,410	\$2,468,244	43	\$329,890
District 3	\$1,447,212	\$507 , 854	12	\$83,662
District 4	\$2,437,044	\$865,206	19	\$133,377
Total	\$11,530,300	\$4,287,315	84	\$615,203

Total Economic Impact (Construction + Household Savings)

				Total Fiscal Impact
	Business Revenue	Personal Income	Employment	(Taxes and Fees)
District	Impact (2017)	Impact (2017)	Impact	(2017)
District 1	\$1,998, <i>577</i>	\$723,248	15	\$90,999
District 2	\$13,558,293	\$5,380,859	92	\$550,875
District 3	\$2,123,973	\$764 , 775	1 <i>7</i>	\$103,685
District 4	\$3,486,754	\$1,253,485	27	\$164,930
Total	\$21,167,597	\$8,122,367	151	\$910,489
*All monetary figu	res are in 2018 dollars.			

Cumulative Economic and Fiscal Impact Assessment. When we take into account the entire life of the program, its economic impact increases significantly. The table below provides a detailed picture of the cumulative impact of the New Start Program. The total impact figures provided here include both construction and household savings due to homeownership through the program.

Since its start in 1999, the New Start Program has created an estimated \$281.36 million in business revenues (in 2018 dollars). In the same period, a total of \$108.28 million in wages and salaries (in 2018 dollars) was taken home by the employees in Tennessee. Consistently over the 18 years, the New Start Program and its associated activities provided job opportunities for 117 people in Tennessee. Meanwhile, a total of \$10.80 million in taxes and fees was created for the state and local government.

Cumul	ative Impact of the Ne	w Start Program by Hal	oitat District (in 201	18 Dollars)
	Cumulative	Cumulative Direct	Household Cost	
	Acquisition Cost	Construction Spending	Savings (1999-	
District	(1999-2017)	(1999-2017)	2017)	
District 1	\$8,654,424	\$7,788,982	\$8,724,243	
District 2	\$62,538,940	\$56,285,046	\$34,559,055	
District 3	\$18,829,091	\$16,946,182	\$14,463,811	
District 4	\$26,720,063	\$24,048,056	\$19,701,274	
Total	\$116,742,518	\$105,068,266	\$77,448,383	
Construction				
	Cumulative Business	Cumulative Personal	Average Annual	Total Fiscal Impact
	Revenue Impact	Income Impact (1999-	Employment	(Taxes and Fees)
District	(1999-201 <i>7</i>)	2017)	Impact	(1999-2017)
District 1	\$13,404,922	\$5,063,508	6	\$414,946
District 2	\$105,403,828	\$42,776,351	42	\$3,245,522
District 3	\$27,264,717	\$10,329,405	12	\$805,770
District 4	\$40,035,969	\$14,808,970	17	\$1,205,339
Total	\$186,109,436	\$72,978,234	77	\$5,671,577
Household Savir	ngs (Cumulative)			
	Cumulative Business	Cumulative Personal	Average Annual	Total Fiscal Impact
	Revenue Impact	Income Impact (1999-	Employment	(Taxes and Fees)
District	(1999-2017)	2017)	Impact	(1999-2017)
District 1	\$10,466,354	\$3,691,279	5	\$565,048
District 2	\$49,299,527	\$19,068,390	19	\$2,548,574
District 3	\$14,163,161	\$4,970,123	7	\$818,709
District 4	\$21,321,788	<i>\$7,</i> 569,716	9	\$1,193,668
Total	\$95,250,830	\$35,299,508	40	\$5,125,999
Total (Cumulativ	ve Construction + House	ehold Savings) (1999-20	17)	
	Cumulative Business	Cumulative Personal	Average Annual	Total Fiscal Impact
	Revenue Impact	Income Impact (1999-	Employment	(Taxes and Fees)
District	(1999-2017)	2017)	Impact	(1999-2017)
District 1	\$23,871,275	\$8 , 754 , 787	10	\$979,993
District 2	\$154,703,355	\$61,844,741	61	\$5,794,096
District 3	\$41,427,878	\$15,299,528	19	\$1,624,479
District 4	\$61,3 <i>57,757</i>	\$22,378,686	26	\$2,399,007
Total	\$281,360,266	\$108,277,742	117	\$10,797,576

To conclude, the New Start Program is a partnership between Habitat and THDA. According to the BERC assessment, the program has benefited more than 1,000 people since its inception in 1999. Although these programs benefit recipients and communities in more ways than just the dollar figures associated with the programs, they nevertheless have significant economic and fiscal impact.

XI. Other Benefits Not Quantified in This Study

While we are able to quantify the economic impact of activities such as construction and renovation of homes with models used in this study, quantifying the social impact of such operations is not an easy task. Homeownership itself has been shown to correlate to community benefits ranging from increased achievement in schools to reduction in crime. A wide array of literature exists on the relationships among civic engagement, human capital development, familial stability, school success, and a stable home environment. The role of homeownership as a factor in these relationships includes a number of variables that cannot be modeled simply. Thus, quantifying the effects of homeownership on such indicators of social health is difficult and can easily produce misleading results. However, the study of such indicators is critical to an understanding of what goes into building prosperous communities. One approach in examining these issues is to make a dual-feature study that includes qualitative case analyses as well as quantitative effects.

Other studies have sought to quantify these traditionally qualitative associations by using forms of regression analysis to study the impact of Habitat activities on property values as well as community unemployment rates. Such analyses are only possible with extensive data on each constructed home as well as historical data on neighborhood housing dynamics. For the most part, the independent status of most affiliates prevents the compilation of unaggregated data as measurements, and record-keeping practices vary from location to location. Nonetheless, this may be a possibility for future iterations and might help to better represent the scope of Habitat's impact.

While this study has not quantified the societal benefits of Habitat for Humanity in Tennessee in the same way that it has demonstrated the organization's economic impact, those societal impacts affect even the economic dynamics within local communities. Given the complex dynamics of housing activities on society and the range of reciprocal benefits those activities bring to the local economy, this study's impact assessment of Habitat for Humanity operations should be considered conservative.

XII. Conclusion

Habitat for Humanity in Tennessee has had an immense impact on the local economies of the areas in which it operates as well as the state's economy as a whole. In total, the contributions of volunteers, homeowners, and the institution's operations amounted to more than \$107 million dollars in business revenue as well as 1,234 jobs. Thus, for every dollar Habitat spends, it generates an additional \$1.97 in the state economy. Furthermore, Habitat for Humanity affiliates were responsible for 154 new home constructions in 2018 and 4,590 since their inception in the state. Habitat for Humanity in Tennessee also serves as a community hub with over 27,000 volunteers contributing the work equivalent of 164 full-time employees in 2017 alone. This study has also demonstrated the value of owning a Habitat home in comparison to renting, with the savings of Habitat homeowners generating nearly \$1.5 million in business revenue. In conjunction with THDA, Habitat has also helped to ensure that 114 elderly or special needs individuals have a place to call home.

However, as mentioned above, the full impact of such an organization can never truly be quantified. The value that homeownership has for the individual and the community is not solely economic. Previous literature has reported that homeownership has vast influences on the mental health of individuals as well as on employment and crime rates. Habitat's stringent requirements and focus on preparation and education help to ensure the success of its homeowner partners and, in turn, to strengthen communities. Thus, when evaluating an organization such as Habitat for Humanity in Tennessee, it is important to consider not only the economic and fiscal benefits it creates but also the personal empowerment and community development it fosters. The scope of Habitat for Humanity's effects, in this light, far exceeds its tremendous impact as an economic contributor as highlighted in this study. The social value of homeownership and Habitat for Humanity community initiatives warrants separate studies.

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