

November 2021

HARDEST HIT FUND

FINAL REPORT





Section I – Introduction

The Housing Finance Agency (HFA) Hardest Hit Fund (HHF) program was one of several tools utilized by the Troubled Asset Relief Program (TARP) federal funds to help the nation's housing market recover by assisting struggling homeowners. Of the five total rounds of HHF funding, Tennessee was included with 16 other states¹ and the District of Columbia in the third round of funding in September 2010. The state also received additional funding in the fourth and fifth rounds. Between three rounds of funding, the Tennessee Housing Development Agency (THDA) received almost \$272 million in program funds and nearly \$32 million in permitted expenses.

Ultimately, the 18 states and the District of Columbia which received HHF awards designed and administered programs that fit the specific needs of struggling homeowners in their regions. Examples of HHF programs administered by various HFAs include mortgage payment assistance for unemployed or underemployed homeowners, principal reduction to help homeowners get into more affordable mortgages, assistance to eliminate second mortgage loans, the removal of blighted properties by demolishing them, downpayment assistance to help encourage market penetration in areas that needed revitalization and help for homeowners transitioning into more affordable places of residence.

Receipt of HHF funding was dependent upon having either unemployment rates equal to or higher than the national average or declines in home prices of more than 20 percent.² Tennessee received the federal HHF funds because of its persistently high unemployment rates, which were contributing to mortgage delinquencies. In 2008, the unemployment rate in Tennessee was higher than the national average and was increasing, just as it was across the nation. The following year, however, led to skyrocketing unemployment rates that were significantly higher than the national average. The nationwide average unemployment rate increased from 7.3 percent in December 2008 to 7.8 percent in January 2009; in Tennessee the unemployment rate increased from 8.2 percent to 8.7 percent over the same period.³ Tennessee's monthly unemployment rates in 2009 continued to surpass national averages, nearly one percentage point above the national average monthly rates.

Although high itself, the statewide average unemployment rate further masked the depth of the crisis for some rural Tennessee counties, which experienced significantly greater levels of hardship compared to other counties during this period. In January 2009, when Tennessee's seasonally adjusted unemployment rate was 8.7 percent and the national average unemployment rate was at 7.8 percent, Perry County's unemployment rate peaked at 28.7 percent. In 2009, 72 counties had unemployment rates higher than 11.1 percent, one percentage point above the state's annual average unemployment rate. In fact, 31 counties had rates higher than 13.1 percent, which was three percentage points higher than the state average. The dominant sector was manufacturing in many of these high-unemployment counties, an area in which jobs were

¹ Alabama, California, Florida, Georgia, Illinois, Indiana, Kentucky, Michigan, Mississippi, Nevada, New Jersey, North Carolina, Ohio, Oregon, Rhode Island, South Carolina. Arizona did not receive funding in the third round.

² U.S. Department of Treasury, Hardest Hit Fund, Program Purpose and Overview, https://home.treasury.gov/data/troubled-assets-reliefprogram/housing/hhf.

³ Monthly unemployment data for the states and counties is from Bureau of Labor Statistics' Local Area Unemployment Statistics (LAUS),

https://www.bls.gov/lau/.

already disappearing prior to the recession.⁴ This concentrated job loss increased the risk of destabilization for these communities.

Unlike other states, negative equity was not as serious of an issue in Tennessee. Yet, slowing economic activity in the region adversely impacted the state by reducing home sales and depressing home prices, which ultimately made it difficult for homeowners to sell their homes when their employment situation changed.⁵ According to a report from First American CoreLogic, ⁶ at the end of 2009, 13.9 percent of Tennessee homeowners with a mortgage were underwater (e.g. borrowers owed more on their mortgages than their homes were worth) ⁷ and an additional 6.9 percent of borrowers were near underwater (e.g. borrowers had less than five percent equity). The proportion of mortgages in negative equity in Tennessee was substantially lower than the 23.8 percent of borrowers underwater in the nation during the same period. However, severe negative equity problems were unevenly distributed between Tennessee counties. For example, according to December 2010 data from CoreLogic, Shelby, Maury, Fayette, Lauderdale, Tipton, Rutherford, Sevier, DeKalb, Jefferson and Lake Counties had the highest negative equity shares in the state. In Shelby County, in particular, the share of loans with negative equity among all properties with a mortgage was approximately 15 percentage points higher than the state average. Furthermore, the concentration of borrowers with negative equity in particular counties is perhaps most compelling. In fact, almost 35 percent of borrowers with negative equity in the entire state resided in Shelby County at the time. Following Shelby County, Davidson County was home to 15 percent of the state's underwater borrowers, making it the county with the second highest concentration of the state's underwater borrowers.⁸

From 2011 until 2021, THDA created and administered five different programs utilizing money from the Hardest Hit Fund. These were the Keep My Tennessee Home (KMTH) Program, the Blight Elimination Program (BEP), the Principal Reduction with Recast Program or Lien Extinguishment (PRRPLE) Program, the Reinstatement Only Program (ROP) and the Downpayment Assistance (HHF-DPA) Program. The KMTH, ROP and PRRPLE programs were available across the state for low- and moderate-income homeowners whose primary residence was in Tennessee and who were struggling to make housing payments because of unemployment, underemployment, divorce or death of a spouse. Because eligibility for the

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⁴ In 2003, manufacturing employment represented 14.6% of total nonfarm employment in Tennessee, while that share declined to below 12% in 2010. See Murray, M.N. and Kessler, L.M. 2014. "Promoting Advance Manufacturing Clusters in Tennessee." Retrieved from https://haslam.utk.edu/sites/default/files/mnm134c2.pdf.

Great Recession that started around 2007 hit the employment in several Tennessee sectors including manufacturing, information, retail trade, wholesale trade, transportation and utilities, and leisure and hospitality worse. Although, the retail trade, wholesale trade, financial activities, and information sectors are expected to return to their peak employment levels after 2022, estimates by the University of Tennessee's Center for Business and Economic Research show that manufacturing employment may never return to its peak level. See Chervin, S., Lippard, C., Roehrich-Patrick, L. and Kyle, R. 2013. "The Recession and Employment in the US and Tennessee: A Long Way Back to Recovery." Staff report to members of the Tennessee Advisory Commission on Intergovernmental Relations. Retrieved from https://www.tn.gov/content/dam/tn/tacir/documents/TheRecessionAndEmployment.pdf.

⁵ Cuts, A. C. and William A. Merrill. 2008. "Interventions in Mortgage Default: Policies and Practices to Prevent Home Loss and Lower Costs." Joint Center for Housing Studies, Harvard University. Retrieved from https://www.jchs.harvard.edu/sites/default/files/media/imp/ucc08-15_cutts_merrill.pdf

⁶ Until June 2010, First American Core Logic was one company, but later formally separated into First American Financial Corp. and CoreLogic. First American provides title insurance and other services for residential and commercial real estate sales. CoreLogic generates consumer, financial and property information while providing other business services.

⁷ "Underwater Mortgages on the Rise According to First American CoreLogic Q4 2009 Negative Equity Data." First American CoreLogic. Retrieved from http://media.oregonlive.com/frontporch/other/Q4%202009%20Negative%20Equity%20Media%20Alert.pdf

⁸ Data are from CoreLogic Market Trends.

program required that the property be owner-occupied, assistance was not provided for rental properties or vacation homes or for owners who owned real estate other than a primary residence. The BEP and HHF-DPA programs targeted specific areas (counties or zip codes) in the state with concentrations of blighted properties or distressed markets with high levels of seriously delinquent mortgage loans, negative equity, short sales, REO sales, and foreclosures.

As of September 30, 2021, nearly 13,000 households in 94 out of 95 Tennessee counties received assistance. Between all of the programs, including blight elimination, THDA disbursed nearly \$270 million and spent approximately \$28 million for administrative expenses. The KMTH Program assisted 7,355 homeowners with \$183 million while THDA's Downpayment Assistance (DPA) program helped 5,448 Tennesseans⁹ become homeowners with \$81 million. The remaining programs made up approximately two percent of total disbursement and assisted households/homes.

Table 1: Amount Disbursed and Households/Homes Assisted, by Program, 2011-2021Q3

| Program | Households/Homes | Assistance Amount |
|---------|------------------|--------------------------|
| KMTH | 7,355 | \$182,844,739 |
| HHF-DPA | 5,430 | \$81,450,000 |
| BEP | 147 | \$2,945,347 |
| ROP | 104 | \$1,078,391 |
| PRRPLE | 21 | \$732,910 |
| TOTAL | 12,899* / 147 | \$269,051,387 |

^{*} Total number of unique borrowers having received some form of assistance under any one of the HFA's programs, which excludes 11 ROP borrowers who received assistance from other HHF programs (10 HHF-DPA borrowers and 1 PRRPLE borrower).

Section II – Summary of Programs

KEEP MY TENNESSEE HOME (KMTH) PROGRAM

A. Program Implementation and Evolution

THDA's Keep My Tennessee Home (KMTH) Program, which was the first program administered through HHF, was designed to provide assistance to qualified unemployed homeowners while they were either searching for new employment or completing a job training or education program. Additionally, currently employed homeowners who had previously been unemployed or substantially underemployed and who were delinquent because of arrearages accumulated during the period of unemployment or substantial underemployment were also eligible to receive assistance if they could resume future payments without needing additional assistance. For eligibility, substantially underemployed homeowners had to experience 50 percent or higher declines in their regular income.¹⁰

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⁹ In the third quarter of 2020, THDA removed 18 HHF-DPA loans that were made to the borrowers who would not be eligible for the HHF-DPA program. Therefore, the cumulative number of homeowners assisted is different than total number of new homeowners as a result of this program.

10 This was changed to 30 percent or higher decline in income.

The KMTH Program included forgivable loans to unemployed and substantially underemployed homeowners who, through no fault of their own, were unable to make their mortgage payment and were at risk of foreclosure. The program paid monthly mortgage and mortgage-related expenses such as property taxes, homeowner insurance, homeowner association fees, and/or past-due mortgage payments that accumulated during a period of unemployment. These funds were paid directly to the loan servicer or lender for past due mortgage payments to bring the mortgage current and/or to make monthly mortgage payments.

The KMTH assistance was not a grant, but a five-year subordinate loan, with zero percent interest, deferred payments, and was fully forgivable after five years. The loan amount was reduced (forgiven) by 20 percent each year the borrower stayed in the home. At the end of five years, the note was considered satisfied and THDA released the lien securing the note. Eligibility criterial for the program are outlined in detail in Appendix A.

The program began on January 1, 2011 as a pilot serving only 29 targeted counties deemed to be the "hardest hit counties." These targeted counties scored high on at least two of the three following factors: unemployment rates higher than the statewide average of 10.6 percent in 2019; a high percentage of the state's foreclosure filings; or a high rate of mortgage loans that are 30-90+ days delinquent. On March 1, 2011, the program was expanded and all counties became eligible for the program. The first applications for the KMTH Program were submitted in early January 2011, and the first borrower was approved to receive assistance on March 4, 2011.

The structure of assistance evolved over time:

- In the beginning of the KMTH Program, struggling homeowners were eligible to receive assistance of up to \$12,000 (\$18,000 if their home was located in a targeted county) for up to a maximum of 12 months (18 months in a targeted county). In an effort to ensure that the assistance provided in the KMTH Program was enough to aid in sustainable homeownership rather than short-term fixes, the second amendment increased assistance amount from \$12,000 to \$15,000 in standard eligible counties and from \$18,000 to \$20,000 in targeted counties.
- In May 2011, THDA changed the eligibility criteria for substantially underemployed homeowners. The reduction in income to be considered as "substantial" was reduced from 50 percent to 30 percent.
- In December 2011, the maximum assistance amount increased to \$20,000 (up to 12 months) for non-targeted counties and \$25,000 (up to 18 months) in targeted counties.
- Modification in May 2012 increased the maximum income limit (from \$74,980 to \$92,680) and unpaid loan balance (from \$226,100 to \$275,000) limits in accordance with increased income and purchase price limits in THDA's own homeownership programs.¹²

¹² The maximum income limit to be eligible for KMTH program was tied to the THDA's income limit in the Nashville MSA for a family of three or more persons.

¹¹ Bedford, Bledsoe, Carroll, Cocke, Crockett, Fentress, Gibson, Greene, Hamblen, Hardeman, Haywood, Hickman, Houston, Jefferson, Lauderdale, Lewis, Macon, Madison, Marshall, Maury, McMinn, McNairy, Monroe, Rhea, Sevier, Shelby, Smith, Trousdale and Warren Counties were identified as hardest hit/targeted counties in Tennessee.

- In November 2012, THDA expanded the eligibility to include divorce and death of a spouse as events causing mortgage payment difficulties.¹³
- Additionally, in November 2012, THDA increased the amount of assistance that could be provided again. In October 2012, the distinction between targeted and standard counties was removed and the assistance was increased to \$40,000 for all counties, up to 36 months. A homeowner who found employment during this period could continue receiving assistance up to two additional months. Or, if the re-employed homeowner's housing payments still exceed 31 percent of his/her income, he/she was able to continue receiving the assistance payments.

Following the assistance increase of November 2012, in June 2013, the THDA Board of Directors approved an extension of assistance up to the new maximum of dollars and months for eligible borrowers who previously received assistance and were still unable to make their payments. This expansion of assistance also ensured that Tennessee was getting this federal assistance out to homeowners quickly, for maximum impact. With outreach to all affected borrowers, more than 1,400 borrowers¹⁴ applied to take advantage of the additional assistance between June 2013 and July 2014. Approximately 83 percent of those borrowers who previously received assistance and applied for the extension were approved to receive additional assistance.¹⁵

B. Program Results

In its initial application for the Treasury's HHF program, THDA estimated that 44 percent of potential program beneficiaries would be from the targeted counties and 56 percent would be from the non-targeted counties. These estimates were based on an analysis of active loans and the unemployment and delinquency rates in each county. Assuming each applicant would use the maximum available assistance, THDA's initial proposal estimated that the program would help 11,211 homeowners. Accounting for the fact that the average assistance amount was approximately \$14,000, in December 2011, THDA increased the estimated number of participating households to 13,500. By November of 2012, this number was reduced to 11,300 with the expectation that it could be even fewer households as the maximum amount of assistance increased from \$25,000 to \$40,000 (\$20,000 for non-targeted counties). As expected, by the eighth amendment to the program, the average assistance amount increased to \$25,000; and based on this information, THDA reduced the target number of assisted homeowners to a final estimate of 7,700 homeowners.

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¹³ In 2012, THDA also received funds from the Tennessee Attorney General (AG) that were allocated through the National Mortgage Servicer Settlement. With these funds, THDA designed the AG's Long-term Medical Hardship Program to provide mortgage payment assistance to eligible Tennessee homeowners suffering from a long-term medical disability, a hardship that was not covered under the Hardest Hit Fund from the Department of Treasury.

¹⁴ There were approximately 1,600 borrowers who received assistance when the assistance amount was less than \$40,000 and would be able to apply for the extension. THDA reached out to them; however, only 1,427 borrowers chose to apply for assistance extension.

¹⁵ Of the 247 applicants whose extension application was denied, 40 percent were denied an extension because they did not complete the required

documentations on time, and 18 percent had a monthly housing cost of less than 31 percent of their income (they were not considered "cost burdened") at the time the extension request was made.

Table 2. Changes to the Actual Assistance Amount and the Estimates in KMTH Program

| | Amendment | Assistance Amount, | Estimated Number | Estimated Average |
|-------------|------------|----------------------|-------------------------|--------------------------|
| Amendment # | Date | per Borrower | of Borrowers | Assistance Amount |
| Amendment 1 | 9/29/2010 | \$12,000/\$18,000 | 5,015 | \$14,640 |
| Amendment 2 | 12/16/2010 | \$15,000/\$20,000 | 11,211 | \$17,200 |
| Amendment 3 | 5/25/2011 | \$15,000/\$20,000 | 11,211 | \$17,200 |
| Amendment 4 | 9/28/2011 | \$15,000/\$20,000 | 11,211 | \$17,200 |
| Amendment 5 | 12/8/2011 | \$20,000/\$25,000 | 13,500 | \$14,000 |
| Amendment 6 | 5/3/2012 | \$20,000/\$25,000 | 13,500 | \$14,000 |
| Amendment 7 | 11/15/2012 | \$40,000 (36 months) | 11,300 | \$16,254 |
| Amendment 8 | 6/11/2014 | \$40,000 (36 months) | 7,700 | \$25,000 |
| Amendment 9 | 9/29/2015 | \$40,000 (36 months) | 7,355 | \$25,000 |

THDA's KMTH Program continued approving borrowers and funding loans until the fourth quarter of 2014 while making monthly mortgage payments for these approved homeowners until the second quarter of 2018. A total of 7,355 homeowners received assistance and nearly \$183 million was disbursed on behalf of these borrowers. At least one homeowner was assisted in every Tennessee County, with the exception of Moore County. The program was disbursed proportionally such that counties with higher shares of the state's unemployed people before the start of HHF also had higher shares of HHF recipients. In 2009, 14 percent of more than 300,000 unemployed people in the State of Tennessee resided in Shelby County, followed by Davidson County with nine percent of total unemployed in the state. With nearly 1,900 homeowners assisted, Shelby County had the highest number of KMTH program borrowers, representing 26 percent of all borrowers, followed by Davidson County with 16 percent of state's nearly 7,400 program participants. Counties such as Morgan, Perry, Pickett, Lake and Moore had high and persistent unemployment rates, but they had relatively few homeowners with a mortgage. There were five or fewer homeowners assisted with the KMTH Program in these counties.

Figure 1. KMTH Program Recipients by County

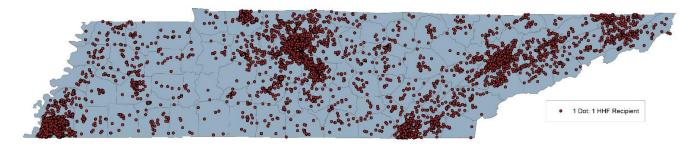


Table 3. Number of KMTH Borrowers Approved and Funds Disbursed by Year¹⁶

| Year | Homeowners Approved | Assistance Disbursed |
|-------|----------------------------|-----------------------------|
| 2011 | 755 | \$5,281,515 |
| 2012 | 1,900 | \$24,562,045 |
| 2013 | 2,725 | \$47,222,745 |
| 2014 | 1,975 | \$60,853,255 |
| 2015 | | \$32,101,186 |
| 2016 | | \$10,917,398 |
| 2017 | | \$1,865,714 |
| 2018 | | \$78,260 |
| TOTAL | 7,355 | \$182,844,739 |

A total of 1,300 prescreened applicants were denied because they were not able to provide appropriate documentation that they met the eligibility criteria. Approximately 700 applicants withdrew their applications before a decision about their approval was made at THDA.

The most common hardship reason borrowers reported was unemployment, followed by underemployment. Approximately 76 percent of all KMTH recipients reported being unemployed.

Being current on monthly mortgage payments at the time of application was not a requirement to be eligible to receive assistance in the KMTH Program. The recipient data illustrate that the program served mostly Tennessee homeowners with serious payment difficulties. Seventy-one percent of borrowers were 90 or more days behind on their mortgage payments, while only five percent were current on their payments.

THDA recertified the borrowers in the KMTH Program every three months. If borrowers experienced any of the following changes, they were no longer eligible to continue receiving assistance: new employment, an increase in income making their income exceed maximum allowable income limit, a reduction in housing cost to income ratio making it less than 31 percent, or a gain of more assets enough to pay their principal, interest, taxes and insurance (PITI) at least for 12 months. Other reasons terminating eligibility were abandonment, no response and death of the borrower. The most frequent reason borrowers left the program, representing 65 percent of all borrowers, was a completion of the program by receiving either the maximum amount of time or dollars in assistance for which they were approved. The next frequent reason for leaving the program, with 18 percent of all borrowers, was finding employment opportunities that made them no longer eligible due to their increased income.

Even if a borrower were approved to receive the maximum assistance amount allowed, the number of months they received assistance would depend on the monthly mortgage payments and unpaid arrears THDA had to pay to bring the borrower current on their mortgage loan. If the monthly PITI amount and/or the arrears were large, then the maximum assistance amount would

¹⁶ Sum of assistance disbursed by year is different than total reported because there were revisions made to the assistance disbursed, which were not reflected here in annual totals.

be available only for a short period of time. An average KMTH borrower received mortgage assistance for 19 months. KMTH assistance was both for reinstatement and also for helping with monthly mortgage payments. Approximately 400 borrowers received one time assistance to reinstate their mortgage payments.

Servicer participation was very important for the success of the program. Even if an applicant met the eligibility criteria, their ability to receive assistance was contingent on the agreement by their original servicer to accept payments from THDA on behalf of the borrower. By November 2014, more than 300 mortgage servicers participated in the HHF Program. Wells Fargo was the servicer with the highest number of recipients in the KMTH Program, followed by Bank of America, US Bank Home Mortgage, Chase and Ocwen Loan Servicing Inc.. These five servicing companies serviced 50 percent of the loans of the borrowers in the KMTH Program.

C. Lessons Learned

Effectiveness of partnering with existing networks of counseling agencies. Utilizing the existing network of nonprofits for the counseling requirement of the KMTH Program proved to be very effective. During the application process, applicants received ongoing support via face-to-face interaction and even at the end of the assistance, applicants were able to rely on the relationships they had built to access other community and state-level resources. The in-person support from counselors included helping applicants determine if they were eligible, assisting with completing the application, and searching for and accessing alternative options in the event they were ineligible for HHF mortgage assistance. Counselors were also available to provide wrap-around services to struggling homeowners, including negotiating with servicers for deferments, payment plans, and budgeting.

Strong relationships with servicers eased program launch. THDA's strong relationship with servicers, especially several large ones, contributed to the program's success. Servicers helped THDA market the program to eligible borrowers via communication, establishing boot camps, and sending representatives to conferences alongside THDA employees where applicants could complete the applications in person. Their involvement in the program from the beginning also encouraged smaller banks and servicers to join the program, which helped provide legitimacy to the program, particularly to individual homeowners and some smaller servicers. Therefore, accurate messaging and distinguishing the program from scams was critical.

Determining an individual's status as an "applicant." Only those individuals sent by counseling agencies were considered program "applicants," as these individuals completed the application and proved their eligibility after answering the pre-screening questions in the portal. Differentiating between these individuals and those who began an application, but failed to complete it or even respond to follow-up, was critical to gaining an accurate representation of the true rate of rejection.

Collaboration with Treasury and smaller servicers to implement the CDF. The use of the Common Data File (CDF) significantly improved the experience of administering the KMTH,

despite initial challenges with the adoption of this system. While large servicers were quick to adopt the CDF, smaller servicers like local community banks and credit unions were more likely to have concerns about program's credibility. In response, THDA adopted a two pronged approach. First, THDA had face-to-face meetings with local rural banks to clarify the program and resolve any misunderstandings. Second, THDA relied on the Treasury to follow-up with unresponsive servicers, which usually yielded a response and continued collaboration from the servicer.

Creation of a single system to disburse payments was effective. THDA administered KMTH using an older data sharing system called MITAS, which allowed the agency to avoid using multiple systems for payment. For the majority of the program's duration, the functions were time consuming as they required manual input (i.e. manual reconciliation of payments using Excel spreadsheets), but, eventually, staff was able to automate such tasks. While MITAS was challenging for entering and reporting data from the program administration side, it was an efficient system for payments as it eased the finance team's ability to make payments to servicers and other vendors. With this in mind, THDA developed its own system to manage ROP, PRRPLE, and BEP loans.

Alternative methods of disbursing payments. While the use of ACH to make payments to servicers was very effective, especially if implemented from the beginning, issuance of checks complicated the process of correcting mistakes. As such, the agency has explored different methods for disbursing payments for current programs like ERA, including paying utility companies directly.

Streamlining processes. Incorporating taxes and insurance into homeowners' escrow greatly eased the challenges associated with acquiring updated statements from homeowners. Because THDA could not issue a check without a current statement from the homeowner, it was difficult to confirm the correct arrearage amount if taxes and insurance were not in a homeowners' escrow. Furthermore, using a regular funding schedule allowed for greater efficiency and collaboration between the Agency's accounting and program divisions.

Marketing with geographically and community-specific strategies. THDA marketed the KMTH program extensively, compared to subsequent HHF programs, including the use of billboards, television and radio. ¹⁷ For example, THDA hired an outside marketing company to create a video, which was later distributed to churches across the state. As a result, faith leaders discussed the KMTH program and how it had assisted members of the congregation, which engendered belief in the program. While costly, these advertising strategies were critical to marketing and investing others in the program. However, rural communities were not served by such advertising as they relied more on the perspectives of fellow community members and physical advertisements.

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¹⁷ BEP did not require marketing because it was available only in several counties and THDA worked directly with nonprofits. For HHF-DPA program, THDA worked closely with approved realtors and lenders. THDA used mostly the recaptured funds to administer the PRRPLE and ROP, therefore did not have a large admin budget left for marketing. THDA mostly advertised them on the website announcing the availability of funds and talked to some nonprofits.

Easing recipients from assistance to ensure better outcomes. Some borrowers who received assistance the entirety of the program (three years) had great difficulty managing payments once the assistance ended. If payments stopped due to recertification because the individual did not qualify for the program anymore due to changes in their income status, THDA made two additional months of payments to prepare them for managing payments on their own. This was not the case for individuals who relied on THDA for making their house payments for entirety of the three years of the program. Many of these individuals had a limited amount of income, which made resuming monthly mortgage payments difficult when the assistance stopped. In reflection, a tiered approach in which borrowers would be eased into making their mortgage payments towards the end of the program may have helped prevent negative outcomes. Furthermore, it may have been beneficial for counselors to focus on budgeting and transitioning from the program in addition to their work on educating borrowers around foreclosure prevention (e.g. explaining to borrowers what foreclosure, short-sale, deed-in-lieu alternatives are).

BLIGHT ELIMINATION PROGRAM (BEP)

A. Program Implementation and Evolution

THDA's Hardest Hit Fund Blight Elimination Program (BEP) started in November 2015. Using recaptured HHF funds, BEP's purpose was to reduce foreclosures, promote neighborhood stabilization, and maintain property values through the demolition of vacant, abandoned, blighted residential structures, and subsequent greening or improvement of the remaining parcels. The program was offered in targeted counties¹⁸ with high numbers of vacancies and foreclosures. The eligible program participants were either nonprofits or land banks. Eligible nonprofits were required to be engaged in affordable housing development activities in the BEP eligible counties for at least two years prior to the date of BEP application.

A property acquired and demolished with a BEP loan had to be maintained ("greened") for a period of three years or redeveloped for the benefit of the community, unless new affordable housing that met THDA acquisition cost and income requirements was constructed on the property.

BEP was a loan program with two phases. In the first phase ("Stage 1 Loan"), THDA used its own funds to make loans to eligible participants for acquisition, demolition, and greening of a previously approved lot. In the second phase ("Stage 2 Loan"), recaptured HHF funds were used to repay the Stage 1 Loan.

The maximum BEP loan amount was \$25,000. Participating nonprofits and land banks were required to demonstrate that they had sufficient capacity and experience to carry out the required activities and that they were able to identify properties to be addressed through BEP. Only the residential vacant and blighted properties that met the certain criteria were eligible for BEP. Please see Appendix A for more details about program eligibility criteria.

¹⁸ Shelby, Montgomery, Davidson, Rutherford, Hamilton, and Knox were the originally included counties. In the subsequent changes, Anderson and Madison Counties were added to the list of targeted counties.

Nonprofits and land banks were required to apply to THDA to be a BEP program participant. Once approved and selected, they were required to submit at least one BEP loan application during a calendar year to maintain their eligibility. If approved, the BEP program participant was allowed to have a maximum of 10 active Stage 1 loans at one time. Only after closing of a Stage 2 loan, which pays off a Stage 1 loan, the BEP program participant could submit another BEP loan application, to maintain the 10 active Stage 1 loan maximum.

When applying for a specific property, a BEP program participant was required to submit a property inspection report that included pictures of the interior, exterior (front and back), and visible damage. A BEP Property Condition Checklist was not required if the property was condemned by a city or county where the property was located. Once approved, a BEP program participant was able to submit a BEP loan application for each property identified for the HHF Blight Elimination Program.

THDA first allocated \$5.5 million for this program, but later increased the allocation amount to \$10 million. As THDA received more recaptured funds they were rolled into the program with the intention of utilizing them. Shelby, Montgomery, Davidson, Rutherford, Hamilton, and Knox were the initial targeted counties. As a result of negotiations with Treasury, Anderson and Madison Counties were added to the list of targeted counties, while Davidson and Rutherford Counties were removed. THDA wanted to add more counties to the list of targeted counties so that the program could be available in more parts of the state and have a positive impact. However, there was a lot of scrutiny from the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) and Treasury, who wanted to make sure that the program was carefully targeted to areas with highest levels of foreclosure and blight. Since Davidson and Rutherford Counties did not produce any loans even after reaching out to several nonprofits in those counties, THDA asked Treasury to remove them so that other counties could be added. During the life of the program, there were no BEP loans funded in Davidson, Montgomery and Rutherford Counties.

B. Program Results

When it was first introduced, THDA allocated \$5.5 million for this program. Assuming that participants would use the maximum amount of assistance available to them (\$25,000), it was estimated that 220 blighted properties would be demolished and greened. Subsequently, once the allocation for this program was nearly doubled to \$10 million, THDA increased this estimate to 400 blighted properties.

As of the third quarter of 2021, nearly \$3 million has been used to remove 147 blighted properties in four Tennessee counties. Although Madison County was added to the list of targeted counties later in the process, 91 out of 147 BEP loans were in this county, followed by Shelby County. In fact, over 90 percent of BEP funds were distributed to these two West Tennessee counties.

Table 4. Number of Properties Demolished with BEP and Funds Disbursed by Year¹⁹

| Year | Properties Demolished | Assistance Disbursed |
|-------|------------------------------|-----------------------------|
| 2015 | 0 | \$0 |
| 2016 | 3 | \$57,513 |
| 2017 | 13 | \$215,868 |
| 2018 | 21 | \$361,211 |
| 2019 | 39 | \$770,101 |
| 2020 | 31 | \$668,427 |
| 2021 | 40 | \$872,227 |
| TOTAL | 147 | \$2,945,463 |

Eight nonprofits and land banks operating in the eligible counties participated in the program. While most counties had only one participant, Shelby County had five participants who demolished 45 properties. Originally, the participants were required to find blighted properties in scattered sites to prevent clustering of the assistance and to spread the benefits of the assistance to a wider geography. Later, the agency realized that there were multiple blighted properties in close proximity to one another and removing just one would not be enough to improve and stabilize the neighborhood. Therefore, THDA began allowing the demolition of multiple properties on the same street. Even with that change, participants mostly demolished single properties located in each street. There were several exceptions, however, in which multiple blighted properties on one street were demolished. For example, in Madison County, the Community Redevelopment Agency demolished nine properties on one street. Also in Madison County, two different streets had four blighted properties removed at one time.

Of the \$3 million total in BEP spending, nearly \$1.6 million was used to acquire the blighted properties and nearly \$750,000 was used for demolition. Program participants used approximately \$350,000 for greening and maintaining the lots. On average, participants paid nearly \$11,000 for acquiring the property. Of the four counties with BEP loans, the average cost of acquisition was lowest in Shelby County at less than \$6,000; it was highest in Anderson County at nearly \$19,000. Four of the program participants that operated in Shelby County received 11 properties free of charge.

Once the property was acquired and demolished, participants were required to maintain the property as green space in accordance with local codes and ordinances for three years; in the end, the BEP loan would be forgiven. A Stage 2 loan could be modified, forgiven, or paid off if the participant submitted a request to redevelop the vacant lot for the benefit of the community, build affordable housing for homeownership, or build affordable rental housing on the property at any time prior to the end of the 3-year term of the Stage 2 loan. Building affordable housing for homeownership use was most the cited use by participants followed by maintaining a green lot. Especially in Madison County, 75 percent of demolished properties were earmarked for building affordable housing for homeownership.

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¹⁹ Sum of assistance disbursed by year is different than total reported because there were quarterly revisions made to the assistance disbursed, which were not reflected here in annual totals.

Table 5: How the Lot Was Maintained After Demolishing the Blighted Property

| End Use Description | Anderson | Hamilton | Madison | Shelby | Tennessee |
|-------------------------------------|----------|----------|---------|---------------|-----------|
| Build a community garden/park | 0 | 0 | 2 | 3 | 5 |
| Build affordable housing for rental | | | | | |
| use | 0 | 4 | 1 | 4 | 9 |
| Build affordable housing for | | | | | |
| homeownership use | 0 | 3 | 68 | 8 | 79 |
| Maintain a green vacant lot | 4 | 0 | 20 | 30 | 54 |
| TOTAL | 4 | 7 | 91 | 45 | 147 |

Overall, BEP was an impactful program in communities in which a blighted house surrounded by non-blighted homes. The positive effects of the program will likely be understood better with more time and data.

C. Lessons Learned

Advocating for clean titles. When THDA set up the blight elimination program, the Agency required legal authority, e.g. a "clean title," for demolition before demolishing a home. This policy was intended to avoid situations in which owners or heirs might attempt to claim the property after a demolition. However, obtaining a clean title was difficult for participants, particularly in Shelby County. The economic downturn contributed to several owners leaving Memphis, which led to difficulty in finding the owner and having them agree to demolish the property. This due diligence added nearly nine months to the whole process for non-profits. In fact, Memphis implemented new legislation to address this issue. With this new legislation, if a property surpassed a number of code enforcement issues and was considered blighted and/or a nuisance to the area, the owners' right of redemption was shortened to 6 months instead of a year. This allowed the city and county to move more quickly to revitalize the area.

Allowing BEP participants to demolish multiple properties on the same street. Realizing that demolition of a single property on a street would be unlikely to yield significant impacts on the overall neighborhood, THDA began to allow for the demolition of multiple blighted properties on a street. Initially, the policy required the existence of other occupied single family homes within 500 feet of the blighted property so that removing that one would improve the values of the other occupied homes in the neighborhood. But, particularly in Shelby County, removing just one blighted property of several on a street would be insufficient revitalize the neighborhood and improve the property values. This change gave some program participants more flexibility and increased activity.

²⁰ This was due in large part to the efforts of Steve Barlow, President and cofounder of Neighborhood Preservation Inc. For more information about efforts to fight blight in Memphis, see: Barlow, S., Schaffzin, D. M. and Williams, B.J. 2017. "Ten Years of Fighting Blighted Property in Memphis: How Innovative Litigation Inspired Systems Change and a Local Culture of Collaboration to Resolve Vacant and Abandoned Properties." Retrieved from https://www.americanbar.org/content/dam/aba/publications/journal of affordable housing/volume 25 no 3/ah-25-

3-07-barlow.pdf

²¹ In Tennessee, even after the sale of the property in tax sale, a one-year "redemption period" is required, during which the original owner could redeem the property by paying taxes owed. The law has been changed to provide for a 30-day redemption period in cases where the property is abandoned. See: Tennessee Code 67-5-2701(a)(1)(C). Retrieved from https://casetext.com/statute/tennessee-code/title-67-taxes-and-licenses/chapter-5-property-taxes/part-27-redemption/section-67-5-2701-procedure-for-redemption-of-property.

Although essential, nonprofit requirements may have stemmed participation. Although THDA tried to increase participation by training city officials and nonprofits about the program, they may have had difficulty accessing the program due to some of THDA's requirements. These requirements were necessary since THDA was using its own funds, which were later reimbursed by the Treasury once demolitions and inspections were completed. As such, extra due diligence was implemented to ensure funds were disbursed to organizations that were capable of administering them without triggering any red flags with SIGTARP or Treasury.

Creating protocols to prevent the accidental demolition of properties. THDA unintentionally demolished a house that was attached to a multifamily development (a tax-credit property). At the time, THDA did not inspect if targeted properties were adjacent to or were tax-credit properties, themselves. After this incident, once the applications were received from participants, BEP staff sent the list of addresses (for the homes that would be demolished) to the multifamily division to ensure the property was not associated with their portfolio. Eventually, THDA's IT department automated this process to ensure a smooth inspection.

DOWNPAYMENT ASSISTANCE PROGRAM

A. Program Implementation and Evolution

THDA provided a Hardest Hit Fund Downpayment Assistance (HHF-DPA) to qualified first-time homebuyers to purchase a residence in housing markets that had been affected the most by serious delinquency, negative equity, distressed sales, and foreclosures. The intent of the program was to help strengthen the housing demand in those distressed zip codes, stabilize housing prices, and help to prevent future foreclosures. When the program started on March 1, 2017, THDA allocated nearly \$60.3 million for this program.

The HHF-DPA program was only available to qualified home buyers who were purchasing a home in one of 55 approved "targeted zip codes" located in 30 Tennessee counties via THDA's Great Choice mortgage loan. To identify targeted zip codes, THDA evaluated five housing market distress indicators including seriously delinquent mortgage loans, negative equity, short sales, REO sales, and foreclosures. Additionally, loan origination data was utilized to determine that THDA would be able to disburse funds in a reasonable time. The zip codes that exceeded the statewide rate in at least four of the five distressed housing market indicators, and achieved a minimum threshold origination volume were selected as targeted zip codes. Every six months, the existing list of HHF-DPA approved zip codes were re-evaluated to determine if they continued to meet the criteria of targeted zip codes. Zip codes had higher than state average rates across four or more distress indicators were re-identified as targeted zip codes. Zip codes that met only two distress indicators were removed from the targeted zip code list within 90 days. Zip codes that met three distress indicators were re-analyzed in the subsequent quarter to determine if they might meet four distress indicators in the next review. A zip code that met only three distress indicators for two consecutive reviews was deemed ineligible for HHF-DPA and removed from the targeted zip code list within 90 days from the second review.

Since eligible borrowers were using THDA's 30-year fix rate Great Choice mortgage loan product, originated through THDA-approved lenders, they had to meet all Great Choice loan requirements, including, but not limited to, being a first-time homebuyer with income that did not exceed THDA's household income limit and purchasing a home priced less than or equal to THDA's purchase price limit in one of the targeted zip codes. Borrowers were required to be, or become within 60 days after the THDA loan closing, a resident of the State of Tennessee, and they had to occupy the property as their principal residence. Borrowers were also required to complete both a pre-purchase and post-purchase homebuyer education course through a THDA-approved counseling agency. Homebuyers who received assistance from other HHF programs were excluded.

Downpayment assistance of up to \$15,000 was available to homeowners in the form of a zero-percent interest, non-recourse, and forgivable second mortgage loan with a 10-year term. The second mortgage loan was forgivable at a rate of 20 percent per year, starting in the sixth year. The HHF-DPA loan was due on sale. Any HHF-DPA loan funds recovered before September 30, 2020 were recycled back into HHF-DPA and used to provide assistance to additional homeowners for the duration of HHF-DPA in accordance with the Agreement. Borrowers were required to purchase existing properties, new or proposed construction were excluded.

A major change made to this program was the regular re-evaluation of zip codes. As economic conditions improved, THDA was wary of over-penetrating the markets with increased sales, which was contributing to making areas unaffordable for many residents rather than stabilizing the housing markets. Therefore, those zip codes were removed from the list of targeted zip codes.

In November of 2019, a state audit found that 23 HHF-DPA borrowers purchased homes in census tracts or counties that had been mistakenly designated as targeted areas. Because the first-time homebuyer requirement for the Great Choice program is waived if the borrower is a qualified veteran or is purchasing on one of the targeted areas, it was critical for THDA to correct this mistake by purchasing these loans back. However, these loans closed prior to discovering the issue and borrowers had already received their DPA funds from the Hardest Hit Program. Upon receipt of the information from the state audit, THDA staff disclosed this error to the U.S. Treasury. THDA also found out that five of those borrowers had already paid off their loans and reimbursed THDA. Based on the U.S. Treasury's recommendation THDA reimbursed the U.S. Treasury for the DPA provided for these 18 borrowers that were either not first-time homebuyers or did not purchase a home in a targeted area where the requirement was waived.

B. Program Results

Originally, THDA allocated \$60 million for this program and estimated assisting approximately 4,000 households. The last four borrowers were approved and became homeowners in October 2019. In just two and a half years, a total of 5,430 Tennesseans became homeowners with the help of this program. THDA provided over \$81 million in downpayment assistance for these borrowers, supporting loans in the amount of nearly \$640 million. With 1,186 loans, representing 22 percent of all HHF-DPA loans, Shelby County had the most borrowers followed by Knox and Montgomery Counties with 15 and 13 percent of total borrowers, respectively. Eighteen Shelby

County zip codes were targeted, the most among all Tennessee counties. However, the number of eligible zip codes was not an indicator of the number of borrowers. Montgomery County with only two eligible zip codes had more HHF-DPA borrowers than Hamilton County with five eligible zip codes.

In March 2017, the program was available in 55 zip codes; seven more zip codes were added in November 2017 raising the eligible number of zip codes to 62. As the following table displays, in three subsequent rounds of revisions, 24 zip codes were removed from the list of eligible zip codes.

Table 6. Major changes to eligible zip codes and dates

| Announcement | Effective | |
|--------------|------------------|---|
| Date | Date | Change |
| 24-Feb-17 | 1-Mar-17 | Availability of new HHF-DPA program in 55 zip codes |
| 16-Oct-17 | 1-Nov-17 | Adding 7 zip codes to the list of eligible zip codes |
| 15-Nov-18 | 1-Jan-19 | Removing 10 zip codes from the list of eligible zip codes |
| 1-Feb-19 | 18-Mar-19 | Removing 3 zip codes from the list of eligible zip codes |
| 27-Mar-19 | 1-Jul-19 | Removing 11 zip codes from the list of eligible zip codes |
| 7-Aug-19 | 7-Aug-19 | Ending HHF-DPA Program |

Table 7. Number of Households Assisted with HHF-DPA Program and Funds Disbursed by Year

| Year | Households Assisted | DPA Amount Provided | Mortgage Loan \$ |
|-------|----------------------------|----------------------------|------------------|
| 2017 | 1,465 | \$21,975,000 | \$164,971,033 |
| 2018 | 2,545 | \$38,175,000 | \$301,508,810 |
| 2019 | 1,420 | \$21,300,000 | \$169,730,891 |
| TOTAL | 5,430* | \$81,450,000 | \$636,210,734 |

^{*} In the third quarter of 2020, THDA removed 18 HHF-DPA loans that were made to the borrowers who would not be eligible for the HHF-DPA program. Therefore, the cumulative number of homeowners assisted is different than total number of new homeowners as a result of this program.

C. Lessons Learned

Ensuring a consistent geographic area for targeting. THDA was able to increase the footprint of the program across the state in the highest-need regions by shifting from a county to a zip code-level geography for determining targeted areas. Although this increased the program's impact on a wider scale geographically, there were complications associated with the messaging of a mid-program change, particularly for THDA's marketing efforts. For example, realtors and lenders who may have been expecting DPA funds while in the process of closing on a contract were left with no funds as their eligibility status changed. Therefore, a consistent geographic area throughout the duration of the program would have been beneficial.

Ensuring timely lien releases. Housing finance agencies have to allocate funds to pay for the lien releases if these releases extend beyond the program's timeframe (after the HFA closes all of

its accounts with Treasury). Lien releases are often costly, which complicates an HFA's ability to utilize its own resources to pay for the fees associated with lien releases in these events.

Marketing the program to lenders was an effective strategy. THDA marketed the DPA program heavily to lenders. Compared to the mortgage assistance programs (KMTH, PRRPLE or ROP), lenders and realtors were more heavily involved than servicers with DPA. THDA placed hangers that explained the program details at rental apartment complexes in the cities to educate the renters about the availability of a significant DPA available to them. This approach seemed to boost production. Realtors in those communities also helped THDA with DPA.

PRINCIPAL REDUCTION WITH RECAST PROGRAM OR LIEN EXTINGUISHMENT (PRRPLE) PROGRAM

A. Program Implementation and Evolution

The Principal Reduction with Recast Program or Lien Extinguishment (PRRPLE) was an additional foreclosure prevention program administered by THDA using recaptured HHF funds. The goal of the program was to reduce delinquencies and foreclosures by lowering mortgage payments to affordable levels for homeowners who had experienced a financial burden due to an eligible hardship. Excluding administrative expenses, THDA made \$5 million available for this program. The maximum amount of assistance available per homeowner was \$40,000, and the program was available in all counties across Tennessee.

A PRRPLE loan was available to eligible low- and moderate-income homeowners who were facing a financial hardship due to the death of a spouse, divorce, or substantial underemployment. This included homeowners who may have been in fixed incomes.

PRRPLE lowered monthly mortgage payments to affordable levels for eligible homeowners by providing a reduction in the principal balance of their first mortgage loan, combined with a loan recast or modification. It also provided principal reduction, which resulted in a full lien extinguishment. To bring homeowners current on their mortgage, in conjunction with the principal reduction, PRRPLE also paid mortgage-related expenses (e.g., principal, interest, property taxes, homeowner insurance, and servicer-related fees).

The PRRPLE assistance was structured as a zero percent interest, non-recourse, deferred-payment, forgivable, subordinate loan with a term of 10 years. Starting in the sixth year, the loan was forgiven by 20 percent each year. At the end of tenth year, the note will be considered satisfied and THDA will, upon request, release the lien securing the note. If the house is sold or refinanced, or the property is no longer owner-occupied, loan funds will be due.

Two types of assistance were available under the PRRPLE Program: Principal Reduction with Recast or Lien Extinguishment. Eligible homeowners were only able to receive one type of assistance. Servicers might recast, modify, or refinance the first mortgage loan to deliver a more affordable mortgage loan payment to the homeowner. A PRRPLE loan could not be used to pay taxes, homeowner's insurance, or homeowner's association dues that were not currently

escrowed by the servicer, or to satisfy existing consumer debt of the eligible homeowner. Additionally PRRPLE loan payments could not result in cash to the eligible homeowner. Eligibility criteria for the PRRPLE program are detailed in Appendix A.

Full lien extinguishment was available only for households that received income from social security, long-term disability or other fixed-income sources. Homeowners had to have an outstanding balance under a first mortgage lien on a principal residence of \$40,000 or less, including all arrearages and fees. If the principal balance on the first mortgage loan exceeded \$40,000 (the maximum assistance amount), lien extinguishment was not an option, but assistance was still available if the homeowner met the eligibility requirements for principal reduction with recast, modification or refinance.

When the program was first introduced, there was a maximum household income limit and post-assistance loan-to-value (LTV) ratio regardless of the source of income. In October 2017, THDA made a distinction between a non-fixed-income homeowner and fixed-income homeowner for the maximum income and minimum LTV ratio. With this program, THDA intended to help homeowners with limited options after they experienced a reduction in their income resulting from unemployment or underemployment. A homeowner with enough equity will be in a better position to face this hardship. In contrast, a homeowner on a fixed income may not be able to improve their situation over time and may be faced with limited options. Most people on fixed incomes were older or disabled. Even if they had access to the extra equity, they would be less likely to pull the equity from their home. In an effort to offer these homeowners more options, the full lien extinguishment was only available for homeowners on fixed incomes. At first, THDA allocated \$10.7 million for the program, but after reviewing the application trends and noticing the lack of demand, the allocation amount was reduced to \$5 million.

B. Program Results

Assuming that the borrowers would use the maximum available assistance amount of \$40,000, THDA estimated that 268 borrowers would be helped with this program. Once the allocated amount was reduced, THDA revised this target to 125 households.

The PRRPLE Program started receiving applications in the first quarter of 2017, though the first borrowers did not start receiving assistance until the first quarter of 2018. A total of 21 homeowners were assisted with nearly \$750,000 from then until the program ended in 2019. Six of the PRRPLE borrowers received lien extinguishment, one borrower received only recast, and the remaining borrowers had received payments for both arrearages and recast.

Table 8. Number of Households Assisted with PRRPLE and Funds Disbursed by Year²²

| Year | Homeowners Assisted | Assistance Disbursed |
|-------|----------------------------|-----------------------------|
| 2017* | 0 | \$0 |
| 2018 | 12 | \$402,100 |
| 2019 | 9 | \$330,810 |
| TOTAL | 21 | \$728,222 |

*Although the program was active in 2017, no applicants were approved as the program required some time to put into operation.

For borrowers with lien extinguishment, unpaid loan balances ranged from less than \$5,000 to nearly \$40,000. Even without full lien extinguishment, an average PRRPLE borrower with recast was able to reduce their monthly PITI payment by 48 percent. For PRRPLE with recast borrowers, assistance provided the mortgage recast and also paid down their arrearages, except for one PRRPLE borrower who did not have any arrearage. Still, on average, over 80 percent of total assistance provided to these borrowers went toward paying down the mortgage balance (recast) and improving the affordability for the borrowers.

Table 9. Unpaid loan balance and monthly payment, before and after assistance

| | Average Unpaid Balance (UPB) | | | Average Monthly Payment (PITI) | | |
|-----------------|------------------------------|---------------------|-------------|---------------------------------------|---------------------|-------------|
| Program Type | Pre- Assistance | Post- Assistance | % Change | Pre- Assistance | Post- Assistance | % Change |
| PRRPLE w/Lien | | | | | | _ |
| Extinguishment | \$27,856 | \$0 | 100% | \$527 | \$0 | 100% |
| PRRPLE w/Recast | \$77,020 | \$45,132 | 48% | \$705 | \$487 | 34% |
| ALL | \$62,973 | \$32,237 | 63% | \$654 | \$370 | 53% |

THDA never expected PRRPLE (or ROP, in that vein) to have very high production. Not many funds were made available for these programs. Furthermore, because a majority of administrative funds were already used in the early stages of the HHF program launch, including the marketing of previous programs, THDA did not have enough funds to advertise the PRRPLE program more heavily. Additionally, for the small amount of funds available and few expected participants, the overhead costs of an extensive marketing campaign would be too high to justify. Therefore, low production numbers were reasonable and expected.

C. Lessons Learned

Additional funding for counselors would have been beneficial. Utilizing counselors was proven to be effective in the KMTH program, but THDA was not able to use them until the end of the program for PRRPLE or ROP, particularly with budget counseling. An intentional choice was made to reallocate the funds that would have been designated for counselors towards the program assistance fund. The cost of utilizing counselors was determined to be too high for the

²² Sum of assistance disbursed by year is different than total reported because there were quarterly revisions made to the assistance disbursed, which were not reflected here in annual totals.

expected volume THDA was expecting from the program. In addition, foreclosure counselors were not available to provide the appropriate counseling at the time of the launch of PRRPLE. As a result, THDA staff had to provide the necessary customer service for applicants. The eligible individuals for whom PRRPLE was intended (the elderly or individuals who were on fixed incomes) were far less likely to have access to the internet, have transportation to access the library for assistance, or be capable of completing the application independently compared to the general population.

Stronger messaging related to the program was needed. With the exception of BEP, all HHF programs could have benefitted from stronger messaging related to THDA's intention. For example, several homeowners misunderstood THDA's program requirements and subsequently feared losing their homes. This may have resulted in PRRPLE's (and ROP's) effects being less expansive. The use of counselors may have also stemmed this outcome.

Development of an internal system to report and enter data. THDA developed its own system (LOUISE) for reporting and entering data about applicants. This system was developed and available for BEP, PRRPLE and ROP and was used from the programs' initiations, which was an effective strategy.

REINSTATEMENT ONLY PROGRAM (ROP)

A. Program Implementation and Evolution

The ROP Program offered a one-time disbursement up to \$20,000 intended to fully reinstate the first mortgage loan of qualified homeowners who had fallen behind on their mortgage loans and were in imminent danger of losing their home to foreclosure due to a qualified hardship that occurred after they purchased their home. After receipt of the funds, the borrower was expected to continue making the monthly mortgage payments. Therefore, the borrower was required to demonstrate the ability to make such payments by verification of permanent employment or income benefits such as child support, SSI benefits, foster care, etc. Further details about the eligibility criteria are outlined in Appendix A.

Homeowners who had an unpaid principal balance in excess of \$275,000, had received assistance through other HHF funded programs, and were in active bankruptcy were excluded from ROP. When ROP was reopened in 2021 to help struggling homeowners with COVID-19 related job and income losses, homeowners who received assistance from other HHF programs were allowed to apply and receive assistance.

The property was required to be an owner-occupied existing single family home or condominium (attached or detached) including manufactured homes on foundations permanently affixed to real estate owned by the borrower.

Similar to PRRPLE loans, ROP assistance was also structured as a zero percent interest, non-recourse, deferred-payment, forgivable, subordinate mortgage loan with a 10-year term. The loan amount was reduced by 20 percent per year for every year the homeowner stays in the home

starting in the sixth year. At the end of 10 years, the note will be considered satisfied and the homeowner may request to release the lien securing the note.

The mortgage loan was evidenced by a promissory note and secured by a deed of trust on the property in favor of THDA. Borrowers were required to sign and acknowledge the program guidelines pursuant to a written agreement. Loan funds were due and payable if the property was sold, refinanced or no longer owner occupied, and there were sufficient equity proceeds available (unless otherwise prohibited under applicable federal law).

THDA closed the ROP in the first quarter of 2020, but reopened it in December 2020 (12/14/2020) to assist the homeowners who were struggling to pay their mortgage after job losses related to COVID-19. In the first round of ROP (and all other THDA administered HHF programs), THDA had not allowed someone who had previously received assistance in one HHF program to receive assistance in another one. In the second round of ROP, however, homeowners who previously received any HHF assistance were eligible. A total of 11 ROP borrowers received other HHF assistance, ten of whom became homeowners with HHF downpayment assistance (HHF-DPA) and one of whom received a PRRPLE loan.

B. Program Results

THDA allocated \$5.7 million for this program and estimated that approximately 285 homeowners would be assisted with the program. In the first round of program, from the fourth quarter of 2017 until the first quarter of 2020, 64 homeowners were assisted with \$617,644. When it was reopened in December 2020, a total of 40 more homeowners were assisted with nearly \$500,000.

Of all the assisted homeowners from the beginning to the end of the third quarter in 2021, a majority of assisted homeowners were underemployed, followed by divorced homeowners. Out of 95 Tennessee counties, 33 counties had at least one ROP borrower. Davidson and Knox Counties led the counties with 13 borrowers each followed by Shelby and Rutherford Counties, with 11 and 10 loans, respectively.

Table 10. Number of Households Assisted with ROP and Funds Disbursed by Year

| Year | Homeowners Assisted | Assistance Disbursed |
|-------|---------------------|----------------------|
| 2017 | 1 | \$14,650 |
| 2018 | 39 | \$368,388 |
| 2019 | 21 | \$197,837 |
| 2020 | 3 | \$36,769 |
| 2021 | 40 | \$460,748 |
| TOTAL | 104 | \$1,078,392 |

C. Lessons Learned

Supporting applicants in gathering documentation. As was the case with KMTH and PRRPLE, THDA received several complaints regarding the required documentation for application and approval. Gathering all the necessary documents was particularly challenging for

elderly applicants or individuals who had been in their homes for a long time. To balance a desire to maintain the fidelity of the assistance as well as the unintentional dissuasion of individuals who may have been good candidates, in the future THDA should consider the use of proxy indicators in lieu of specific documentation. Although the recruitment of counselors and other nonprofit agencies to support applicants in this process was considered, the lack of administrative funds and available made this difficult.

Section III - Homeownership Retention under HHF

The homeownership retention tables below contain the outcomes of HHF homeowners for all programs within two years of their exit from the program. There are five homeowner categories:

- Foreclosure Sale
- Deed in Lieu
- Short Sale
- Traditional Sale
- Borrower Still Owns Home

These data are reported cumulatively as well as by individual program. All HHF programs are included except for the blight elimination (BEP) and downpayment assistance (DPA) programs, as the intent of these programs was not to retain the homes of assisted homeowners.

We excluded those properties for which ownership information was unavailable based on the provided address from our analysis of homeownership retention. The KMTH program had 187 missing retention information while two PRRPLE properties were excluded from the analysis.

| | Total - All Programs | | |
|---|---------------------------------------|--------|--|
| P | Program Outcomes 2 Years Post Program | | |
| | Exit | | |
| | Foreclosure Sales | | |
| | Number | 597 | |
| | Deed in Lieu | | |
| | Number | 10 | |
| | Short Sale | | |
| | Number | 33 | |
| | Traditional Sale | | |
| | Number | 330 | |
| | Borrower Still Owns | Home | |
| | Number | 6,321 | |
| | Homeownership Retention | | |
| | Number | 6,651 | |
| | % | 91.22% | |

| | KMTH | | |
|------------|-------------------------|-------------------|--|
| | | - | |
| P : | rogram Outcomes 2 Y | ears Post Program | |
| Exit | | | |
| | Foreclosure Sales | | |
| | Number | 597 | |
| | Deed in Lieu | | |
| | Number | 10 | |
| | Short Sale | | |
| | Number | 33 | |
| | Traditional Sale | | |
| | Number | 321 | |
| | Borrower Still Owns | Home | |
| | Number | 6,207 | |
| | Homeownership Retention | | |
| | Number | 6,528 | |
| | % | 91.07% | |

| RO | P | | | | | | |
|--------------------|---------------------------------------|--|--|--|--|--|--|
| Program Outcomes 2 | Program Outcomes 2 Years Post Program | | | | | | |
| Ex | it | | | | | | |
| Foreclosure Sales | | | | | | | |
| Number | 0 | | | | | | |
| Deed in Lieu | | | | | | | |
| Number | 0 | | | | | | |
| Short Sale | | | | | | | |
| Number | 0 | | | | | | |
| Traditional Sale | | | | | | | |
| Number | 9 | | | | | | |
| Borrower Still Own | ns Home | | | | | | |
| Number | 95 | | | | | | |
| Homeownership Re | etention | | | | | | |
| Number | 104 | | | | | | |
| % | 100.00% | | | | | | |

| | PRRPLE | | | | | | | |
|---|---------------------------------------|----------|--|--|--|--|--|--|
| P | Program Outcomes 2 Years Post Program | | | | | | | |
| | Ex | it | | | | | | |
| | Foreclosure Sales | | | | | | | |
| | Number | 0 | | | | | | |
| | Deed in Lieu | | | | | | | |
| | Number | 0 | | | | | | |
| | Short Sale | | | | | | | |
| | Number | 0 | | | | | | |
| | Traditional Sale | | | | | | | |
| | Number | 0 | | | | | | |
| | Borrower Still Own | is Home | | | | | | |
| | Number | 19 | | | | | | |
| | Homeownership Re | etention | | | | | | |
| | Number | 19 | | | | | | |
| | % | 100.00% | | | | | | |

Section IV – Conclusion

THDA began administering the Treasury's Hardest Hit Fund (HHF) program in 2011. It began with a single mortgage assistance program (KMTH), and was soon followed with a blight elimination program (BEP), a downpayment assistance program (HHF-DPA) and two other mortgage assistance programs that focused on the reinstatement and principal reduction (ROP and PRRPLE, respectively).

Nearly \$270 million of HHF assistance helped approximately 13,000 households with their housing expenses and removed 147 blighted properties. The KMTH and HHF-DPA programs were the largest of all programs administered, in both the dollar amount of assistance and the number of households served.

Table 11. Approved Households and Disbursed Amounts by THDA's HHF Programs

| Year | | KMTH | | BEP | DPA | | PRRPLE | | ROP | | TOTAL | |
|-------|-------|---------------|-----|-------------|-------|--------------|--------|-----------|-----|-------------|--------|---------------|
| rear | # | \$ | # | \$ | # | \$ | # | \$ | # | \$ | # | \$ |
| 2011 | 755 | \$5,281,515 | | | | | | | | | 755 | \$5,281,515 |
| 2012 | 1,900 | \$24,562,045 | | | | | | | | | 1,900 | \$24,562,045 |
| 2013 | 2,725 | \$47,222,745 | | | | | | | | | 2,725 | \$47,222,745 |
| 2014 | 1,975 | \$60,853,255 | | | | | | | | | 1,975 | \$60,853,255 |
| 2015 | | \$32,101,186 | 0 | \$0 | | | | | | | 0 | \$32,101,186 |
| 2016 | | \$10,917,398 | 3 | \$57,513 | | | | | | | 0 | \$10,974,911 |
| 2017 | • | \$1,865,714 | 13 | \$215,868 | 1,474 | \$22,110,000 | 0 | \$0 | 1 | \$14,650 | 1,475 | \$24,206,232 |
| 2018 | | \$78,260 | 21 | \$361,211 | 2,554 | \$38,340,000 | 12 | \$402,100 | 39 | \$368,388 | 2,605 | \$39,549,959 |
| 2019 | | | 39 | \$770,101 | 1,420 | \$21,300,000 | 9 | \$330,810 | 21 | \$197,837 | 1,450 | \$22,598,748 |
| 2020 | | | 31 | \$668,427 | | | | | 3 | \$36,769 | 3 | \$705,195 |
| 2021 | • | | 40 | \$872,227 | | | | | 40 | \$460,748 | 40 | \$1,332,975 |
| TOTAL | 7,355 | \$182,844,739 | 147 | \$2,945,347 | 5,430 | \$81,450,000 | 21 | \$732,910 | 104 | \$1,078,391 | 12,899 | \$269,051,387 |

Approved households total does not Include BEP properties. It also excludes 11 ROP borrowers who received assistance in another HHF program

When THDA received the funding from the U.S. Treasury in 2010, Tennessee homeowners were facing difficulty paying their mortgages as a result of job losses and prolonged unemployment. At the time, Tennessee's unemployment rates were above the national average. Rural counties, in particular, had even higher rates, which started after losses in manufacturing jobs predating the housing market crash. Therefore, THDA's first HHF program (KMTH) targeted unemployed or substantially underemployed homeowners who were struggling to make their mortgage and related payments. In subsequent changes to the program, the death of a spouse and divorce were also added to the eligible hardship list. Ultimately, KMTH helped 7,355 homeowners in 94 out of 95 Tennessee counties.

After committing funds via the KMTH in 2015, THDA introduced the blight elimination program (BEP) to help stabilize the neighborhoods struggling with declining property values due to blighted properties in the area. Compared to KMTH, which was available in all counties across the state, BEP was targeted to select counties. Even though THDA worked hard to involve more nonprofits and land banks in the program, only eight participants were a part of the program spending nearly \$3 million to demolish 147 blighted properties.

In 2017, to respond to an evolving need, THDA introduced a downpayment assistance program (HHF-DPA) to strengthen the demand in the housing sector in distressed parts of the state struggling with serious delinquency, foreclosures, and negative equity. The program was made available to only 62 targeted zip codes across 30 counties. It ultimately helped 5,448 Tennesseans become homeowners.

Two other programs also aimed to help homeowners. The Principal Reduction with Recast Program or Lien Extinguishment (PRRPLE) was another foreclosure prevention program administered by THDA using recaptured HHF funds. PRRPLE's goal was to reduce delinquencies and foreclosures by lowering mortgage payments to affordable levels for homeowners who had experienced a financial burden due to an eligible hardship. It did so by providing a reduction in the principal balance of their first mortgage loan, combined with a loan recast or modification as well as principal reduction, which resulted in a full lien extinguishment.

The ROP Program was a one-time disbursement up to \$20,000 paid to fully reinstate the first mortgage loan of qualified homeowners who had fallen behind on their mortgage loans and were in imminent danger of losing their home to foreclosure due to a qualified hardship that occurred after they purchased their home.

With the KMTH program, THDA took advantage of an existing network of counseling agencies, which were beneficial to both THDA and applicants. Counselors made themselves available to applicants to assist with the application and even directed ineligible applicants to other available programs or helped them negotiate with their servicers for loan modifications or other options. Furthermore, a secondary effect of KMTH assistance was on the counseling agencies, themselves, whose homebuyer education initiatives – their primary source of income – declined as a result of declines in home buying after the housing market crash. Therefore, HHF provided the necessary funding to restart this source of revenue for counseling agencies.

The importance of counseling agencies was solidified through the experiences of administering the ROP and PRRPLE programs. Due to a lack of available counselors and administrative funds, THDA did not prioritize counseling for these programs initially. As such, THDA was responsible for approving the applicants from the beginning, a difficult task to accomplish in addition to administering the program.

Marketing strategies varied based on the program. THDA heavily marketed the KMTH program, using billboards across the state, television and radio spots, and even created information material, including short recordings and pamphlets. THDA worked with faith leaders to target struggling homeowners in their congregations. Because BEP was available in only a few counties, in which the target population was nonprofits and land banks rather than individuals, advertising was not essential. For HHF-DPA, THDA worked directly with real estate agents and lenders, which also minimized marketing efforts. For ROP and PRRPLE, the limited amount of funds in addition to the lower number of expected applicants did not justify a widespread marketing campaign. Therefore, advertising for these two programs was not as robust as it was for the KMTH and HHF-DPA programs.

In all, THDA made 13 amendments to the HHF participation agreement. Due to uncertainty associated with the amount of available funds, the number of potential applicants, as well as the initial allocations provided, and the logic (market conditions such as unemployment and serious delinquency rates) at the time, several of these amendments occurred before the launch of the first HHF program (KMTH) started in 2011. However, as more information (from Treasury as well as market data) became available, THDA changed its targets and amended the program descriptions. Some of the adjustments in allocation amounts in the early amendments were related to changes in anticipated administrative costs. Although THDA tried to keep the administrative costs low, when the agency needed to administer several programs at once, more staff were required. Redistributing funds from program to administrative needs required adjusting the estimated targets and requesting an amendment. The process with Treasury also changed. In the beginning, each modification required a formal closing, which required the involvement of the legal and executive teams. Eventually, the process became more streamlined, easing the ability to make amendments.

Appendix A: Eligibility Criteria in Various HHF Programs

Keep My Tennessee Home (KMTH) Program Eligibility

Struggling homeowners seeking assistance were required to complete applications on the KMTH website by answering prescreening questions about their employment and residency status. These responses determined applicants' potential eligibility. From the prescreening application on the website, applicants were assigned to counseling agencies based on the location of their home. THDA decided to utilize its existing network of foreclosure counseling agencies to implement the counseling component of KMTH Program. Counseling agencies worked with the applicants who applied on the website and further determined their eligibility based on their documentations. At the end, nearly 10,000 applicants were sent to THDA for further consideration in the KMTH Program.

In addition to needing to have an eligible hardship, the applicants were required to meet the following eligibility criteria:

- Applicants should have a mortgage for a single-family home or condominium (attached or detached) in Tennessee that they occupy as their primary residence,
- The combined amount of mortgage principal, interest, taxes and insurance (PITI) must be greater than 31 percent of the household income after the job loss and/or reduction of income,
- Applicants should not have more than six months' reserves of liquid assets,
- Household income should not exceed \$74,980²³, and
- The total unpaid principal balance on the first mortgage should not exceed \$226,100²⁴.

Blight Elimination Program (BEP) Eligibility Criteria

Residential vacant and blighted properties that met the following criteria were eligible for BEP:

- Be an existing single-family (1-4 unit) structure;
- Be appropriate for demolition through the BEP Property Condition Checklist and the third party pre-demolition inspection report;
- Be located in one of the targeted counties;
- Be vacant for a minimum of 90 days at the time of application;
- Be condemned, or otherwise been determined by the relevant local government to be a nuisance, or meets the definition of "blight" based on the BEP Property Condition Checklist and the third party pre-demolition inspection report;
- Be available for acquisition (if necessary), demolition, "greening", and maintaining the property for up to three years at a cost that does not exceed \$25,000; and

²³ Modification in May 2012 increased the maximum income limit from \$74,980 to \$92,680 in accordance with increased income limits in THDA's own homeownership programs.

²⁴ Modification in May 2012 increased the unpaid loan balance from \$226,100 to \$275,000 in accordance with purchase price limits in THDA's own homeownership programs.

• Have clear title to the property to be delivered to the BEP Program Participant at closing of the Stage 1 Loan.

Occupied residential properties, commercial or multifamily properties, properties funded through THDA's New Start Loan Program and properties that do not meet THDA's property eligibility criteria were excluded. Any property listed on a national, state, or local historic register was also excluded from participating in the BEP. BEP program participants were responsible for determining and verifying if a property was listed on a historic register prior to submitting a BEP loan application. If the property was built 50 years prior to the date of BEP loan application, the BEP Program Participant was required to retain proof that the property was not considered a historic property or has any historic significance to the State Historic Preservation Office. Evidence that the property is not located on the National Register of Historic Places was verified by THDA at application.

HHF Downpayment Assistance (DPA) Program Eligibility Criteria

An Eligible Applicant must meet ALL of the following criteria:

- Possess and demonstrate the legal capacity to incur the THDA debt (not be judged incompetent, and be age 18 or older or have minority removed by judicial process);
- Meet credit underwriting standards of the relevant insuring program as evidenced by the approval of a Direct Endorsement underwriter or the insurer program accepted underwriting software, i.e. Loan Prospector, Desktop Underwriter;
- Be, or become, within 60 days after the THDA loan closing, a resident of the State of Tennessee and intend to occupy the property as their principal residence;
- Have gross assets of such amounts as to be considered a person of low or moderate income as THDA may determine from the documentation contained in the application file.
- Agree to occupy the property as their principal residence and agree not to rent the
 property during the term of the THDA loan, as sworn to in the Application Affidavit and
 as precluded by the THDA Rider.
- Must be a U.S. citizen or permanent resident alien.

An eligible property must meet all of the following requirements:

- Be one of the following:
 - A detached or semi-detached house;
 - A row-house, townhouse, condominium or be part of a planned unit development.
 For a property located in a condominium development, including developments less than 100% complete, the condominium development must have approval by either FHA, VA, USDA/RD, FHLMC or FNMA;
 - A one, two, three, or four-family residence, one unit of which must be occupied by Applicant as his/her principal residence;

- Any of the above types of residences, existing, new or proposed (HHF-DPA excludes new or proposed construction):
 - ✓ built on site, or
 - ✓ a modular home permanently attached to a foundation (in compliance with HUD guidelines, or
 - ✓ a HUD approved double-wide manufactured home permanently attached to a foundation (in compliance with HUD Manual 4930.3, "Permanent Foundations Guide for Manufactured Housing"), with wheels, axles, towing tongue and running lights removed. If any portion of a

<u>Principal Reduction with Recast Program or Lien Extinguishment (PRRPLE) Program Eligibility</u> Criteria

Homeowners need to meet the following criteria to be eligible:

- Homeowner could not have had more than 12 months of principal, interest, taxes, and insurance (PITI) in reserves;
- Homeowner had to be a U. S. citizen or a permanent resident alien;
- Unless permanently disabled, the homeowner should have experienced an eligible financial hardship that occurred after January 1, 2010;
- The homeowner was required to have completed a budgeting/housing counseling session before closing;
- The household income should not have exceeded \$95,900 (\$68,700 for a fixed-income homeowner):
- The first mortgage loan should have been serviced by a servicer who agreed to accept payments on behalf of the homeowner and to recast, modify or refinance the first mortgage loan for the eligible homeowner.

Full lien extinguishment was available only for households that received income from social security, long-term disability or income from other fixed-income sources. In order to receive principal reduction with a loan recast or modification, the following additional criteria were considered:

- Homeowners had to have an outstanding balance under a first mortgage lien on a principal residence of \$40,000 or less, including all arrearages and fees;
- The primary income of the homeowner and spouse was from social security, long-term disability or other type of fixed income, and total household income was equal to or less than \$68,700 per year;
- The homeowner suffered a loss of income greater than or equal to 20 percent due to a divorce, death of a spouse, underemployment or other financial hardship;
- Pre-assistance monthly PITI exceeded 30 percent of household income.

- Post-assistance monthly PITI does not exceed 38 percent of household income, and is not lower than 25 percent of household income.
- The unpaid principal balance of first mortgage loan did not exceed \$275,000.
- The post-assistance loan-to-value (LTV) ratio should not have been less than 78 percent (there is no minimum LTV ratio for a fixed income homeowner).

Homeowners who had previously received HHF funds through the KMTH program and were in an active bankruptcy, or homeowners who had a subordinate lien that was delinquent or in foreclosure status were not eligible for PRRPLE. If the homeowner or spouse voluntarily left their employment or had their hours reduced, or refinanced the first mortgage loan after the qualifying hardship occurred or owned more than two properties²⁵, they were not eligible.

Eligible properties were owner-occupied existing single family homes or condominiums (attached or detached) including manufactured homes on permanent foundations assessed by taxing authority as real property. Manufactured homes that were not considered real property were excluded.

Reinstatement Only Program (ROP) Eligibility Criteria

In order to be eligible for assistance under ROP, homeowners had to meet the following criteria:

- Household income should not have exceeded \$95,900.
- The homeowner must not have had more than six months of PITI in reserves (excluding retirement accounts).
- The homeowner was required to be a U. S. citizen or a permanent resident alien.
- The homeowner had lost 20 percent or more of income due to a divorce, death of a spouse, or temporary (involuntary) loss of wages, which occurred after the purchase of the home and after January 1, 2010 (permanently disabled homeowners do not need to meet the January 1, 2010 requirement).
- Post-assistance monthly PITI did not exceed 38 percent of household income.
- Homeowner was required to complete and sign a financial hardship affidavit with appropriate documentation as to the cause of the hardship.
- Homeowners were required to complete a budgeting/housing counseling session before closing.

²⁵ With the exception of vacant land because this was considered an asset that could be used for reserves. This included residential or commercial property.

Appendix B: Calculating the Economic Impact using the IMPLAN input-output model (Results and Methodology)

Economic Impact of HHF Programs

In addition to the individual benefit to borrowers and their families, HHF programs had far reaching economic impacts. The notion of calculating the economic impact rests on the concept that a dollar spent in local and regional economies will support more than that one dollar in the area as it will create business revenue and income for others in the region. It is inevitable that some "leakages," however, e.g. instances in which money is funneled towards savings, taxes and fees, vendors outside of the local economy, etc. instead of consumption within the regional economy. However, the portion of funds that remains in the local economy will continue to circulate and support additional rounds of spending until there is no more.

The table below lists the total impact of the HHF programs administered by THDA between 2011 and 2021. When all five programs are considered, nearly \$270 million of HHF assistance generated a total of more than \$400 million additional business revenue over the eight year span the program was active. Business revenue captures the total economic activity generated by HHF programs spending in THDA economy. The multiplier, which is calculated by dividing the total impact by the direct impact is 1.95, which means for every \$100 invested in Tennessee economy direct through HHF programs, an additional \$95 in business revenues were generated.

Table B1. Economic Impact of HHF Programs in Tennessee Economy, 2011-2021

| | | Assisted | | | |
|---------|-------------------|-------------------|--------------------------|---------------|-----------------|
| | Assistance | Households/ | | Labor | Business |
| Program | Provided | Properties | Employment ²⁶ | Income | Revenue |
| KMTH | \$182,844,739 | 7,355 | 312 | \$105,073,029 | \$276,916,876 |
| BEP | \$2,945,347 | 147 | 3 | \$1,068,045 | \$2,799,008 |
| DPA | \$81,450,000 | 5,430 | 269 | \$46,925,970 | \$120,108,914 |
| PRRPLE | \$728,222 | 21 | 3 | \$390,484 | \$1,029,110 |
| ROP | \$1,078,391 | 104 | 3 | \$566,563 | \$1,493,299 |

²⁶ The total impact is for all the years HHF programs were actively operating. For labor income and business revenue impact, it is simply the sum of individual years each program was active. However, employment or job impact is different. A worker employed because of the increased spending resulting from KMTH program might be employed in the same position for all eight years the program was active. However, for the IMPLAN, that job will be counted once per year over the course of program, and therefore, the job impact will be inflated. To prevent this over counting, the annual average is calculated for employment impact. However, while the program was very active between 2011 and 2016, in 2017 and 2018, it was winding down and making only the final payments for the remaining KMTH borrower who received assistance previously. The economic impact (including job creation) was very small in these two years because of the small amount of spending injection to the economy. Therefore, including those final years in calculation of average employment impact underestimates the annual average job creation with KMTH program. For this reason, we excluded these years when calculating the annual average for job impact of KMTH program. Similarly ROP was also not very active in two years. Therefore, while the program was operating for five years, annual average employment impact is calculated by dividing the total impact by three (more active years).

Economic Impact Methodology

We used the IMPLAN input-output model to calculate the economic effects of the HHF Program on the Tennessee economy. The IMPLAN model calculates total business revenues, personal incomes, and total employment. For each of these categories, IMPLAN provides the direct, indirect, and induced impacts. Direct impact is the dollar amount of the initial spending because of the HHF program. 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. 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, respective of consumption patterns, there are ripple effects in the economy.

In economic impact models, multipliers measure the secondary effects of initial spending on local economies. Initial new spending in a local economy creates many rounds of subsequent spending within the region's economy and multipliers capture those rounds of spending. Multipliers are estimated by dividing the total impact (the sum of direct, indirect and induced impacts) by the initial direct spending in the economy. The income multiplier, for example, represents a change in total income (employee compensation and proprietary 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.

If the borrower had arrears, the KMTH program, PRRPLE and ROP paid arrears, and, additionally, made the monthly mortgage payments to the servicers on behalf of the homeowner to prevent the delinquencies and/or foreclosures. If the HHF assistance was not available, the homeowners would make the mortgage payment on their own. We assumed that homeowners spent the money that they would otherwise use for paying their mortgages in the local economy for consumption of goods and services. The downpayment Assistance Program (HHF-DPA) provided \$15,000 forgivable loan to homebuyers to be used in the purchase of an existing home as primary residence. The downpayment and closing costs require large sums of money when someone is purchasing a house. The funds used for the downpayment and closing costs cannot be spent on goods and services in the local economy. The HHF-DPA program, in an indirect way, stabilized the neighborhoods where the HHF-DPA was used to purchase a residence by increasing the volume of homes purchased in a distressed area. This generated an increase in property values, property taxes, the desirability of a community and an increase in market penetration, which results in a decrease in foreclosure. The HHF-DPA also put the money borrowers would otherwise use for downpayment and closing costs back into the economy for more spending on goods and services that further stimulate economic activity. In the absence of this assistance, the homebuyers would come up with the downpayment amount on their own (by reducing their spending or by borrowing). The DPA freed up these funds for consumption spending.

The economic impact of BEP is calculated as industry spending from demolition, greening and maintenance. The purchase of an existing home does not create a multiplier effect because this transaction does not represent a new production. Therefore, we excluded the dollar amount nonprofits paid to acquire the blighted properties when calculating the economic impact of the BEP. The rest of the provided funds were distributed to the appropriate sectors of the economy in the IMPLAN model.

We did not make any assumption about the change in the property values from prevented foreclosures or from the reduction in blight. Although, BEP helped stabilize the neighborhoods and improved the property values, it was not concentrated enough to claim that an increase in property value was the direct result of the program. Moreover, for mortgage assistance and DPA programs, we only considered the additional household consumption of goods and services injected to the local economies as the funds helped homeowners pay their mortgages. It is true that, in the absence of this assistance, some severely delinquent borrowers (those who were more than 90 days behind their mortgage payment) could lose their homes to foreclosure resulting in declining value of the home itself and also neighboring homes in the close proximity. Another possible impact that was not modeled here is the change in the spending when someone purchases a home such as moving expenses, furnishing and even increased spending for home improvement or landscaping. These spending categories are not included in the model either. When all these omitted spending categories are considered, our HHF program economic impact estimates are conservative.

Appendix C: Downpayment Assistance Program Impact

To highlight the impact of downpayment assistance program on the targeted zip codes, THDA pulled the market trends data from CoreLogic at three different times: January 2017 (right before the start of the program in March), December 2018 (right after the first removal of 10 zip codes) and September 2019 (after the end of the program in August 2019). These five indicators (delinquency and foreclosure rates, negative equity share and REO and Short Sales as percent of total sales) are the indicators that were used in determining the targeted zip codes for the program eligibility.

Serious delinquency declined in all targeted zip codes from January 2017. Foreclosure rate and negative equity share were also lower in majority of HHF-DPA eligible zip codes in December 2018 and September 2019 compared to January 2017.

Table C1. Serious Delinquency Rate (90+ Days Delinquent Loans Percent of Total Loans)

| | Seriously D | elinquent (| 90+ Days |) Loans Pe | ercent of Total Loa | ans |
|-----------------|-------------|-------------|----------|------------|---------------------|---------------|
| HHF- DPA Zip | | T 15 | D 10 | G 10 | % Change Jan. | % Change Jan. |
| Code | County | Jan-17 | Dec-18 | Sep-19 | 17-Dec. 18 | 17-Sep. 19 |
| 37716 | Anderson | 3.08% | 2.52% | 1.91% | -0.56% | -1.17% |
| 37311 | Bradley | 4.69% | 2.97% | 2.68% | -1.72% | -2.01% |
| 37323 | Bradley | 4.34% | 2.81% | 2.48% | -1.53% | -1.86% |
| 37821 | Cocke | 4.62% | 2.50% | 2.11% | -2.12% | -2.51% |
| 37217 | Davidson | 2.17% | 1.59% | 1.26% | -0.58% | -0.91% |
| 37207 | Davidson | 4.17% | 1.89% | 1.73% | -2.28% | -2.44% |
| 37208 | Davidson | 3.03% | 1.60% | 1.56% | -1.43% | -1.47% |
| 37218 | Davidson | 4.79% | 2.88% | 2.50% | -1.91% | -2.29% |
| 37115 | Davidson | 3.56% | 1.87% | 1.41% | -1.69% | -2.15% |
| 37813 | Hamblen | 3.70% | 3.26% | 2.87% | -0.44% | -0.83% |
| 37416 | Hamilton | 5.75% | 4.32% | 3.73% | -1.43% | -2.02% |
| 37406 | Hamilton | 9.86% | 6.64% | 5.83% | -3.22% | -4.03% |
| 37411 | Hamilton | 6.18% | 4.39% | 4.40% | -1.79% | -1.78% |
| 37412 | Hamilton | 4.59% | 3.21% | 2.33% | -1.38% | -2.26% |
| 37404 | Hamilton | 4.64% | 3.29% | 2.65% | -1.35% | -1.99% |
| 38012 | Haywood | 7.55% | 6.57% | 5.74% | -0.98% | -1.81% |
| 37890 | Jefferson | 3.10% | 1.71% | 1.49% | -1.39% | -1.61% |
| 37877 | Jefferson | 3.02% | 2.28% | 1.93% | -0.74% | -1.09% |
| 37924 | Knox | 2.32% | 1.89% | 1.76% | -0.43% | -0.56% |
| 37912 | Knox | 3.09% | 1.57% | 1.64% | -1.52% | -1.45% |
| 37871 | Knox | 3.30% | 3.18% | 1.87% | -0.12% | -1.43% |
| 37721 | Knox | 2.96% | 1.34% | 1.17% | -1.62% | -1.79% |
| 37917 | Knox | 3.07% | 1.58% | 1.62% | -1.49% | -1.45% |
| 37920 | Knox | 3.12% | 1.66% | 1.27% | -1.46% | -1.85% |

| HHF- DPA Zip Code County Jan-17 Dec-18 Sep-19 17-Dec. 18 17-Sep. 19 37921 Knox 3.79% 2.25% 1.60% -1.54% -2.19% 37914 Knox 3.81% 3.25% 2.44% -0.56% -1.37% 38063 Lauderdale 7.95% 5.01% 3.26% -2.94% -4.69% 38305 Madison 3.50% 2.64% 2.09% -0.86% -1.41% 38301 Madison 6.61% 4.95% 4.22% -1.66% -2.39% 37303 McMinn 3.88% 2.73% 2.06% -1.15% -1.82% 37354 Monroe 3.01% 3.10% 2.99% 0.09% -0.09% -0.11% 37354 Monroe 3.44% 2.47% 2.81% -0.97% -0.63% 37042 Montgomery 3.20% 2.37% 2.17% -0.83% -1.03% 37321 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37037 Rutherford 2.12% 1.22% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.65% -1.63% 38135 Shelby 3.56% 2.01% 2.03% -1.65% -1.65% -1.63% 38135 Shelby 3.56% 2.01% 2.03% -1.65% -1.65% -1.63% 38118 Shelby 10.27% 6.52% 5.21% 4.40% -1.53% -2.14% -1.95% -2.64% 38118 Shelby 10.57% 6.52% 5.21% 4.09% -1.53% -2.14% -1.65% -1.65% -1.63% 38115 Shelby 10.57% 6.52% 5.21% 4.09% -3.32% -1.65% -3.36% 38115 Shelby 10.57% 6.52% 5.21% 4.09% -3.52% -3.43% -2.13% -2 | | Seriously Delinquent (90+ Days) Loans Percent of Total Loans | | | | | | | | | |
|--|---------|--|--------|--------|--------|--------|--------|--|--|--|--|
| 37914 Knox 3.81% 3.25% 2.44% -0.56% -1.37% 38063 Lauderdale 7.95% 5.01% 3.26% -2.94% -4.69% 38305 Madison 3.50% 2.09% -0.86% -1.41% 38301 Madison 6.61% 4.95% 4.22% -1.66% -2.39% 37803 McMinn 3.88% 2.73% 2.06% -1.15% -1.82% 37874 Monroe 3.01% 3.10% 2.90% 0.09% -0.11% 37534 Montgomery 3.20% 2.37% 2.17% -0.83% -1.03% 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37321 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 3.68% 2.04% 1.72% -1.64% -1.96% 37086 Rutherford 2.12% 1.22% 1.22% -0.90% -0.90% 38109 | DPA Zip | County | Jan-17 | Dec-18 | Sep-19 | | 0 | | | | |
| 38063 Lauderdale 7.95% 5.01% 3.26% -2.94% -4.69% 38305 Madison 3.50% 2.64% 2.09% -0.86% -1.41% 38301 Madison 6.61% 4.95% 4.22% -1.66% -2.39% 37303 McMinn 3.88% 2.73% 2.06% -1.15% -1.82% 37874 Monroe 3.01% 3.10% 2.90% 0.09% -0.11% 37344 Monree 3.44% 2.47% 2.81% -0.97% -0.63% 37040 Montgomery 4.30% 3.13% 2.47% -1.17% -0.83% -1.03% 37021 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37172 Robertson 2.64% 1.72% 1.22% -0.90% -0.90% 37037 Rutherford 2.12% 1.22% 1.22% -0.90% -0.90% | 37921 | Knox | 3.79% | 2.25% | 1.60% | -1.54% | -2.19% | | | | |
| 38305 Madison 3.50% 2.64% 2.09% -0.86% -1.41% 38301 Madison 6.61% 4.95% 4.22% -1.66% -2.39% 37303 McMinn 3.88% 2.73% 2.06% -1.15% -1.82% 37874 Monroe 3.01% 3.10% 2.90% 0.09% -0.11% 37344 Monroe 3.44% 2.47% 2.81% -0.97% -0.63% 37040 Montgomery 3.20% 2.37% 2.17% -0.83% -1.03% 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37321 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37037 Rutherford 2.12% 1.22% 1.22% -0.90% -0.90% 37037 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% | 37914 | Knox | 3.81% | 3.25% | 2.44% | -0.56% | -1.37% | | | | |
| 38301 Madison 6.61% 4.95% 4.22% -1.66% -2.39% 37303 McMinn 3.88% 2.73% 2.06% -1.15% -1.82% 37874 Monroe 3.01% 3.10% 2.90% 0.09% -0.11% 37354 Monroe 3.44% 2.47% 2.81% -0.97% -0.63% 37040 Montgomery 4.30% 2.37% 2.17% -0.83% -1.03% 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37037 Rutherford 2.12% 1.22% 1.22% -0.69% -1.96% 37037 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38125 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% | 38063 | Lauderdale | 7.95% | 5.01% | 3.26% | -2.94% | -4.69% | | | | |
| 37303 McMinn 3.88% 2.73% 2.06% -1.15% -1.82% 37874 Monroe 3.01% 3.10% 2.90% 0.09% -0.11% 37354 Monroe 3.44% 2.47% 2.81% -0.97% -0.63% 37040 Montgomery 3.20% 2.37% 2.17% -0.83% -1.03% 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37031 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37037 Rutherford 2.12% 1.22% -0.90% -0.90% 37038 Rutherford 2.12% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38125 Shelby | 38305 | Madison | 3.50% | 2.64% | 2.09% | -0.86% | -1.41% | | | | |
| 37874 Monroe 3.01% 3.10% 2.90% 0.09% -0.11% 37354 Monroe 3.44% 2.47% 2.81% -0.97% -0.63% 37040 Montgomery 3.20% 2.37% 2.17% -0.83% -1.03% 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37021 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37037 Rutherford 2.12% 1.22% -1.29% -1.95% -2.64% 37037 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38125 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38133 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% | 38301 | Madison | 6.61% | 4.95% | 4.22% | -1.66% | -2.39% | | | | |
| 37354 Monroe 3.44% 2.47% 2.81% -0.97% -0.63% 37040 Montgomery 3.20% 2.37% 2.17% -0.83% -1.03% 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37321 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37037 Rutherford 2.12% 1.22% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38125 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% | 37303 | McMinn | 3.88% | 2.73% | 2.06% | -1.15% | -1.82% | | | | |
| 37354 Monroe 3.44% 2.47% 2.81% -0.97% -0.63% 37040 Montgomery 3.20% 2.37% 2.17% -0.83% -1.03% 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37321 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37037 Rutherford 2.12% 1.22% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38125 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% | 37874 | Monroe | 3.01% | 3.10% | 2.90% | 0.09% | -0.11% | | | | |
| 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37321 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37172 Robertson 3.68% 2.04% 1.72% -1.64% -1.96% 37037 Rutherford 2.12% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38125 Shelby 3.66% 2.01% 2.03% -1.65% -3.36% 38133 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 | 37354 | Monroe | | 2.47% | 2.81% | -0.97% | -0.63% | | | | |
| 37042 Montgomery 4.30% 3.13% 2.47% -1.17% -1.83% 37321 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37172 Robertson 3.68% 2.04% 1.72% -1.64% -1.96% 37037 Rutherford 2.12% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38125 Shelby 3.66% 2.01% 2.03% -1.65% -3.36% 38133 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 | 37040 | Montgomery | 3.20% | 2.37% | 2.17% | -0.83% | -1.03% | | | | |
| 37321 Rhea 3.92% 3.82% 3.15% -0.10% -0.77% 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37172 Robertson 3.68% 2.04% 1.72% -1.64% -1.96% 37037 Rutherford 2.12% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38135 Shelby 3.27% 5.52% 4.91% -2.75% -3.36% 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38018 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38118 | 37042 | | 4.30% | | 2.47% | -1.17% | | | | | |
| 37073 Robertson 2.46% 1.77% 1.56% -0.69% -0.90% 37172 Robertson 3.68% 2.04% 1.72% -1.64% -1.96% 37037 Rutherford 2.12% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38125 Shelby 8.27% 5.52% 4.91% -2.75% -3.36% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38105 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38108 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 10.57% 6.52% 2.17% -1.49% -1.86% 38118 | 37321 | | 3.92% | | | | | | | | |
| 37172 Robertson 3.68% 2.04% 1.72% -1.64% -1.96% 37037 Rutherford 2.12% 1.22% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38125 Shelby 8.27% 5.52% 4.91% -2.75% -3.36% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38105 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38018 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% | 37073 | Robertson | 2.46% | 1.77% | 1.56% | -0.69% | | | | | |
| 37037 Rutherford 2.12% 1.22% 1.22% -0.90% -0.90% 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38125 Shelby 8.27% 5.52% 4.91% -2.75% -3.36% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% < | | Robertson | | | | | | | | | |
| 37086 Rutherford 4.46% 2.51% 1.82% -1.95% -2.64% 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38125 Shelby 8.27% 5.52% 4.91% -2.75% -3.36% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38033 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 3 | 37037 | Rutherford | | 1.22% | 1.22% | -0.90% | | | | | |
| 38109 Shelby 10.12% 6.70% 5.12% -3.42% -5.00% 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38125 Shelby 8.27% 5.52% 4.91% -2.75% -3.36% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 4.03% 2.54% 2.17% -1.49% -1.86% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38111 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107< | 37086 | Rutherford | | | | | | | | | |
| 38016 Shelby 3.99% 2.89% 3.00% -1.10% -0.99% 38125 Shelby 8.27% 5.52% 4.91% -2.75% -3.36% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 4.03% 2.54% 2.17% -1.49% -1.86% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 </td <td></td> <td>Shelby</td> <td>10.12%</td> <td>6.70%</td> <td>5.12%</td> <td>-3.42%</td> <td></td> | | Shelby | 10.12% | 6.70% | 5.12% | -3.42% | | | | | |
| 38125 Shelby 8.27% 5.52% 4.91% -2.75% -3.36% 38135 Shelby 3.66% 2.01% 2.03% -1.65% -1.63% 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 4.03% 2.54% 2.17% -1.49% -1.86% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38115 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38122 </td <td></td> <td>•</td> <td>1</td> <td></td> <td></td> <td>-1.10%</td> <td></td> | | • | 1 | | | -1.10% | | | | | |
| 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 4.03% 2.54% 2.17% -1.49% -1.86% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38122 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38128 </td <td>38125</td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> | 38125 | • | | | | | | | | | |
| 38133 Shelby 3.56% 2.03% 1.42% -1.53% -2.14% 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 4.03% 2.54% 2.17% -1.49% -1.86% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38122 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38128 </td <td>38135</td> <td>Shelby</td> <td>3.66%</td> <td>2.01%</td> <td>2.03%</td> <td>-1.65%</td> <td>-1.63%</td> | 38135 | Shelby | 3.66% | 2.01% | 2.03% | -1.65% | -1.63% | | | | |
| 38105 Shelby 10.57% 6.52% 5.21% -4.05% -5.36% 38018 Shelby 4.03% 2.54% 2.17% -1.49% -1.86% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38122 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 </td <td>38133</td> <td>•</td> <td>3.56%</td> <td>2.03%</td> <td>1.42%</td> <td></td> <td></td> | 38133 | • | 3.56% | 2.03% | 1.42% | | | | | | |
| 38018 Shelby 4.03% 2.54% 2.17% -1.49% -1.86% 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38122 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 <td>38105</td> <td>Shelby</td> <td></td> <td>6.52%</td> <td>5.21%</td> <td>-4.05%</td> <td></td> | 38105 | Shelby | | 6.52% | 5.21% | -4.05% | | | | | |
| 38118 Shelby 10.27% 7.15% 5.96% -3.12% -4.31% 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38122 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37186< | 38018 | | | | | | | | | | |
| 38127 Shelby 10.50% 5.90% 5.11% -4.60% -5.39% 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38122 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38128 Shelby 4.13% 2.82% 1.99% -1.31% -2.14% 38134 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37186 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37650 </td <td></td> <td>•</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> | | • | 1 | | | | | | | | |
| 38053 Shelby 4.12% 3.19% 2.92% -0.93% -1.20% 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38116 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38122 Shelby 4.13% 2.82% 1.99% -1.31% -2.14% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37186 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37650 <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> | | | 1 | | | | | | | | |
| 38111 Shelby 4.59% 2.68% 2.06% -1.91% -2.53% 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38116 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38122 Shelby 4.13% 2.82% 1.99% -1.31% -2.14% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37186 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | | 1 | 3.19% | | | | | | | |
| 38141 Shelby 9.66% 6.14% 5.40% -3.52% -4.26% 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38116 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38122 Shelby 4.13% 2.82% 1.99% -1.31% -2.14% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | • | | | | | | | | | |
| 38107 Shelby 7.98% 3.82% 4.44% -4.16% -3.54% 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38116 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38122 Shelby 4.13% 2.82% 1.99% -1.31% -2.14% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | | | | | | | | | | |
| 38115 Shelby 8.76% 5.72% 5.11% -3.04% -3.65% 38116 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38122 Shelby 4.13% 2.82% 1.99% -1.31% -2.14% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | 38107 | • | 7.98% | 3.82% | 4.44% | -4.16% | -3.54% | | | | |
| 38116 Shelby 8.54% 6.59% 5.27% -1.95% -3.27% 38122 Shelby 4.13% 2.82% 1.99% -1.31% -2.14% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | 38115 | Shelby | 8.76% | | 5.11% | -3.04% | -3.65% | | | | |
| 38122 Shelby 4.13% 2.82% 1.99% -1.31% -2.14% 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | Shelby | 8.54% | | 5.27% | -1.95% | -3.27% | | | | |
| 38128 Shelby 9.16% 6.32% 5.26% -2.84% -3.90% 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | • | | | | | | | | | |
| 38134 Shelby 4.73% 3.43% 2.98% -1.30% -1.75% 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | - | • | | | | | | | | | |
| 37660 Sullivan 3.36% 2.62% 2.48% -0.74% -0.88% 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | • | 1 | | | | | | | | |
| 37148 Sumner 4.30% 2.48% 2.23% -1.82% -2.07% 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | | 1 | | | | | | | | |
| 37186 Sumner 3.10% 3.18% 2.28% 0.08% -0.82% 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | | | | | | | | | | |
| 37650 Unicoi 3.84% 2.01% 1.87% -1.83% -1.97% | | | | | | | | | | | |
| | | | | | | | | | | | |
| | 37110 | Warren | 4.59% | 3.03% | 1.39% | -1.56% | -3.20% | | | | |

Table C2. Foreclosure Rate (Completed Foreclosures Percent of Total Loans)

| | Com | pleted Fo | reclosures | Percent | of Total Loans | |
|-------------------------|------------|-----------|------------|---------|-----------------------------|-----------------------------|
| HHF- DPA Zip Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 |
| 37716 | Anderson | 0.32% | 0.50% | 0.26% | 0.18% | -0.06% |
| 37311 | Bradley | 0.60% | 0.34% | 0.17% | -0.26% | -0.43% |
| 37323 | Bradley | 0.55% | 0.29% | 0.30% | -0.26% | -0.25% |
| 37821 | Cocke | 0.52% | 0.10% | 0.30% | -0.42% | -0.22% |
| 37217 | Davidson | 0.32% | 0.28% | 0.14% | -0.04% | -0.18% |
| 37207 | Davidson | 0.59% | 0.15% | 0.12% | -0.44% | -0.47% |
| 37208 | Davidson | 0.25% | 0.17% | 0.26% | -0.08% | 0.01% |
| 37218 | Davidson | 0.47% | 0.13% | 0.58% | -0.34% | 0.11% |
| 37115 | Davidson | 0.69% | 0.11% | 0.12% | -0.58% | -0.57% |
| 37813 | Hamblen | 0.86% | 0.30% | 0.62% | -0.56% | -0.24% |
| 37416 | Hamilton | 1.23% | 0.64% | 0.54% | -0.59% | -0.69% |
| 37406 | Hamilton | 1.13% | 0.65% | 0.67% | -0.48% | -0.46% |
| 37411 | Hamilton | 0.75% | 0.36% | 0.48% | -0.39% | -0.27% |
| 37412 | Hamilton | 0.91% | 0.23% | 0.14% | -0.68% | -0.77% |
| 37404 | Hamilton | 0.88% | 0.94% | 0.09% | 0.06% | -0.79% |
| 38012 | Haywood | 1.12% | 0.82% | 0.50% | -0.30% | -0.62% |
| 37890 | Jefferson | 0.00% | 0.00% | 0.64% | 0.00% | 0.64% |
| 37877 | Jefferson | 0.22% | 0.13% | 0.39% | -0.09% | 0.17% |
| 37924 | Knox | 0.28% | 0.15% | 0.31% | -0.13% | 0.03% |
| 37912 | Knox | 0.62% | 0.15% | 0.16% | -0.47% | -0.46% |
| 37871 | Knox | 0.76% | 0.55% | 0.72% | -0.21% | -0.04% |
| 37721 | Knox | 0.63% | 0.14% | 0.37% | -0.49% | -0.26% |
| 37917 | Knox | 0.34% | 0.42% | 0.46% | 0.08% | 0.12% |
| 37920 | Knox | 0.67% | 0.26% | 0.24% | -0.41% | -0.43% |
| 37921 | Knox | 0.71% | 0.29% | 0.34% | -0.42% | -0.37% |
| 37914 | Knox | 0.50% | 0.45% | 0.35% | -0.05% | -0.15% |
| 38063 | Lauderdale | 0.57% | 1.08% | 0.44% | 0.51% | -0.13% |
| 38305 | Madison | 0.55% | 0.32% | 0.18% | -0.23% | -0.37% |
| 38301 | Madison | 0.72% | 0.76% | 0.43% | 0.04% | -0.29% |
| 37303 | McMinn | 0.50% | 0.20% | 0.20% | -0.30% | -0.30% |
| 37874 | Monroe | 0.46% | 0.48% | 0.50% | 0.02% | 0.04% |
| 37354 | Monroe | 0.57% | 0.18% | 0.47% | -0.39% | -0.10% |
| 37040 | Montgomery | 0.76% | 0.49% | 0.44% | -0.27% | -0.32% |
| 37042 | Montgomery | 1.01% | 0.55% | 0.40% | -0.46% | -0.61% |
| 37321 | Rhea | 0.61% | 1.07% | 0.31% | 0.46% | -0.30% |
| 37073 | Robertson | 0.35% | 0.38% | 0.27% | 0.03% | -0.08% |
| 37172 | Robertson | 0.84% | 0.14% | 0.11% | -0.70% | -0.73% |
| 37037 | Rutherford | 0.16% | 0.17% | 0.09% | 0.01% | -0.07% |
| 37086 | Rutherford | 0.71% | 0.25% | 0.21% | -0.46% | -0.50% |

| | Com | pleted Fo | reclosures | Percent of | of Total Loans | |
|-----------------|----------|-----------|------------|------------|----------------|---------------|
| HHF- DPA Zip | | | | | % Change Jan. | % Change Jan. |
| Code | County | Jan-17 | Dec-18 | Sep-19 | 17-Dec. 18 | 17-Sep. 19 |
| 38109 | Shelby | 1.22% | 0.99% | 0.66% | -0.23% | -0.56% |
| 38016 | Shelby | 0.70% | 0.53% | 0.33% | -0.17% | -0.37% |
| 38125 | Shelby | 1.38% | 0.72% | 0.52% | -0.66% | -0.86% |
| 38135 | Shelby | 0.50% | 0.36% | 0.33% | -0.14% | -0.17% |
| 38133 | Shelby | 0.57% | 0.23% | 0.17% | -0.34% | -0.40% |
| 38105 | Shelby | 0.81% | 1.09% | 1.04% | 0.28% | 0.23% |
| 38018 | Shelby | 0.82% | 0.28% | 0.22% | -0.54% | -0.60% |
| 38118 | Shelby | 1.62% | 0.94% | 0.65% | -0.68% | -0.97% |
| 38127 | Shelby | 1.77% | 0.72% | 0.63% | -1.05% | -1.14% |
| 38053 | Shelby | 0.45% | 0.28% | 0.37% | -0.17% | -0.08% |
| 38111 | Shelby | 0.62% | 0.37% | 0.31% | -0.25% | -0.31% |
| 38141 | Shelby | 1.29% | 0.65% | 0.76% | -0.64% | -0.53% |
| 38107 | Shelby | 1.05% | 0.67% | 0.39% | -0.38% | -0.66% |
| 38115 | Shelby | 1.66% | 0.46% | 0.76% | -1.20% | -0.90% |
| 38116 | Shelby | 1.35% | 0.58% | 0.74% | -0.77% | -0.61% |
| 38122 | Shelby | 0.92% | 0.67% | 0.44% | -0.25% | -0.48% |
| 38128 | Shelby | 1.46% | 0.90% | 0.61% | -0.56% | -0.85% |
| 38134 | Shelby | 0.83% | 0.43% | 0.42% | -0.40% | -0.41% |
| 37660 | Sullivan | 0.55% | 0.52% | 0.49% | -0.03% | -0.06% |
| 37148 | Sumner | 0.64% | 0.27% | 0.26% | -0.37% | -0.38% |
| 37186 | Sumner | 0.34% | 0.53% | 0.70% | 0.19% | 0.36% |
| 37650 | Unicoi | 1.17% | 0.36% | 0.19% | -0.81% | -0.98% |
| 37110 | Warren | 0.72% | 0.46% | 0.26% | -0.26% | -0.46% |

Table C3. Negative Equity Share (Loans with Negative Equity Percent of Total Loans)

| | Loans with Negative Equity Percent of Total Loans | | | | | | | | | |
|-----------------|---|--------|--------|--------|-----------------------------|--------------------------|--|--|--|--|
| HHF- | | | | | O/ Change I | 0/ 61 | | | | |
| DPA Zip Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 | | | | |
| 37716 | Anderson | 3.82% | 3.68% | 3.38% | -0.14% | -0.44% | | | | |
| 37311 | Bradley | 3.54% | 2.90% | 2.87% | -0.64% | -0.67% | | | | |
| 37323 | Bradley | 4.25% | 3.40% | 3.37% | -0.85% | -0.88% | | | | |
| 37821 | Cocke | 5.83% | 3.06% | 2.89% | -2.77% | -2.93% | | | | |
| 37217 | Davidson | 1.32% | 1.93% | 1.65% | 0.61% | 0.32% | | | | |
| 37207 | Davidson | 5.13% | 5.01% | 4.55% | -0.12% | -0.58% | | | | |
| 37208 | Davidson | 10.14% | 7.92% | 8.23% | -2.23% | -1.91% | | | | |
| 37218 | Davidson | 2.86% | 2.78% | 2.07% | -0.09% | -0.79% | | | | |

| | Loans | with Neg | ative Equ | ity Percen | t of Total Loans | |
|-------------------------|------------|----------|-----------|------------|-----------------------------|-----------------------------|
| HHF- DPA Zip Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 |
| 37115 | Davidson | 3.61% | 3.51% | 3.14% | -0.10% | -0.47% |
| 37813 | Hamblen | 8.69% | 4.99% | 3.91% | -3.70% | -4.79% |
| 37416 | Hamilton | 4.92% | 3.43% | 2.50% | -1.49% | -2.42% |
| 37406 | Hamilton | 8.49% | 6.52% | 5.94% | -1.97% | -2.55% |
| 37411 | Hamilton | 7.38% | 4.79% | 4.96% | -2.60% | -2.43% |
| 37412 | Hamilton | 5.11% | 4.45% | 3.21% | -0.66% | -1.90% |
| 37404 | Hamilton | 7.60% | 5.84% | 5.96% | -1.76% | -1.64% |
| 38012 | Haywood | 5.71% | 5.00% | 4.28% | -0.71% | -1.43% |
| 37890 | Jefferson | 6.65% | 4.58% | 3.34% | -2.07% | -3.31% |
| 37877 | Jefferson | 5.78% | 2.79% | 2.02% | -2.99% | -3.76% |
| 37924 | Knox | 2.32% | 2.65% | 2.40% | 0.32% | 0.07% |
| 37912 | Knox | 1.99% | 2.65% | 2.26% | 0.66% | 0.27% |
| 37871 | Knox | 5.39% | 5.01% | 4.65% | -0.38% | -0.74% |
| 37721 | Knox | 3.58% | 3.48% | 3.04% | -0.10% | -0.54% |
| 37917 | Knox | 3.75% | 4.45% | 4.31% | 0.70% | 0.57% |
| 37920 | Knox | 5.95% | 4.10% | 3.71% | -1.85% | -2.24% |
| 37921 | Knox | 3.52% | 3.53% | 3.22% | 0.01% | -0.30% |
| 37914 | Knox | 4.84% | 4.26% | 3.66% | -0.58% | -1.18% |
| 38063 | Lauderdale | 5.60% | 5.07% | 4.53% | -0.53% | -1.07% |
| 38305 | Madison | 9.01% | 5.08% | 3.88% | -3.94% | -5.13% |
| 38301 | Madison | 11.42% | 7.48% | 6.71% | -3.94% | -4.70% |
| 37303 | McMinn | 3.93% | 3.19% | 2.96% | -0.73% | -0.97% |
| 37874 | Monroe | 5.75% | 6.12% | 4.98% | 0.37% | -0.77% |
| 37354 | Monroe | 6.78% | 5.55% | 5.19% | -1.23% | -1.59% |
| 37040 | Montgomery | 3.17% | 2.64% | 2.21% | -0.53% | -0.95% |
| 37042 | Montgomery | 2.84% | 2.12% | 1.88% | -0.72% | -0.96% |
| 37321 | Rhea | 4.12% | 3.80% | 3.99% | -0.33% | -0.13% |
| 37073 | Robertson | 2.12% | 2.67% | 2.86% | 0.54% | 0.74% |
| 37172 | Robertson | 3.16% | 3.03% | 3.07% | -0.13% | -0.09% |
| 37037 | Rutherford | 5.03% | 3.86% | 3.53% | -1.17% | -1.50% |
| 37086 | Rutherford | 1.87% | 1.57% | 1.40% | -0.30% | -0.46% |
| 38109 | Shelby | 6.70% | 3.11% | 2.25% | -3.59% | -4.45% |
| 38016 | Shelby | 9.34% | 2.34% | 1.60% | -7.00% | -7.75% |
| 38125 | Shelby | 4.81% | 1.53% | 1.23% | -3.28% | -3.57% |
| 38135 | Shelby | 5.33% | 2.19% | 1.14% | -3.14% | -4.20% |
| 38133 | Shelby | 5.07% | 2.29% | 1.58% | -2.78% | -3.49% |
| 38105 | Shelby | 9.96% | 6.83% | 6.32% | -3.13% | -3.64% |
| 38018 | Shelby | 4.74% | 1.73% | 1.08% | -3.00% | -3.66% |
| 38118 | Shelby | 4.83% | 3.12% | 2.12% | -1.71% | -2.71% |
| 38127 | Shelby | 12.17% | 4.82% | 3.70% | -7.35% | -8.47% |
| 38053 | Shelby | 3.22% | 2.31% | 1.95% | -0.91% | -1.26% |

| | Loans with Negative Equity Percent of Total Loans | | | | | | | | | |
|-------------------------|---|--------|--------|--------|-----------------------------|-----------------------------|--|--|--|--|
| HHF- DPA Zip Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 | | | | |
| 38111 | Shelby | 6.58% | 4.21% | 3.54% | -2.37% | -3.04% | | | | |
| 38141 | Shelby | 27.71% | 10.02% | 5.28% | -17.69% | -22.42% | | | | |
| 38107 | Shelby | 7.24% | 6.34% | 5.27% | -0.90% | -1.98% | | | | |
| 38115 | Shelby | 13.08% | 5.15% | 3.21% | -7.93% | -9.87% | | | | |
| 38116 | Shelby | 20.90% | 12.09% | 9.37% | -8.81% | -11.53% | | | | |
| 38122 | Shelby | 8.16% | 3.84% | 3.03% | -4.32% | -5.13% | | | | |
| 38128 | Shelby | 6.96% | 2.82% | 2.10% | -4.14% | -4.85% | | | | |
| 38134 | Shelby | 6.87% | 2.85% | 2.08% | -4.02% | -4.79% | | | | |
| 37660 | Sullivan | 3.01% | 3.59% | 3.26% | 0.58% | 0.24% | | | | |
| 37148 | Sumner | 3.69% | 4.20% | 3.62% | 0.51% | -0.07% | | | | |
| 37186 | Sumner | 4.52% | 4.35% | 4.47% | -0.17% | -0.05% | | | | |
| 37650 | Unicoi | 6.23% | 3.99% | 3.61% | -2.24% | -2.62% | | | | |
| 37110 | Warren | 3.54% | 3.67% | 3.51% | 0.13% | -0.03% | | | | |

Table C4. Short Sales as Percent of Total Sales

| | Short Sales Percent of Total Sales | | | | | | | | | |
|-------------------------|------------------------------------|--------|--------|--------|-----------------------------|-----------------------------|--|--|--|--|
| HHF- DPA Zip Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 | | | | |
| 37716 | Anderson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37311 | Bradley | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37323 | Bradley | 0.00% | 0.00% | 1.59% | 0.00% | 1.59% | | | | |
| 37821 | Cocke | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37217 | Davidson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37207 | Davidson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37208 | Davidson | 0.00% | 0.00% | 1.43% | 0.00% | 1.43% | | | | |
| 37218 | Davidson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37115 | Davidson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37813 | Hamblen | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37416 | Hamilton | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37406 | Hamilton | 5.00% | 0.00% | 0.00% | -5.00% | -5.00% | | | | |
| 37411 | Hamilton | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37412 | Hamilton | 0.00% | 4.65% | 1.92% | 4.65% | 1.92% | | | | |
| 37404 | Hamilton | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 38012 | Haywood | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37890 | Jefferson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |
| 37877 | Jefferson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | | | | |

| Short Sales Percent of Total Sales | | | | | | | |
|------------------------------------|------------|--------|--------|--------|-----------------------------|-----------------------------|--|
| HHF- DPA Zip Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 | |
| 37924 | Knox | 0.00% | 3.23% | 0.00% | 3.23% | 0.00% | |
| 37912 | Knox | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37871 | Knox | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37721 | Knox | 0.00% | 3.70% | 3.70% | 3.70% | 3.70% | |
| 37917 | Knox | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37920 | Knox | 1.96% | 1.49% | 0.00% | -0.47% | -1.96% | |
| 37921 | Knox | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37914 | Knox | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 38063 | Lauderdale | 0.00% | 4.55% | 0.00% | 4.55% | 0.00% | |
| 38305 | Madison | 1.49% | 1.16% | 0.00% | -0.33% | -1.49% | |
| 38301 | Madison | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37303 | McMinn | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37874 | Monroe | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37354 | Monroe | 3.70% | 0.00% | 0.00% | -3.70% | -3.70% | |
| 37040 | Montgomery | 0.00% | 0.81% | 0.00% | 0.81% | 0.00% | |
| 37042 | Montgomery | 0.58% | 0.49% | 0.00% | -0.09% | -0.58% | |
| 37321 | Rhea | 0.00% | 0.00% | 2.33% | 0.00% | 2.33% | |
| 37073 | Robertson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37172 | Robertson | 1.85% | 0.00% | 0.00% | -1.85% | -1.85% | |
| 37037 | Rutherford | 7.69% | 0.00% | 0.00% | -7.69% | -7.69% | |
| 37086 | Rutherford | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 38109 | Shelby | 0.00% | 0.00% | 1.39% | 0.00% | 1.39% | |
| 38016 | Shelby | 0.00% | 1.16% | 0.00% | 1.16% | 0.00% | |
| 38125 | Shelby | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 38135 | Shelby | 4.35% | 0.00% | 0.00% | -4.35% | -4.35% | |
| 38133 | Shelby | 0.00% | 3.33% | 0.00% | 3.33% | 0.00% | |
| 38105 | Shelby | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 38018 | Shelby | 1.61% | 0.00% | 0.00% | -1.61% | -1.61% | |
| 38118 | Shelby | 1.64% | 1.64% | 0.00% | 0.00% | -1.64% | |
| 38127 | Shelby | 0.00% | 0.00% | 1.27% | 0.00% | 1.27% | |
| 38053 | Shelby | 0.00% | 0.00% | 2.33% | 0.00% | 2.33% | |
| 38111 | Shelby | 0.00% | 1.27% | 1.23% | 1.27% | 1.23% | |
| 38141 | Shelby | 3.45% | 1.82% | 0.00% | -1.63% | -3.45% | |
| 38107 | Shelby | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 38115 | Shelby | 5.13% | 2.38% | 3.03% | -2.75% | -2.10% | |
| 38116 | Shelby | 2.27% | 0.00% | 0.00% | -2.27% | -2.27% | |
| 38122 | Shelby | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 38128 | Shelby | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 38134 | Shelby | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37660 | Sullivan | 0.00% | 3.28% | 1.11% | 3.28% | 1.11% | |
| 37148 | Sumner | 1.59% | 0.00% | 0.00% | -1.59% | -1.59% | |

| Short Sales Percent of Total Sales | | | | | | |
|------------------------------------|--------|--------|--------|--------|--------------------------|--------------------------|
| HHF- DPA Zip | | | | | 9/ Changa Ian | % Change Ion |
| Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 |
| 37186 | Sumner | 6.25% | 0.00% | 0.00% | -6.25% | -6.25% |
| 37650 | Unicoi | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| 37110 | Warren | 1.69% | 1.82% | 3.13% | 0.13% | 1.44% |

Table C5. REO Sales as Percent of Total Sales

| REO Sales Percent of Total Sales | | | | | | |
|----------------------------------|-----------|--------|--------|--------|-----------------------------|-----------------------------|
| HHF- DPA Zip Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 |
| 37716 | Anderson | 5.41% | 5.00% | 4.62% | -0.41% | -0.79% |
| 37311 | Bradley | 14.29% | 2.63% | 0.00% | -11.66% | -14.29% |
| 37323 | Bradley | 11.76% | 3.03% | 6.35% | -8.73% | -5.41% |
| 37821 | Cocke | 12.00% | 28.57% | 0.00% | 16.57% | -12.00% |
| 37217 | Davidson | 2.17% | 0.00% | 0.00% | -2.17% | -2.17% |
| 37207 | Davidson | 5.00% | 0.00% | 1.67% | -5.00% | -3.33% |
| 37208 | Davidson | 0.00% | 2.13% | 2.86% | 2.13% | 2.86% |
| 37218 | Davidson | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| 37115 | Davidson | 1.69% | 0.00% | 0.00% | -1.69% | -1.69% |
| 37813 | Hamblen | 5.88% | 9.38% | 0.00% | 3.50% | -5.88% |
| 37416 | Hamilton | 17.65% | 12.50% | 0.00% | -5.15% | -17.65% |
| 37406 | Hamilton | 0.00% | 8.33% | 9.52% | 8.33% | 9.52% |
| 37411 | Hamilton | 19.35% | 3.85% | 5.71% | -15.50% | -13.64% |
| 37412 | Hamilton | 13.16% | 2.33% | 0.00% | -10.83% | -13.16% |
| 37404 | Hamilton | 7.69% | 5.26% | 7.69% | -2.43% | 0.00% |
| 38012 | Haywood | 9.09% | 12.50% | 6.67% | 3.41% | -2.42% |
| 37890 | Jefferson | 11.11% | 0.00% | 0.00% | -11.11% | -11.11% |
| 37877 | Jefferson | 6.25% | 0.00% | 0.00% | -6.25% | -6.25% |
| 37924 | Knox | 9.52% | 3.23% | 0.00% | -6.29% | -9.52% |
| 37912 | Knox | 0.00% | 2.94% | 2.70% | 2.94% | 2.70% |
| 37871 | Knox | 10.00% | 0.00% | 0.00% | -10.00% | -10.00% |
| 37721 | Knox | 15.38% | 7.41% | 3.70% | -7.97% | -11.68% |
| 37917 | Knox | 11.11% | 5.77% | 0.00% | -5.34% | -11.11% |
| 37920 | Knox | 3.92% | 0.00% | 0.00% | -3.92% | -3.92% |
| 37921 | Knox | 6.00% | 4.55% | 0.00% | -1.45% | -6.00% |
| 37914 | Knox | 6.25% | 5.26% | 4.17% | -0.99% | -2.08% |

| REO Sales Percent of Total Sales | | | | | | | |
|----------------------------------|------------|--------|--------|--------|-----------------------------|-----------------------------|--|
| HHF- DPA Zip Code | County | Jan-17 | Dec-18 | Sep-19 | % Change Jan. 17-Dec. 18 | % Change Jan. 17-Sep. 19 | |
| 38063 | Lauderdale | 57.14% | 9.09% | 0.00% | -48.05% | -57.14% | |
| 38305 | Madison | 2.99% | 2.33% | 3.17% | -0.66% | 0.18% | |
| 38301 | Madison | 8.51% | 16.28% | 7.46% | 7.77% | -1.05% | |
| 37303 | McMinn | 5.13% | 6.82% | 6.00% | 1.69% | 0.87% | |
| 37874 | Monroe | 0.00% | 12.50% | 3.13% | 12.50% | 3.13% | |
| 37354 | Monroe | 7.41% | 12.90% | 5.88% | 5.49% | -1.53% | |
| 37040 | Montgomery | 14.95% | 5.65% | 2.37% | -9.30% | -12.58% | |
| 37042 | Montgomery | 19.30% | 10.78% | 3.17% | -8.52% | -16.13% | |
| 37321 | Rhea | 8.70% | 4.00% | 2.33% | -4.70% | -6.37% | |
| 37073 | Robertson | 16.67% | 4.55% | 0.00% | -12.12% | -16.67% | |
| 37172 | Robertson | 3.70% | 0.00% | 0.00% | -3.70% | -3.70% | |
| 37037 | Rutherford | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37086 | Rutherford | 4.76% | 0.00% | 0.00% | -4.76% | -4.76% | |
| 38109 | Shelby | 12.31% | 6.67% | 5.56% | -5.64% | -6.75% | |
| 38016 | Shelby | 6.67% | 1.16% | 0.00% | -5.51% | -6.67% | |
| 38125 | Shelby | 20.37% | 8.89% | 2.90% | -11.48% | -17.47% | |
| 38135 | Shelby | 6.52% | 2.50% | 3.70% | -4.02% | -2.82% | |
| 38133 | Shelby | 6.67% | 6.67% | 2.50% | 0.00% | -4.17% | |
| 38105 | Shelby | 0.00% | 0.00% | 50.00% | 0.00% | 50.00% | |
| 38018 | Shelby | 6.45% | 4.11% | 2.33% | -2.34% | -4.12% | |
| 38118 | Shelby | 13.11% | 8.20% | 0.00% | -4.91% | -13.11% | |
| 38127 | Shelby | 7.50% | 12.66% | 6.33% | 5.16% | -1.17% | |
| 38053 | Shelby | 6.25% | 4.76% | 6.98% | -1.49% | 0.73% | |
| 38111 | Shelby | 9.21% | 6.33% | 6.17% | -2.88% | -3.04% | |
| 38141 | Shelby | 10.34% | 5.45% | 2.94% | -4.89% | -7.40% | |
| 38107 | Shelby | 4.17% | 18.92% | 0.00% | 14.75% | -4.17% | |
| 38115 | Shelby | 15.38% | 9.52% | 6.06% | -5.86% | -9.32% | |
| 38116 | Shelby | 13.64% | 8.70% | 0.00% | -4.94% | -13.64% | |
| 38122 | Shelby | 7.69% | 2.50% | 2.00% | -5.19% | -5.69% | |
| 38128 | Shelby | 18.18% | 5.71% | 6.67% | -12.47% | -11.51% | |
| 38134 | Shelby | 7.50% | 4.35% | 0.00% | -3.15% | -7.50% | |
| 37660 | Sullivan | 7.55% | 3.28% | 6.67% | -4.27% | -0.88% | |
| 37148 | Sumner | 3.17% | 0.00% | 1.18% | -3.17% | -1.99% | |
| 37186 | Sumner | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| 37650 | Unicoi | 20.00% | 12.50% | 0.00% | -7.50% | -20.00% | |
| 37110 | Warren | 1.69% | 5.45% | 0.00% | 3.76% | -1.69% | |