



404 James Robertson Pkwy, Ste 1200, Nashville, TN 37243-0900; (615) 815-2200

**Economic Impact of THDA Activities in Calendar Year 2010
on the Tennessee Economy**

Prepared by

**Hulya Arik, Ph.D.
Research Coordinator
Tennessee Housing Development Agency
Nashville, TN**

DIVISION OF RESEARCH AND PLANNING

EXECUTIVE SUMMARY

THDA's mission is to create safe, sound, affordable housing opportunities, which lead to a healthy home, educational achievement, successful employment, and the sustainability of the neighborhood and the community. Affordable housing not only lowers the monthly cost of housing for households of low- and moderate-income, it also creates jobs, income, and spending for the local economy and revenue for the state and local governments.

In this study, we developed a comprehensive framework to estimate the economic impact of the Tennessee Housing Development Agency (THDA) activities in providing safe, sound, affordable housing options to households of low- and moderate-income. To this end, we reviewed THDA programs, both loans and grants, to determine the scope and the monetary flows of each program's activities. Because of the economic multipliers or the "ripple" effect, our affordable housing programs impact all industries in the economy, going far beyond the specific unit or the neighborhood in which THDA program money is spent¹.

Economic Impact of THDA-Related Activities in 2010²

Business revenue

- ✓ The total contribution of THDA-related activities to Tennessee's economy was estimated at \$966.9 million in 2010.
 - Of this total, \$478.6 million was directly injected into the economy by THDA-related activities.
 - Every \$100 of THDA-related activities generated an additional \$102 in the business revenues.

Personal income

- ✓ THDA-related activities generated \$327.8 million in wages and salaries in 2010.
 - Every \$100 of personal income produced an additional \$108 in personal income in the local economy.

Employment / Job Creation

- ✓ THDA-related activities created 8,170 jobs in 2010.
 - Every 100 jobs created by THDA-related activities, primarily in the construction sector, generated 98 additional jobs throughout the local economy.

State and local taxes

The THDA-related activities accounted for \$42 million in state and local taxes in 2010.

¹ We used the IMPLAN input-output model to calculate these "ripple" effects.

² Direct, indirect and induced.

THDA's program accomplishments in 2010 included in this study are as follows:

- Mortgage production reached \$278.6 million. As a result, 2,652 households became homeowners. THDA's *Stimulus Second Mortgage Program* helped 407 new homeowners with \$1.6 million in down payment and closing cost assistance.
- The *Low Income Housing Tax Credit (LIHTC)* 2010 allocations in the amount of \$76.3 million will create an additional 821 rental units^{3,4,5}.
- The *Multifamily Tax-Exempt Bond Authority* 2010 allocations in the amount of \$6.2 million will create and renovate 128 rental apartments⁶.
- *HOME* grants in the amount of \$17.5 million to local governments and not-for-profit organizations to provide rehabilitation and homeownership services to 436 households and to develop 41 rental housing units.
- The *Section 8 Rental Assistance Programs* helped 42,337 households pay reasonable rent by providing \$180.5 million in rent subsidies. Of this, the tenant-based assistance of \$31.2 million in the form of vouchers aided 6,932 households across Tennessee and the project-based assistance of \$149.3 million helped 34,405 families⁷.
- The *Community Investment Tax Credit (CITC)* assisted lenders who made \$11.7 million⁸ in below market loans or contributions to eligible non-profits to assist in creating or preserving 163 units of affordable housing, 290 units of affordable rental housing, and in preventing homelessness by creating or preserving 223 units of affordable housing.
- The THDA *Housing Trust Fund* funded four affordable housing programs. *RAMPS* provided \$113,379⁹ to make 162 homes wheelchair accessible. *Rural Housing Repair* supplemented the USDA's rural repair program, providing \$674,913 additional repair dollars for 155 families. The *Emergency Repair Program (ERP)* provided \$1.7 million in home repair assistance for 293 elderly households. The *Competitive Round* awarded non-profits, local communities and regional organizations \$640,071 to help 22 families with homeownership and repair, and \$2.3 million to provide 239 additional affordable rental units.

³ Some multi-family developments receive funding through both the LIHTC and the Multi-Family Bond programs. For these developments, units are counted in the totals for both programs.

⁴ The dollars listed under LIHTC represent the total value of Tax Credit over 10 years. In previous years' reports Tax Credit dollar amounts were reported as an annualized figure rather than the full value of 10-year Tax Credit allocation.

⁵ For the LIHTC developments, the developers have three years to complete the development and place it in service. Most of the consumption spending takes place in the second year and the remaining small portion is completed in the third year. Therefore, for the 2010 economic impact of LIHTC program spending, 80 percent of 2008 and 20 percent of 2009 total development costs are used.

⁶ For the Multifamily Tax-Exempt Bond Authority projects, most of the construction spending takes place in the year after the developers receive the allocations. Therefore for the 2010 economic impact of the consumption spending in this program 2009 total development cost is used.

⁷ Section 8 units and amounts totaled are those administered by THDA. The numbers do not reflect urban counties or cities that administer Section 8 Tenant-Based programs.

⁸ CITC dollars represent the amount of below market loans made that are eligible for CITC rather than the tax credit amount received.

⁹ \$80,511 was used in the economic impact analysis

- The *Emergency Shelter Grant (ESG) Program* awarded \$1.7 million to the non-profit providers serving Tennessee counties to help homeless and domestic violence shelters.
- *BUILD* provided \$375,000 in low interest, short-term loans to eligible non-profit providers to assist with homeownership and repair and to provide services for homelessness prevention.
- The *Foreclosure Prevention Program* provided \$769,200 to non-profit providers to assist 2,132 homeowners in preventing foreclosure and mitigating the impact of foreclosure.
- The *Homebuyer Education Program* provided area agencies \$748,300 to counsel 3,331 families in their home purchase.
- Non-profit providers and local governments used \$28.1 million in *Neighborhood Stabilization Program (NSP)* funds to purchase foreclosed properties for new construction; this stabilized neighborhoods and produced 492 homes, thus far.
- The *Homelessness Prevention and Rapid Re-housing Program (HPRP)* awarded \$6.4 million to non-profit providers to provide temporary housing services to 2,192 households who were homeless or at risk of being homeless.
- Through the *Section 1602 (Grants in Lieu of Tax Credits) Program* THDA awarded \$160.9 million¹⁰ to support 3,228 rental units in eligible affordable rental housing developments.
- THDA awarded \$32.4 million from the *Tax Credit Assistance Program (TCAP)* to provide funding assistance for 2,410 affordable rental housing units.

¹⁰ It is required that developers used at least 30 percent of awarded funds by the close of 2010. Therefore, for economic impact analysis we used only 30 percent of total cost of the development. More information about this rule could be found at <http://www.thda.org/rentdev/tcap1602/E9-20903.pdf>

I. Introduction

Housing is one of the basic human needs. Investments in housing improve and expand the available stock of housing units, and improve the working and living environment for individuals. Affordable housing has profound impacts on the individuals and the communities. These impacts range from allowing people to succeed in jobs, education, or even in raising a healthy, happy family, to creating income, jobs, and taxes through the construction and the rehabilitation activities. Housing generates employment during its construction period and also during its life for proper maintenance. Investment in private residential construction and private consumption spending on housing services contributes to the Gross Domestic Product (GDP).

The condition of existing housing in a community is as important as the availability of affordable housing. Having a house does not always mean that the shelter need of a household has been met satisfactorily. There are many households who, though they are not considered “homeless,” still have serious housing problems. These families may live in substandard housing, or they spend large portions of their income for housing, or they are forced to live in overcrowded houses.

These housing conditions may affect people’s lives in many different ways¹¹. Substandard conditions, such as lack of kitchen or plumbing facilities, may cause chronic health problems. High rent translates into less money for the other basic necessities of life. Frequent moves disrupt children’s education and might cause serious learning problems. Remedying these housing problems may create a substantial positive impact on both individuals and the community.

Established in 1973, Tennessee Housing Development Agency (THDA) addresses the aforementioned housing problems by¹²

- ✓ promoting the production of more affordable new housing units for very low-, low- and moderate-income individuals and the families in the State,
- ✓ promoting the preservation and rehabilitation of the existing housing units for such persons, and
- ✓ bringing greater stability to the residential construction industry and the related industries so as to assure a steady flow of production of the new housing units.

This study develops a comprehensive framework to estimate the economic impact of Tennessee Housing Development Agency (THDA) activities in terms of providing safe, sound, affordable housing options to households of low and moderate income. To this end, this study reviews THDA programs and grants to determine the scope of each program’s activities as well as the monetary flows.

The rest of the study is organized as follows: the second section offers a brief review of the THDA activities in the calendar year 2009. The third section deals with the economic impact results. The fourth section provides a conceptual framework, the methodological issues, and the study assumptions. The last section concludes the study.

¹¹ For a more detailed discussion see “Social Benefits of Homeownership and Stable Housing” (January 2006), National Association of Realtors, Research Division, and Galster, Quercia & Cortez, 2000, “Identifying Neighborhood Thresholds: An Empirical Investigation”, Housing Policy Debate, V.11, No.3, pp.701-32

¹² Stated in the THDA enabling legislation TCA §13-23-101, et seq.

II. Overview of the THDA Programs and Activities for the Calendar Year 2010

One of the primary ways THDA assists people is by offering fixed-rate mortgages for first-time homebuyers. In addition to helping homebuyers, THDA also administers several other housing programs to help Tennessee families who are low- and moderate-income through such programs as the Low Income Housing Tax Credit (LIHTC), Multifamily Tax-Exempt Bond Authority HOME Investment Partnership program, Section 8 Rental Assistance, Community Investment Tax Credit (CITC), the Tennessee Housing Trust Fund (HTF), the Emergency Shelter Grant (ESG), BUILD, the Foreclosure Prevention Program, Homebuyer Education Initiative (HBEI), Neighborhood Stabilization Program (NSP), the Homelessness Prevention and Repaid Re-housing Program (HPRP) and Section 1602 Program. A brief overview of the programs included in this analysis is provided below. Detailed information about each program is available at www.thda.org.

The THDA programs included in this study

- ✓ The THDA Homeownership Programs: Designed for borrowers of low and moderate income, the THDA mortgage programs offer 30-year fixed-rate mortgages and downpayment assistance for first time homebuyers. The borrowers must meet certain income and credit requirements, and the acquisition cost limits apply to the new and the existing homes.
- ✓ The Low-Income Housing Tax Credit (LIHTC): THDA administers the Low-Income Housing Tax Credit program in Tennessee. The program is intended to encourage the construction and the rehabilitation of rental housing for the individuals and families who are low-income. The LIHTC provides an incentive for the developers to create affordable rental housing. The incentive is a credit against the federal income tax liability each year for 10 years for the owners and the investors in the low-income rental housing.
- ✓ The Multi Family Tax-Exempt Bond Authority: THDA makes the Multifamily Tax-Exempt Bond Authority available to the local issuers for the permanent financing of the multifamily housing units in Tennessee. The Multifamily Tax-Exempt Bond Authority is not intended for short-term financing, construction financing, “the bridge” financing, or any other financing which is not permanent financing for the development. It can be used for the construction of new affordable rental housing units, for the conversion of existing properties through adaptive reuse, or for the acquisition and rehabilitation of rental units.
- ✓ HOME Investment Partnerships Program: The U.S. Department of Housing and Urban Development (HUD) provides federal funds to Tennessee and to the local participating jurisdictions¹³ to carry out multi-year housing strategies through the

¹³ Local participating jurisdictions (PJs) are those local governments in Tennessee that receive HOME funds directly from HUD. The Local PJs are Clarksville, Chattanooga, Jackson, Knoxville, Memphis, Nashville-Davidson County,

acquisition, the rehabilitation, and the new construction of housing units. The purpose of the program is to expand the supply of decent, safe, sanitary and affordable housing for the low and very low-income households. THDA's HOME program focuses more on the homeowner rehabilitation projects, homeownership activities, and the acquisition, rehabilitation and/or new construction of the rental housing projects. THDA, on behalf of the State of Tennessee, operates the HOME program through local governments and non-profit organizations.

- ✓ Section 8 Rental Assistance (the tenant-based rental assistance program and the project-based contract administration program): The Housing Choice Voucher program provides monthly rental assistance for the participants who want to rent from a private landlord but cannot afford the full monthly rental payment¹⁴. Additionally, THDA oversees properties with the Section 8 Housing Assistance Payment Contracts.
- ✓ Community Investment Tax Credit (CITC): Financial institutions may obtain a one-time credit against the sum total of the taxes imposed by the Franchise and Excise Tax Laws when the qualified loans, the qualified investments, the grants or the contributions are extended to the eligible housing entities for engaging in eligible housing activities. The program is administered in cooperation with the Tennessee Department of Revenue. THDA certifies the housing entity and the activity as eligible to receive the tax credits. The eligible activities include those that create or preserve affordable housing for the low-income Tennesseans, that assist the low-income Tennesseans in obtaining safe and affordable housing, that build the capacity of an eligible nonprofit organization to provide housing opportunities for the low-income Tennesseans, and any other low-income housing related activity approved by the THDA Executive Director and the Commissioner of Revenue.
- ✓ The THDA Housing Trust Fund (HTF) addresses the housing needs of the people who are very low income, the elderly who are very low income and the very low income special needs populations of Tennessee. In the calendar year 2010, the Housing Trust Fund funded four programs to address the housing needs of these families and individuals:
 - *The Emergency Repair Program (ERP) for the Elderly*: A program to provide grants (not loans) to the elderly homeowners who are low income, elderly homeowners who are 60 years or older to correct, repair, or replace an essential system and/or a critical structural problem. The purpose of the program is to stabilize the elderly homeowner's residence by making rapid, essential repairs to make the home livable.

Knox County, Shelby County and the Northeast Tennessee/Virginia Consortium (the cities of Bristol, Kingsport, Johnson City, Bluff City, and Sullivan and Washington counties).

¹⁴ THDA administers the Section 8 Rental Assistance program in 75 out of 95 counties in the State. Remaining counties (Bledsoe, Bradley, Carter, Davidson, Dickson, Greene, Grundy, Hamilton, Hancock, Hawkins, Johnson, Knox, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie, Sullivan, Unicoi, and Washington) have their own Section 8 program.

- *The Rural Repair Program (RHS)*: A joint program with the USDA Rural Housing Service to deliver a house repair program for the very low-income homeowners residing in the rural counties.
- *The RAMPS Program*: A partnership with the United Cerebral Palsy to provide grants to construct ramps for persons with disabilities to allow access to their home.
- *Competitive Round*: The annual Competitive HTF program supports activities for persons of very low income including the chronically homeless, persons with intellectual disabilities, developmental disabilities, or mental illness, single mothers recovering from substance addiction or physical abuse, veterans with multiple needs and ex-offenders re-entering society.
- ✓ The Emergency Shelter Grant (ESG) Program: THDA administers the federally-HUD funded ESG Program to increase the number and the quality of emergency shelters and transitional housing facilities for homeless individuals and families, to operate these facilities, to provide essential social services, and to help prevent homelessness.
- ✓ BUILD: The purpose of the BUILD Loan Program is to promote the production, preservation, and rehabilitation of housing for households who are low- and very low-income by making low interest short term loans available to eligible nonprofit organizations. Eligible activities may include: development of single and multi-family units for homeownership or rental, construction, land acquisition, site preparation, pre-development, operating and program expenses. The loans may be secured or unsecured depending on the proposed activity.
- ✓ Foreclosure Prevention Program: This program provides area agencies funds to counsel to the State's homeowners in danger of foreclosure. All Tennesseans can access the foreclosure counseling services available through the program.
- ✓ Homebuyer Education Initiative: This program provides area agencies with funds to counsel families in their home purchase.
- ✓ Neighborhood Stabilization Program (NSP): THDA administers the federally funded NSP on behalf of the U.S. Department of Housing and Urban Development (HUD). The purpose of NSP is to provide emergency assistance to state and local governments to acquire and redevelop foreclosed properties that might otherwise become sources of abandonment and blight within their communities.
- ✓ The Homelessness Prevention and Rapid Re-housing Program (HPRP): HPRP provides housing stability services in Tennessee communities, primarily households of low and moderate income in rental housing.

- ✓ Section 1602 (grants in lieu of tax credit) Program: These funds are to temporarily fill the gap caused by lack of investor interest for tax credits. Section 1602 Program amounts can be used for developments that have or are expected to receive an award of tax credits and may also be used for developments that do not have an award of tax credits.

III. Economic Impact Results

Methodology

We used the IMPLAN input-output model to calculate the ripple effects of THDA-related activities on the Tennessee economy. The IMPLAN model calculates total business revenues, personal incomes, and total employment. For each of these categories, the IMPLAN model provides the direct, the indirect, and the induced impacts. The direct expenditures created by THDA programs and grants generate additional economic activity in the form of indirect and induced expenditures. Direct impact is the dollar amount of the initial spending because of the THDA programs and grants. We also report the corresponding direct personal income and employment figures.

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

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

We provide the impact of THDA-related activities on business revenue, personal income, employment and state and local taxes. Business revenue is the total economic activity generated by THDA programs and grants spending in the economy. Personal income is the income that people in the economy receive because of the spending associated with THDA programs and grants. Employment is the number of jobs generated by THDA programs and grants spending in the economy. Estimated state and local taxes are derived from the IMPLAN model.

Construction of new homes and rehabilitation of existing homes through THDA-related activities increase employment both in the construction industry and the industries with forward and backward linkages to the construction. For every dollar spent in the economy through related activities, the business revenue and personal income increase by more than one dollar of direct spending because of the indirect and induced effects.

As presented in Table 1, the economic impact of THDA programs and grants was quite substantial. For each of the economic impact categories, we present the direct, the indirect and the induced impacts, in addition to the total impact and the multiplier (when applicable).

Results

In 2010, THDA-related activities injected into the economy a total of \$478,616,372 in demand for regionally supplied construction, real estate services, and financial and other services inputs. To provide those sales in the economy, all of the affected firms provided 4,130 employment opportunities making \$157,714,963 in wages and salaries. These are direct impacts of 2010 THDA-related activities. Next, all of those directly stimulated firms required increased inputs of \$189,977,753 from the local economy, which further stimulated 1,537 jobs and \$69,244,683 in labor income. When the workers in the direct and indirect sectors converted their paychecks into household spending, they induced \$298,319,622 in industrial output from industries that served households, yielding 2,503 more jobs making \$100,869,871. Added together, THDA-related activities supported \$966.9 million in area industrial output, \$327.8 million in labor income and 8,170 jobs.

The THDA-related activities also generated sizable tax revenues for the state and the local governments. The model estimated tax revenues due to THDA-related activities were \$42 million.

Total multipliers¹⁵ are also listed in the table. These are calculated by dividing the total impact by the indirect effect. In 2010, for every \$100 in direct industrial output created through THDA-related activities additional \$102 business revenues were generated.

Table 1: The Economic Impact of THDA-Related Activities on Tennessee Economy, 2010*

Type	Direct Effect	Indirect Effect	Induced Effect	Total Effect	Multiplier**
Business Revenue	\$478.62	\$189.98	\$298.32	\$966.91	2.02
Personal Income	\$157.71	\$69.24	\$100.87	\$327.83	2.08
Employment	4,130	1,537	2,503	8,170	1.98
State and Local Taxes***	NA	NA	NA	\$42.2	NA

*Dollar Figures are in millions

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

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

Impact by the major industries

THDA-related spending influences all industries through the ripple effect. Table 2 shows the economic impact of the THDA-related spending by major industries. These are total impact for the industries including direct, indirect, and induced impacts.

According to Table 2, the largest impact is in the construction sector with \$275 million in business revenues, \$82 million in personal income, and 2,088 jobs. The finance and insurance sector follows the construction sector with \$138 million in business revenues, \$39 million in personal income and 589 jobs. Even though its total impact on

¹⁵ Multipliers are explained in page 11 of this report in more detail.

business revenues and personal income is not as high as finance and insurance sector, the retail sector comes second after construction sector in creating additional jobs. Retail sector adds 1,320 more jobs as a result of THDA-related activities. Other major sectors that substantially benefit from the THDA-related spending are manufacturing, real estate, professional services, health and social services, and government. “All others” represent the following major industries: agriculture, mining, utilities, wholesale trade, transportation, information, management of companies, administrative and waste services, educational services, arts, entertainment and recreation, accommodation and food, and other services.

Table 2: Impact of the THDA Programs on the Tennessee Economy by Major Sectors, 2010 (in million dollars)

Sectors	Business Revenue	Personal Income	Employment (Jobs)
Construction	\$275.15	\$82.44	2,088
Manufacturing	\$44.90	\$7.28	130
Retail	\$71.55	\$37.79	1,320
Finance and Insurance	\$137.69	\$39.08	589
Real Estate	\$43.70	\$4.28	347
Professional Services	\$81.93	\$41.24	809
Healthcare	\$54.75	\$29.02	482
Government	\$21.01	\$3.61	57
All Others	\$236.23	\$83.08	2,347
TOTAL	\$966.91	\$327.83	8,170

IV. Methodology and Study Assumptions

Concept of the economic impact

When THDA helps a low-income borrower buy his/her first house or provides some relief to a cost-burdened renter, this affects the life of that person and overall society in several ways.¹⁶ In addition to the benefits reaped by individuals and society, spending in

¹⁶ For a detailed review of literature about health benefits of affordable housing see: Lubell, J., R. Crain, and R. Cohen, (2007). Framing the Issues - the Positive Impacts of Affordable Housing on Health, *Center for Housing Policy*, Enterprise and for a review of literature about education benefits of affordable housing see: Lubell, J. and M. Brennan, (2007). “Framing the Issues – the Positive Impacts of Affordable Housing on Education,” *Center for Housing Policy*, Enterprise. See, also Newman, S. (2008). “Does Housing Matter for Poor Families? A Critical Summary of Research and Issues Still to be Resolved,” *Journal of Policy Analysis and Management*, vol. 27, no. 4, pp. 895-925.

the process of providing affordable housing generates business revenues, incomes and jobs in the communities.¹⁷

The Low-Income Housing Tax Credit program, for example, illustrates the broader impacts of the affordable housing. One additional low-income housing unit built with the incentive created through the tax credit will house a low-income family. This is an important contribution to the well-being of that family that will be paying less than or equal to 30 percent of 60 percent or 50 percent of the area median income for housing. This reduces the cost burden of the renters. The money a developer spends to build that additional rental unit will generate incomes and jobs for the individuals through rounds of spending. One dollar spent in the local and regional economies will support more than that one dollar, creating income for the other people in the region. In the process, there will be some leakages: some money will go to savings instead of being spent, some will go to taxes and fees, some of it will go to the vendors located outside the local economy, and so on. However, the portion staying in the local economy will continue to circulate and support additional rounds of spending until there is no more.

The sum of all these rounds of spending is represented by an “economic multiplier.” For example, a multiplier of 1.5 means that \$100 of initial spending will create an additional \$50 in the local economy. The size of the multiplier depends on the type of the initial spending, mostly related to the sector of the economy in which it is spent, and the strength of the local economy. For example, initial spending in the construction sector supports a larger multiplier than initial spending in the finance sector. The more self-sufficient the local economy is, the higher the multiplier will be. If many items are not produced locally and the region (i.e. the State) depends on the other outlying regions, the value of the multiplier will be smaller.

V. Conclusion

The THDA-related activities have substantial economic impact on Tennessee’s economy. To summarize,

- ✓ For every dollar of business revenue, resulting from the THDA Programs, an additional \$1.02 of business revenue was created throughout the economy.
- ✓ For every dollar of personal income, related to the THDA programs, an additional \$1.08 of personal income is generated throughout the economy.
- ✓ For every 100 jobs, related to THDA programs, an additional 98 jobs are created throughout the economy.

¹⁷ To learn more about the economic impact of affordable housing, see, for example, Beyond Units: Economic Benefits of Federal Home Loan Bank (FHLB) of Atlanta’s Affordable Housing Program (2010). The Hendrickson Company in conjunction with The Shimberg Center for Housing Studies, University of Florida, on behalf of FHLB of Atlanta; The Metro Area Impact of Home Building in Shelby County, TN: Income, Jobs and Taxes Generated. (2010), National Association of Homebuilders; Wood, J. A. (2004), Economic Impact Of Affordable Housing: New Construction, Rehabilitation And Assistance Programs, Retrieved March 2010, from Utah Housing Coalition website: http://www.utahhousing.org/documents/Econ_impact_study05.pdf ; and Assessing the Economic Benefits of Public Housing, Econsult Corporation, Retrieved March 2010, from The Council of Large Public Housing Authorities website: http://www.clpha.org/uploads/final_report_1.pdf

Appendix: Assumptions Related to the Cost of Land Acquisition and Time Lag

The cost of land acquisition

The cost of land acquisition is removed from the final price of the housing because it is not part of the construction spending and it does not create a multiplier effect like spending on the other items. For single-family housing, we used the 2005¹⁸ home sales price data, which THDA annually compiles from the Comptroller's Office. According to this data, for the homes sold in 2005, the land value was estimated at about 18 percent of the sales price. The land value on multifamily housing units is different from single family because of the higher density for multifamily housing units. In the same amount of land, more rental units can be built than the single-family units. Therefore, it comprises a smaller portion of the rental housing prices. A study financed by the Council of Large Public Housing Authorities (Econsult Corporation, 2007)¹⁹ uses 10.4 percent of the total development costs as the national estimate of the land acquisition. In another study conducted by the Enterprise Foundation²⁰, the land acquisition cost is calculated as about six percent of the total development costs. In our previous economic impact studies, we inputted 10 percent of the total development cost for the land value. However, this year we had detailed cost data such as the land value, the site work, the architectural and engineering fees, and the financing fee expenses for the rental developments built with the low-income housing tax credit allocations. We directly inputted that land value to our IMPLAN model.

Production period to complete the housing units

There is a lag time between the allocation of the low income housing tax credit, the multifamily tax-exempt bond authority and the HOME grants and the start-up of the housing developments. Therefore, to determine the impact of 2010 activities, we cannot use the 2010 low income housing tax credit allocations. Generally, the developments rewarded with the tax credits in 2008 and 2009 will comply with the requirements and place the units in service in 2010. In terms of our model, the important stage is the time they start the new construction or the rehabilitation so that they inject the money into the economy. Using the available data, it is established that developers mostly act on their LIHTC commitments in the second year after they receive their right to obtain the tax credit. Based on this prior knowledge and after reviewing the data on the annual tax credit allocations we made the following assumptions:

¹⁸ We did not consider the land cost for the HOME program projects. Next year we will update the land cost in total home price with the most recent data to determine if the declining home and land prices changed the ratio of land cost on the home sale price. We will also exclude the land cost from the new home construction projects in the HOME program.

¹⁹ Econsult Corporation (January, 2007), "Assessing the Economic Benefit of Public Housing", Submitted to the Council of Large Public Housing Authorities, available at: http://www.clpha.org/uploads/final_report.pdf

²⁰ Enterprise Foundation (1999), "Developing Multifamily Housing with New Construction, available at: <http://www.practitionerresources.org/cache/documents/36615.pdf>

- ✓ LIHTC allocations of 2008 and 2009 will be spent in the calendar year 2010.
- ✓ We used an 80-20 percent division, which means that of the total LIHTC spending in the calendar year 2010, 80 percent comes from the 2008 THDA tax credit allocations and 20 percent from the 2009 THDA tax credit allocations.
- ✓ For the multifamily tax exempt bond authority, the developers have one year for the *rehabilitation and the acquisition* projects to complete the project and place in service, while for the *new construction projects*, they have two years. Therefore, we decided to use the 2009 allocations for the multifamily tax exempt bond authority developments.

Matching Funds

Some THDA programs, such as Housing Trust Fund grants, or CITC, require matching funds from the grantees. Those matching funds can come from different sources. Without THDA involvement, those funds would not be used to complete those projects. Therefore, for any grant that requires matching funds total cost of project is used as the input for IMPLAN instead of the amount received from THDA.

Some activities supported by THDA leveraged additional funds to complete the activity even though matching funds were not required to receive the grants. For those projects also we used the total cost instead of the amount granted by THDA.

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