



**Lexington/Fayette Affordable Housing Trust Fund**  
**Fiscal, Economic and Social Impact Study**

Submitted To:

Lexington/Fayette Urban County Government

Submitted By:

Commonwealth Economics, LLC

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## I. EXECUTIVE SUMMARY

The objective of this economic impact analysis is to provide the Lexington-Fayette Urban County Government (LFUCG) with a complete view of the anticipated economic, fiscal, and social impacts that an Affordable Housing Trust Fund (AHTF) would have throughout Lexington. The estimates and information provided by this analysis are intended to be used as a guide for discussion and debate regarding the benefits of implementing an affordable housing program in Lexington.

### FISCAL IMPACT:

- As shown in Table 1.1, the range of the annual gross fiscal impact on LFUCG is between \$4.4 million to \$1.9 million based on different rate increase assumptions and types of tax increases studied by the AHTF Task Force.
- As shown in Table 1.1, the range of the gross fiscal impacts per household in Fayette County is between a low of \$15 per household to a high of \$35 per household based on different rate increase assumptions and types of tax increases studied by the AHTF Task Force.

**Table 1.1**

<b>Impact per Household of Various Increases in the Local Insurance Tax Rates</b>			
<u>Increase in the Local Insurance Tax</u>	<u>Gross Fiscal Impact</u>	<u># of Households</u>	<u>Impact per Household</u>
1% increase	\$4,449,120	127,408	\$35
1% increase, but excluding health increase	\$3,800,677	127,408	\$30
0.75% increase	\$3,336,840	127,408	\$26
0.75% increase, but excluding health increase	\$2,850,508	127,408	\$22
0.5% increase	\$2,224,560	127,408	\$17
0.5% increase, but excluding health increase	\$1,900,338	127,408	\$15

### ECONOMIC IMPACT:

Assuming an 8:1 leverage ratio, the estimated annual economic impacts of a \$4 million AHTF investment include:

- An average of approximately 470 housing opportunities can be produced *each year*, including 150 new construction projects and 320 rehabilitation projects.
- More than 363 new jobs will be directly and indirectly supported by trust fund investment.
- More than \$43.3 million of direct, indirect and induced economic activity will be generated from trust fund investment.

### SOCIAL IMPACT

- Academic literature and numerous studies show that improvements in health, family stability, education, and the environment are some of the positive social and community benefits associated with AHTFs.
- Opportunity costs, administrative costs, and potential negative industry impacts should also be considered when adopting the AHTF.

## II. INTRODUCTION

Housing trust funds are dedicated sources of revenue to help low- and moderate-income people achieve affordable housing. In most cases, a government agency -- usually an existing housing agency -- administers the housing trust fund and awards grants and loans to local governments, non-profit developers, for-profit developers, and in some cases, individuals, for a variety of low and moderate-income housing activities.

Commonwealth Economics, LLC was retained to examine the projected local impacts of an Affordable Housing Trust Fund (the "AHTF") that is proposed to be implemented in Lexington, Kentucky by the Lexington-Fayette Urban County Government. In 2008, the Affordable Housing Trust Fund Commission was charged with the task of determining the need for an improved affordable housing program in Lexington. Now, the AHTF Task Force has been charged with determining the correct implementation of an AHTF in order to maximize its potential benefits to the City. This study examines the proposed Affordable Housing Trust Fund's impact throughout Lexington, including effects on jobs and income, industry sectors, tax revenues, and changes in spending by households that benefit from increased access to affordable housing opportunities. In addition to these quantifiable impacts, the study looks at a range of social and community benefits that can be expected to accrue as a result of the investments made by the trust fund.<sup>1</sup>

Commonwealth Economics used a number of previous reports, studies, websites, and other sources to create this study. In addition, the methodology and economic analysis used in this report relies heavily on other similar economic impact studies using IMPLAN, such as the Colorado Housing Trust Fund Impacts Study (September 2002). A detailed bibliography of all sources can be found in section VII of this report.

The LFUCG's Affordable Housing Trust Fund Task Force commissioned this study to better understand and communicate the potential fiscal, economic and social impact of public investment in a local housing trust fund. In doing so, the AHTF Task Force required Commonwealth Economics to answer the following nine questions.

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<sup>1</sup> The results presented herein are fair and reasonable. Commonwealth Economics utilized sources deemed to be reliable but cannot guarantee their accuracy. Moreover, estimates and analysis presented in this study are based on trends and assumptions, which usually result in differences between the projected results and actual results. And because events and circumstances frequently do not occur as expected, those differences may be material.

- 1) What would be the yield on various levels of increases in insurance taxes from one half of one point, three quarters of one point, and one point? Calculate for an all-inclusive increase and for an increase that exempts the health insurance tax.
- 2) What would be the cost of raising the tax to the average household?
- 3) How many affordable housing units will be created and/or rehabilitated each year if trust fund revenues are \$4 million?
- 4) How many jobs will be created to construct new, or rehabilitate existing, affordable housing units?
- 5) What is the financial impact on the community based on answers to #3 and #4?
- 6) What is the impact on surrounding area property values when new units are created or existing units are rehabilitated?
- 7) Is the “6 to 1 match” attainable?
- 8) What is the economic impact of an average, conservative and aggressive leverage ratio?
- 9) What are the unquantifiable impacts (i.e. social, quality of life, etc) of an affordable housing trust fund on the community?

The following sections of the report provide the answers to the questions listed above.

**Section III** provides background information from the Affordable Housing Commission’s report detailing Lexington’s need for more affordable housing.

**Section IV** calculates the fiscal impact that the proposed AHTF would have on both individual citizens and Lexington as a whole.

**Section V** details the methodology used to calculate the estimated economic impacts that the AHTF would have throughout Lexington.

**Section VI** provides the detailed estimations of the economic impact that the proposed AHTF will have throughout Lexington.

**Section VII** reviews the other unquantifiable impacts that the AHTF is likely to have throughout Lexington, based on numerous studies which have analyzed these effects.

**Section VIII** provides a conclusion to the study.

### III. A REVIEW OF PREVIOUS AFFORDABLE HOUSING STUDIES AND STATISTICS FOR LEXINGTON

The following is an excerpt from the LFUCG's Affordable Housing Trust Fund Commission Report, presented in September 2008 to then-Mayor Jim Newberry. It has been included strictly as supplemental information in order to provide a deeper context to the economic conditions in Lexington which relate to the City's need for affordable housing. Commonwealth Economics neither supports nor denies the need for Affordable Housing in Lexington.<sup>2</sup>

The following quote, **which lasts until page 14**, is a direct excerpt from LFUCG's Affordable Housing Trust Fund Commission Report:

".....

**Shortages of Affordable Housing** - The U.S. Department of Housing and Urban Development defines "worst case needs" households as "unassisted renters with very low incomes (below 50 percent of area median income) who pay more than half of their income for housing or live in severely substandard housing." In a 2003 report, HUD found that "a substantial proportion of households with worst case needs experience these problems despite being *fully employed*. Of families with children that have worst case housing needs, 41 percent have earnings consistent with full-time year-long work at low wages."

In Fayette County there are approximately 48,357 renter households. Of these, 17,312 households (35.8% of all renters) pay more than thirty percent (30%) of their gross household income for their rent. More alarmingly, 18.1% of all renter households in Lexington (8,753 households) pay more than 50% of their gross income for housing.

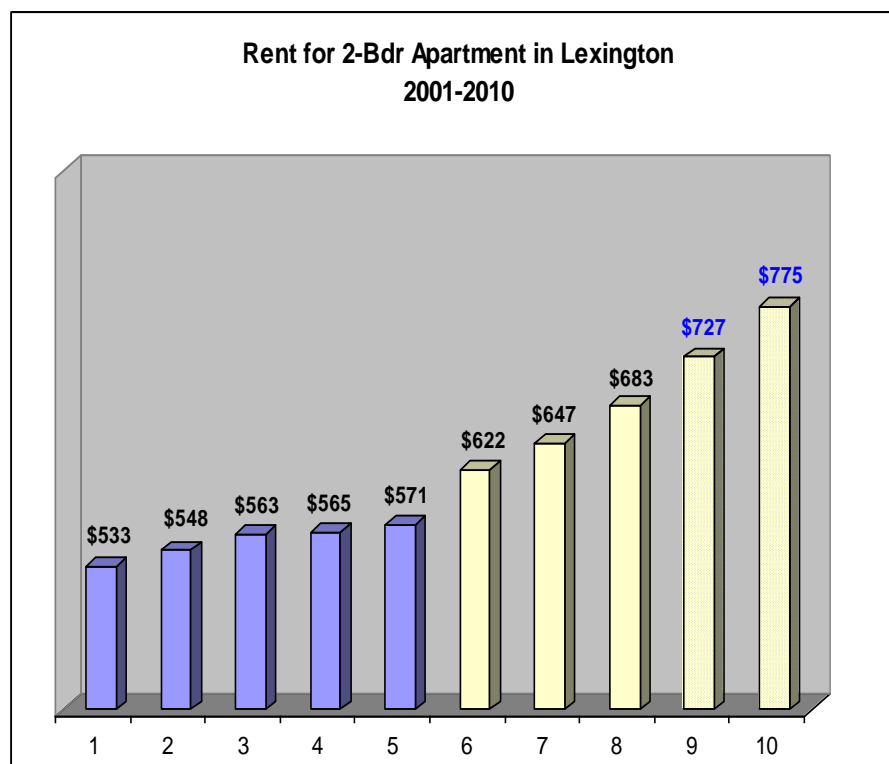
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<sup>2</sup> Commonwealth Economics makes no claim to the accuracy of the content found in the following excerpt. It has been included in this study as a direct quote from the Report submitted by the LFUCG's Housing Trust Fund Commission in 2008, and its findings are neither confirmed nor denied by Commonwealth Economics. It was included as a quote because Commonwealth Economics was not asked to examine the need for Affordable Housing, only to provide answers to the questions listed in Section II, but we felt it important to provide some context to the origin of this impact study. Commonwealth Economics neither supports nor denies the need for Affordable Housing in Lexington.



Between 2003 and 2005, the median renter household income in Lexington increased 5.5% from \$27,298 to \$28,811. However, during this same two-year period the fair market rent of a two-bedroom apartment increased 10%, from \$565 to \$622 per month. Similarly, the “housing wage” (amount needed to afford the average 2-bedroom apartment rent) increased 10% from \$10.87 to \$11.96 per hour.

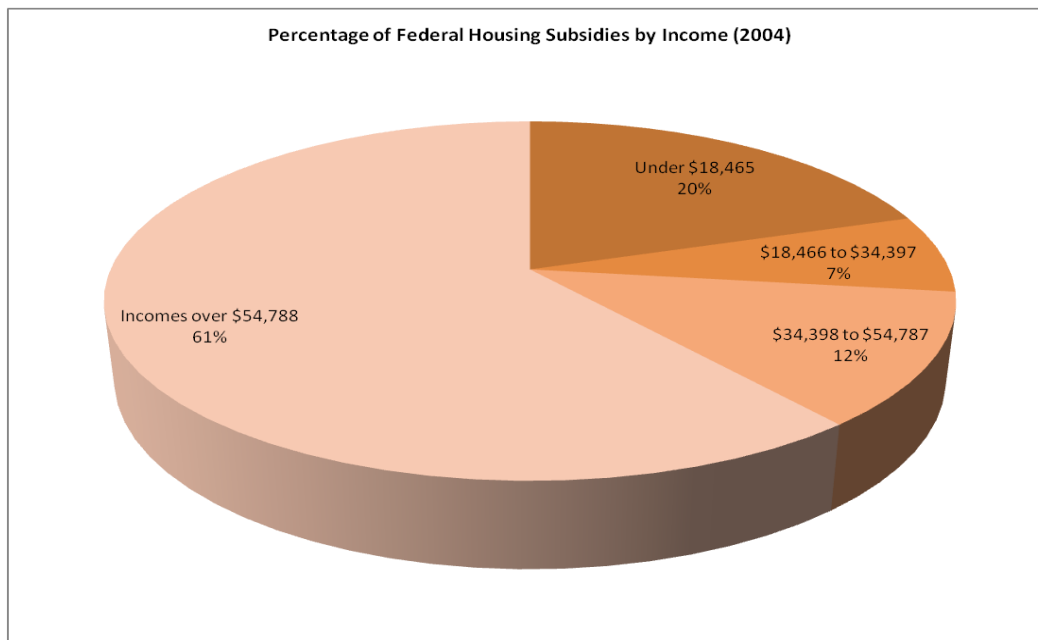
As noted in the following chart, apartment rents in Lexington increased an average of 1.8% per year from 2000 to 2005 but have averaged 6.5% since then. If this trend continues, rents in Lexington will have increased nearly 33% in the last half of this decade compared to just 9% in the first half of the decade.



Surprisingly, the federal government’s response to this nearly three decade long decline in affordable housing has been a steady reduction in the national commitment to allocating federal dollars toward affordable housing. Federal investments in affordable housing have been drastically reduced since 1980. The budget of the Department of Housing and Urban Development (HUD) has plummeted from \$104.5 billion in 1980 (in 2005

dollars) to only \$19.2 billion in 2005. Not surprisingly, these cutbacks in our national commitment to affordable housing have been mirrored by increasing numbers of homeless persons and families in the United States.

However, it should also be noted that total federal outlays for housing have not declined during this same period. In fact, these have actually increased. Primarily because of the homeowner deductions allowed under federal tax law, the emphasis of federal housing policy over this period has increasingly shifted to benefit middle and upper income property owners, as indicated by the following chart.

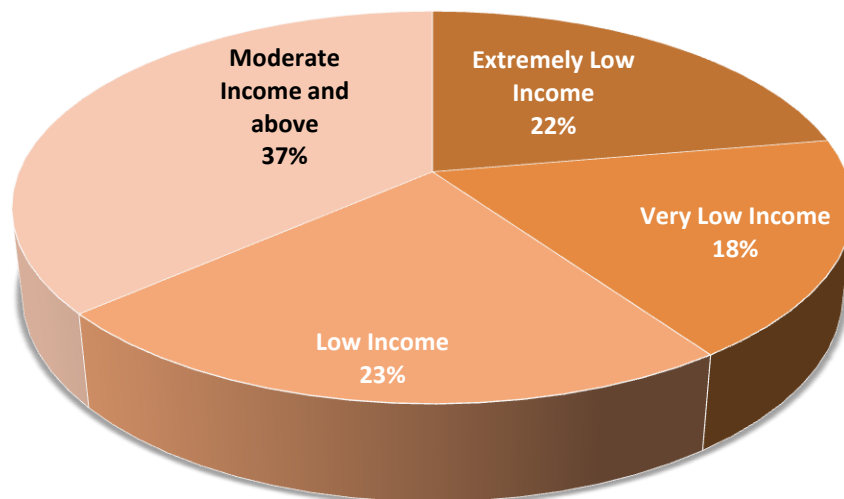
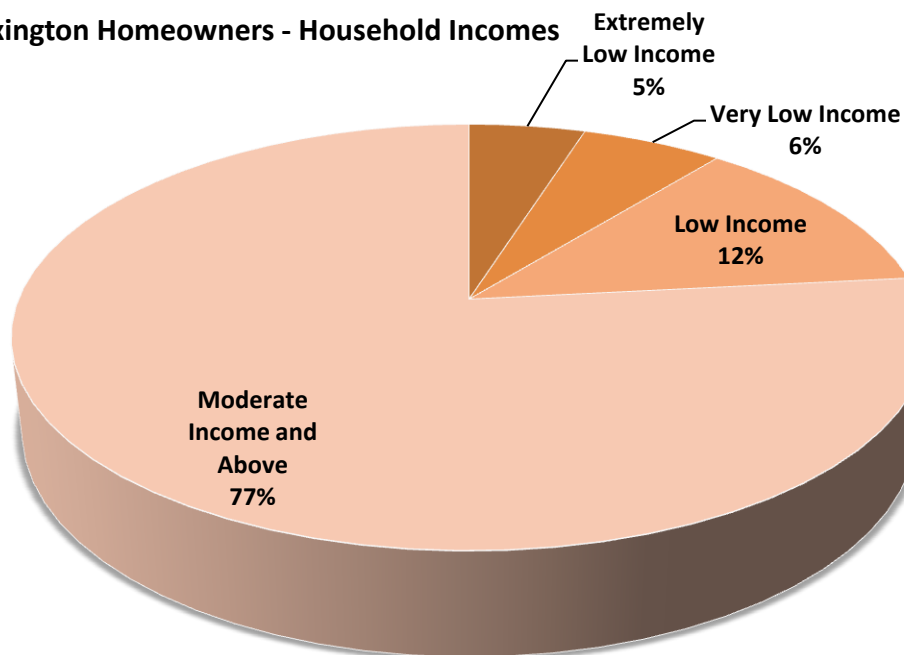


**Declining or Stagnating Real Incomes** - Amidst increasing housing costs that are consistently outstripping the general rate of inflation, most Americans have faced decades of declines or stagnation in their real wages. In 2004, 37 million people, comprising almost thirteen percent (13%) of the U.S. population, lived in poverty. In Fayette County, the percentage is even higher: 14.9% of the population lives under the poverty level. The poverty rate for children in Fayette County is even higher at 17.5%. Rising housing costs, in addition to stagnant incomes and lower safety net benefits, are factors in the rising number of Americans living in poverty. The bottom half of wage earners has seen its income stagnate or decline in the last 20 years, while the top 5 percent of households has seen

its income double. The minimum wage has steadily lost purchasing power since its inception as legislative increases have substantially lagged inflation. Wage inequality has dramatically grown in the last twenty years as a result of a variety of changes in the economy and in public policies that shape the economy. The disparity between the incomes of those at the top and those at the bottom is at its greatest point since the decade of the “roaring 20’s” that preceded the Great Depression. Nearly half of American households are deeper in debt, insecure about their jobs or downsized into the temporary workforce, and contemplating a future retirement that is significantly diminished with little or no economic security.

In addition, reductions in public assistance programs, including the 1996 repeal of the Aid to Families with Dependent Children (AFDC) program, have made it more difficult for single mothers to rise out of poverty. Temporary Assistance to Needy Families (TANF), the program designed to replace AFDC, provides families with only a fraction of the income received under the previous program. In Kentucky, the maximum monthly TANF benefit for a family of three is \$262. Bad credit, no credit and poor or non-existent landlord references are barriers to housing for families. In Minnesota, a study of over 3,100 homeless individuals and families found that 22% had credit problems and 11% had an eviction or other rental problems on their record. Another nine percent had no local rental history.

The cumulative effect of rising housing costs and shrinking incomes stresses family budgets, sometimes to the breaking point. Families with less income are disproportionately impacted by these forces, as the supply of affordable housing fails to keep pace with demand and wage increases have not kept pace with increases in housing costs. Renters are more significantly impacted, primarily because the income distributions for renter households are dramatically lower than those of owner households, as illustrated by the following charts:

**Lexington Renters - Household Incomes****Lexington Homeowners - Household Incomes**

**Homelessness** - In Fayette County, it is estimated that approximately 1,250 individuals (at any given time) are living in shelter programs provided by homeless service providers. Another 200 persons are living on the streets. There is very little argument among those knowledgeable about the root causes of homelessness that long term solutions to this problem must be focused on the two primary factors that cause

homelessness, namely insufficient affordable housing options and stagnating wages unable to keep up with rising housing costs. The combination of higher and higher housing costs while incomes for low-income families continue to shrink presents an increasingly more difficult challenge for those struggling to keep a roof over their heads. Not surprisingly, the vast majority of studies that have researched solutions to homelessness have found that affordable housing (often subsidized), prevents homelessness more effectively than anything else. This is true for all groups of poor people, including those with persistent and severe mental illness and/or substance abuse.

The creation of more affordable housing in Lexington should be the major focus of any recommendations to end homelessness. The comprehensive network of services now provided to assist homeless persons in Fayette County is increasingly burdened by the lack of affordable housing for persons seeking to exit emergency and transitional programs. In addition, increased affordable housing options in the community will reduce the number of people who are at-risk of homelessness and therefore reduce the demand on the existing network of homeless services. Finally, more affordable housing options locally will actually increase capacity in the local homeless service network, particularly in the availability of transitional housing. Local transitional housing providers are experiencing increasing delays with individuals and families successfully exiting their programs to permanent housing because residents simply cannot find affordable housing. Programs that once saw families successfully transitioning to permanent housing in as little as three months are now experiencing stays averaging 18 months. If these programs were able to reduce the delays now needed to successfully transition families into permanent housing (say to an average of 9 months) it could double the number of families who will benefit from the existing network of transitional programs. In short, more affordable housing options in the community not only increases the supply of decent housing that people can afford but it also increases the capacity of existing transitional housing without the expense of expanding the current inventory and it reduces demand on the current network of homeless services by reducing the number of people who fall into homelessness.

Lastly, it should be noted that a local needs assessment is required annually in the Continuum of Care submission to the U.S. Department of Housing and Urban Development. Since 2004, emergency shelter has been designated a “low” priority need in Lexington. This does not mean that there are currently enough shelter beds in Fayette County to meet the needs of all who are homeless. This ranking is a relative assessment when comparing emergency shelter, transitional housing and permanent housing (with supportive services). Since 2004, transitional housing and permanent housing with supportive services have been ranked as “medium” and “high” priorities, respectively. These rankings essentially mean that the greatest unmet local need in Fayette County is permanent housing with supportive services, followed by the unmet need for transitional housing (set at medium). These rankings are based on known and estimated numbers of homeless persons in Lexington in need of emergency shelter, transitional housing and permanent housing with supportive services when compared to the beds currently provided. In short, the current listings of available sheltering capacity are best met at the emergency shelter level and least met at the permanent housing with supportive services level.

.....”

## IV. FISCAL IMPACT

LFUCG's Affordable Housing Trust Fund Task Force (the "Task Force") has proposed the establishment of a local affordable housing trust fund, with a dedicated revenue source in the form of a one percent increase to the insurance premium tax.

The AHTF Task Force asked Commonwealth Economics to answer the following question: "What would be the yield on various levels of increases in insurance taxes from one half of one point, three quarters of one point, and one point? Calculate for an all-inclusive increase and for an increase that exempts the health insurance tax."<sup>3</sup>

To perform these computations, it is first necessary to understand the current LFUCG revenues from the insurance premium tax. As shown in **Table 4.1** the overall gross revenue from the insurance tax rate is approximately \$22.2 million. The tax on health insurance represents approximately \$3.2 million of this \$22.2 million.

**Table 4.1**

<b>LFUCG Insurance Tax Revenues</b>	
	<b>Yearly</b>
Casualty	\$3,875,690
Motor Vehicles	\$7,183,627
Inland Marine	\$1,191,245
Fire and Allied Perils	\$3,872,290
Life	\$1,734,965
Health	\$3,242,216
All Other Risk	\$1,145,567
<b>Total</b>	<b>\$22,245,600</b>

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<sup>3</sup> It must be noted that Commonwealth Economics is not recommending or suggesting certain tax rates. The information provided above is merely a computational analysis.

According to the data provided by the IMPLAN database, a nationally recognized economic forecasting tool, there are approximately 127,408 households in Fayette County. Therefore, a 1% increase in all insurance taxes would represent an increase of \$4.4 million in local insurance tax revenues, which would represent an average insurance cost per household of nearly \$35 per household.<sup>4</sup> This average is based on the total amount of local insurance tax revenue, and therefore includes taxes paid both by individual households and businesses.

Data separating household insurance tax revenues from business insurance tax revenues are not available to make a distinction between the amount of additional tax a household would pay versus the amount of additional tax a business would pay, if a 1% increase to the insurance premium tax is enacted. However, any individual household or business can calculate the exact effect that a 1% increase in the local insurance tax rate would have on a case-by-case basis using their specific level of spending on insurance in a given year. For example, if a household spends a total of \$3,000 a year on all of its insurance (including all of those listed in Table 4.1), by multiplying this amount by 1% (0.01) one will see that the tax increase will cost this particular household \$30 more each year. Similarly, if a business spends a total of \$4,000 a year on all of its insurance, it can calculate the increased cost in the same manner, to show an increased cost of \$40 a year.

**Table 4.2** shows the anticipated revenues for a 0.5%, a 0.75%, and a 1% increase in the local insurance tax rate, both including and excluding the tax on health insurance.

**Table 4.2**

<b>Impact per Household of Various Increases in the Local Insurance Tax Rates</b>			
<u>Increase in the Local Insurance Tax</u>	<u>Gross Fiscal Impact</u>	<u># of Households</u>	<u>Impact per Household</u>
1% increase	\$4,449,120	127,408	\$35
1% increase, but excluding health increase	\$3,800,677	127,408	\$30
0.75% increase	\$3,336,840	127,408	\$26
0.75% increase, but excluding health increase	\$2,850,508	127,408	\$22
0.5% increase	\$2,224,560	127,408	\$17
0.5% increase, but excluding health increase	\$1,900,338	127,408	\$15

<sup>4</sup> While it might be anticipated that the increase in the insurance tax could potentially result in negative economic impacts that might actually result in different baseline gross tax revenues due to tax price elasticity rates, for purposes of this analysis the AHTF only required Commonwealth Economics to look at a static analysis of the revenues. A dynamic analysis of a change in tax rates requires a great deal of assumptions on the elasticity of tax rates, as well as current and future economic conditions.



As shown in Table 4.2, the range of gross fiscal impact is between \$4.4 million and \$1.9 million based on different rate increase assumptions and types of taxes included. It can also be inferred from Table 1.1, the range of the gross fiscal impacts per household in Fayette County is between \$35 per household to \$15 per household based on different rate increase assumptions and types of taxes included.

## V. METHODOLOGY OF ECONOMIC IMPACT STUDY

The study examines the direct, indirect, and induced economic impacts of additional spending on affordable housing programs that would result from the creation of an Affordable Housing Trust Fund by the LFUCG. These impacts include effects on employment, income, spending, industry sectors, and tax revenues in the state. In this section, we examine the following methodology components: type of impact, duration of impact, the multiplier effects, how leverage works, and the assumptions provided by the Task Force on allocation of funds.

### TYPE OF IMPACT

Any economic activity, such as the construction or rehabilitation of housing, generates a number of different effects or impacts throughout a regional economy. Economic impacts are usually measured in terms of jobs, output, and income. Employment refers to full-time jobs, or the equivalent amount of work. For example, if two people were working 20 hours a week building a home for an entire year, the project would be considered to have created only one job. Output refers to the total value of a good or service produced. It includes the value added by the producer of the good as well as the value of all the inputs used to make the good or service. Income refers to wages and benefits paid to all employees (including those that are self-employed).

Initial economic activity creates direct impacts on the local economy. These impacts are followed by indirect and induced impacts, as described below:

- **Direct Impacts** are the jobs, output, and income associated with the industries receiving a change in final demand. For example, the construction of a new home has direct effects on the construction industry in terms of output, jobs, and wages. This initial or direct impact creates a multiplier effect throughout the economy, which is seen through both indirect and induced impacts.
- **Indirect Impacts** are jobs and income resulting from spending by directly impacted industries for goods and services provided by other businesses. For example, the construction industry will purchase materials and services (e.g. concrete, wood, electrical services, etc.) from other industry segments, resulting in employment and income impacts on those segments, and their suppliers. Such

purchases occur both within and outside of Lexington. This study reports only the portion of indirect purchases within Lexington.

- **Induced Impacts** are the impacts on all local industries as a result of the expenditures of new household income generated by the direct and indirect impacts from new output and employees. Payroll expenditures by construction companies are a direct impact. Payroll expenditures by suppliers to construction companies are indirect impacts. The spending by households that receive those payroll dollars creates an induced impact, as those dollars are spent on items including housing, food, utilities, transportation, clothing, health care, entertainment, and taxes. This spending produces revenue for the businesses providing these goods and services, which in turn creates additional jobs and spending – a pattern that repeats as a diminishing ripple throughout the regional economy. This cycle diminishes due to savings and money spent outside the local economy.
- **Total Impacts** represents the sum of the direct, indirect, and induced impacts and is the measure of total economic impact.

## DURATION OF IMPACT

This analysis studies the economic impacts associated with new housing trust fund investment. It does not evaluate the impacts of investment from any current equity subsidy sources. This analysis can be broken down into two types of impacts -- one-time impacts related to new housing construction and rehabilitation and on-going impacts related to changes in household spending.

- **One-time Impacts from Construction** are one-time impacts related to new housing construction and rehabilitation. The actual mix of projects will vary from year to year according to changes in market demand and investment opportunities. It is expected, in most affordable housing trust funds, that a significant portion of funding will be devoted to the construction or rehabilitation of affordable housing projects. This investment in new construction or rehabilitation activity, leveraged with other public and private

funds, generates new economic activity, with corresponding direct, indirect, and induced economic impacts.

The remaining money in the fund typically goes toward the acquisition of land and various supportive services. It is generally accepted that the majority of funds used for property acquisition represent a transfer of capital rather than new economic activity. While there are some economic impacts related to property acquisition, including closing costs and real estate fees, these impacts will be minimal. In addition, the portion of funds related to supportive services can also be considered a transfer payment, which does not create any additional direct economic impacts.

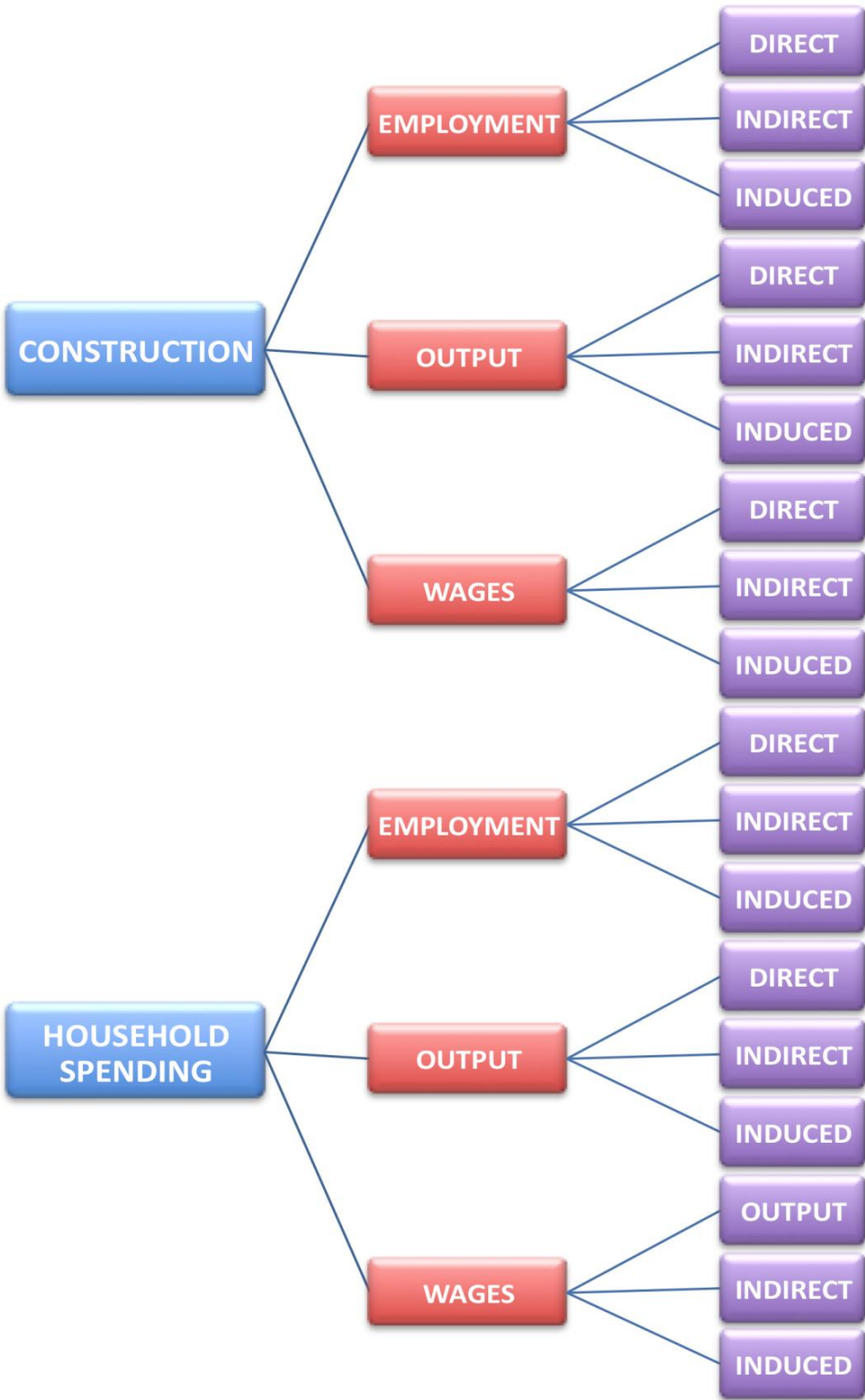
- **Ongoing Economic Impacts** are changes in the local economy that continue on an annual basis after the initial change in final demand. Ongoing impacts accrue from the increase in disposable income resulting from lower rental housing costs to beneficiaries of affordable rental housing opportunities created through the housing trust fund. It is assumed that rental opportunities created through housing trust fund investment will be available only to households that are currently rent-burdened; i.e., paying more than 30 percent of their household income for housing. For all rental projects funded by the trust fund, households are estimated to average annual rent savings of approximately \$2,460 --income that is freed up for alternative spending in the economy. This annual savings is multiplied by the number of rental opportunities produced through new construction and rehabilitation to develop a data input for the total increase in spending by beneficiary households.

## SUMMARY OF IMPACTS

This study measures 18 different economic impacts that are a result of the initial spending by the Affordable Housing Trust Fund. Both the spending on construction and rehabilitation projects and the increased household spending from rent savings create a number of impacts throughout the economy. There are employment, output, and wage increases created by the direct, indirect, and induced spending that result from the initial dollars spent on construction and as increased household spending. These 18 impacts are illustrated below in **Table 5.1**.

Table 5.1

Lexington Housing Trust Fund Impacts Study  
Economic Impacts



The economic activity associated with these 18 measureable impacts will also create tax revenues that will accrue to the local and state governments, as well as to the federal government. When including the effects created by both construction and household spending, there are a total of 20 different impact calculations shown in this section

## LEVERAGE RATIO

Affordable Housing Trust Funds are most successful when they are able to successfully use their available funding to attract additional investment from either the private sector, other public entities (i.e. the State and Federal Governments), or a combination of both. This is typically achieved by the inherent incentive that it provides private businesses or through State and Federal programs that offer to “match” the trust fund’s investments in affordable housing. The estimated extent to which housing trust fund dollars would be able to leverage other public and private funds can vary greatly. An average historical leverage ratio of 8:1 has been estimated in several studies; however, this can fluctuate significantly based on different market conditions in any given year. Kentucky’s Affordable Housing Trust Fund has been able to leverage its funding at nearly a 4:1 average ratio since 1994. Because this leveraging has been achieved at the state level, it is not unreasonable to assume that a local affordable housing trust fund in Kentucky would be able to achieve an even higher leverage ratio because the local AHTF would be able to leverage both the State and Federal programs.

As previously mentioned, housing trust funds leverage other investment at ratios ranging from 1:1 to 25:1 and averaging around 8:1 historically, however, in today’s market this may vary. Therefore, as requested by the Task Force, this study shows the key impacts using a 5:1 ratio, an 8:1 ratio, and a 10:1 ratio in order to illustrate the ranges of impacts that the fund could generate depending on the ability to leverage funds in a bad, average, or a good year.

## ASSUMPTIONS

The economic impacts of housing trust fund investment on the Lexington economy are based on the spending assumptions that have been provided by the Task Force.

As determined by the Affordable Housing Trust Fund Commission’s 2008 Housing Report and discussions with the Task Force, it is expected that the new housing trust

fund equity subsidies will be invested in a mix of housing projects and programs, including new construction, rehabilitation, land acquisition, and supportive services, creating opportunities for a range of income groups.

For this impact analysis, it has been estimated, based on the information provided in the Commission's report, that of the total annual housing trust fund investment (after removing the expected administrative costs), 40 percent would go toward new rental and homeownership construction and 30 percent toward construction-related rehabilitation activities. The remaining 30 percent goes toward the acquisition of land and various supportive services, estimated at 20 percent and 10 percent respectively.

The housing type/income category that benefits from the AHTF spending allocations will be determined based on need at the time of application, however for purposes of this study, the AHTF Task Force made estimates based on the 2008 Commission Report. It is expected that five percent (5%) will be dedicated to Emergency Shelters (Homeless families/individuals), 50 percent (50%) toward Deep Subsidy Rental Units (0-30% AMI), 30 percent (30%) for Affordable Worker Rental Units (31-60% AMI), and 15 percent (15%) toward subsidized homeownership (61- 100% AMI).<sup>5</sup>

The spending allocations, based on expectations described by the Task Force and assuming an estimated \$4 million annual balance are summarized in **Table 5.2**. The total funds generated by the fund using the three different leverage ratio scenarios are shown in **Tables 5.3a, 5.3b, and 5.3c**.

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<sup>5</sup> Allocation is expected to be dedicated toward the indicated Area Median Income, however, these are rough estimates based on the Commission and the Task Force's expectations of community need and program implementation.

Table 5.2

Lexington Housing Trust Fund Impacts Study						
Direct Impact Assumptions- Lexington Housing Trust Fund Allocations						
		Trust Fund Total	New Construction Funds	Rehab Construction Fund	Total Acquisition Funds	Supportive Services
Emergency Shelters	5%	\$200,000	\$80,000	\$60,000	\$40,000	\$20,000
Deep Subsidy Rental Units	50%	\$2,000,000	\$800,000	\$600,000	\$400,000	\$200,000
Affordable Worker Rental Units	30%	\$1,200,000	\$480,000	\$360,000	\$240,000	\$120,000
Subsidized Homeownership	15%	\$600,000	\$240,000	\$180,000	\$120,000	\$60,000
<b>Total</b>	<b>100%</b>	<b>\$4,000,000</b>	<b>\$1,600,000</b>	<b>\$1,200,000</b>	<b>\$800,000</b>	<b>\$400,000</b>
New construction funds based on LFUCG's expected breakdown of 40% of all funds going toward new construction projects.						
Rehab construction funds based on LFUCG's expected breakdown of 30% of all funds going toward multifamily property rehab.						
Acquisition funds based on LFUCG's expected breakdown of 20% of all funds going toward property acquisition.						
Supportive services funds based on LFUCG's expected breakdown of 10% of all funds going toward financial assistance.						



Table 5.3a

Lexington Housing Trust Fund Impacts Study					
Direct Impact Assumptions- Leveraged Funds at 5:1 Ratio					
	Levered Total	New Construction Direct Impacts	Rehab Direct Impacts	Acquisition Spending	Supportive Services Spending
Emergency Shelters	\$1,000,000	\$400,000	\$300,000	\$200,000	\$100,000
Deep Subsidy Rental Units	\$10,000,000	\$4,000,000	\$3,000,000	\$2,000,000	\$1,000,000
Affordable Worker Rental Units	\$6,000,000	\$2,400,000	\$1,800,000	\$1,200,000	\$600,000
Subsidized Homeownership	\$3,000,000	\$1,200,000	\$900,000	\$600,000	\$300,000
<b>Total</b>	<b>\$20,000,000</b>	<b>\$8,000,000</b>	<b>\$6,000,000</b>	<b>\$4,000,000</b>	<b>\$2,000,000</b>

Table 5.3b

Lexington Housing Trust Fund Impacts Study					
Direct Impact Assumptions- Leveraged Funds at 8:1 Ratio					
	Levered Total	New Construction Direct Impacts	Rehab Direct Impacts	Acquisition Spending	Supportive Services Spending
Emergency Shelters	\$1,600,000	\$640,000	\$480,000	\$320,000	\$160,000
Deep Subsidy Rental Units	\$16,000,000	\$6,400,000	\$4,800,000	\$3,200,000	\$1,600,000
Affordable Worker Rental Units	\$9,600,000	\$3,840,000	\$2,880,000	\$1,920,000	\$960,000
Subsidized Homeownership	\$4,800,000	\$1,920,000	\$1,440,000	\$960,000	\$480,000
<b>Total</b>	<b>\$32,000,000</b>	<b>\$12,800,000</b>	<b>\$9,600,000</b>	<b>\$6,400,000</b>	<b>\$3,200,000</b>

Table 5.3c

Lexington Housing Trust Fund Impacts Study					
Direct Impact Assumptions- Leveraged Funds at 10:1 Ratio					
	Levered Total	New Construction Direct Impacts	Rehab Direct Impacts	Acquisition Spending	Supportive Services Spending
Emergency Shelters	\$2,000,000	\$800,000	\$600,000	\$400,000	\$200,000
Deep Subsidy Rental Units	\$20,000,000	\$8,000,000	\$6,000,000	\$4,000,000	\$2,000,000
Affordable Worker Rental Units	\$12,000,000	\$4,800,000	\$3,600,000	\$2,400,000	\$1,200,000
Subsidized Homeownership	\$6,000,000	\$2,400,000	\$1,800,000	\$1,200,000	\$600,000
<b>Total</b>	<b>\$40,000,000</b>	<b>\$16,000,000</b>	<b>\$12,000,000</b>	<b>\$8,000,000</b>	<b>\$4,000,000</b>

## VI. ACTUAL ECONOMIC IMPACT

To calculate the economic impacts of investment by the LFUCG's proposed Affordable Housing Trust Fund, this study uses IMPLAN Pro. This regional economic model was calibrated to simulate the effects of a spending scenario on Lexington's economy. Initial spending is entered into the model in the appropriate category, and the impacts that the initial input is expected to have throughout the given region is calculated. Once impacts are calculated using the IMPLAN model, multipliers are derived to create a tool to calculate indirect and induced impacts for alternative spending assumptions. These multipliers are further described in **Appendix A**.

### CONSTRUCTION IMPACTS

According to the Louisville Apartment Association, Habitat for Humanity, and River City Housing Corporation's estimates, the cost to develop a single unit of affordable housing is approximately \$85,000. In addition to the cost of new construction, the median amount spent on rehabbing a single distressed unit is approximately \$30,000. Based on these average costs, at the 8:1 leverage ratio, Lexington would be able to construct approximately 150 new housing units and rehab up to 320 units per year based on the anticipated spending allocation detailed in **Table 5.3b**.

Housing trust fund spending on new construction and housing rehabilitation activities will cause an initial direct economic impact as trust fund equity subsidies, leveraged by other public and private investment, are used to pay for labor, services, materials, and supplies associated with construction activities. Annual investment for construction activities (at the 8:1 leverage ratio) would result in \$22.4 million of *annual* direct spending on construction activities. This construction activity would cause a direct employment estimate of 161.

As summarized in **Tables 6.1a, 6.1b, and 6.1c**, these direct jobs would all be in the construction industry, but jobs are created through the indirect and induced impacts as well.

The annual indirect and induced effects of housing trust fund investment in construction activity include 143 jobs. These effects are spread over other industry segments as initial investment trickles down through the economy. For example, initial investment in housing construction stimulates indirect spending on insurance and other real estate services needed to support a newly constructed housing unit. Similarly,

wages earned by construction workers are re-circulated into the economy for a broad range of goods and services across industry segments, all of which create jobs throughout the economy.

Table 6.1a

Lexington Housing Trust Fund Impacts Study				
Construction Activity- Employment 5:1 Leverage				
Industry	Direct	Indirect	Induced	Total
Agriculture	0.00	0.00	0.07	0.07
Mining	0.00	0.32	0.05	0.37
Construction	100.72	0.19	0.39	101.30
Manufacturing	0.00	1.62	0.18	1.79
TIPU*	0.00	2.61	0.70	3.32
Trade	0.00	22.76	9.43	32.19
Service	0.00	19.99	30.18	50.17
Government	0.00	0.28	0.43	0.72
<b>Total</b>	<b>100.72</b>	<b>47.78</b>	<b>41.43</b>	<b>189.93</b>

\*TIPU= Transportation Information & Public Utilities

Table 6.1b

Lexington Housing Trust Fund Impacts Study				
Construction Activity- Employment 8:1 Leverage				
Industry	Direct	Indirect	Induced	Total
Agriculture	0.00	0.01	0.11	0.12
Mining	0.00	0.51	0.08	0.60
Construction	161.15	0.30	0.62	162.08
Manufacturing	0.00	2.59	0.28	2.87
TIPU*	0.00	4.18	1.13	5.31
Trade	0.00	36.42	15.08	51.50
Service	0.00	31.98	48.29	80.28
Government	0.00	0.46	0.69	1.15
<b>Total</b>	<b>161.15</b>	<b>76.45</b>	<b>66.29</b>	<b>303.89</b>

\*TIPU= Transportation Information & Public Utilities

Table 6.1c

<b>Lexington Housing Trust Fund Impacts Study</b>				
<b>Construction Activity- Employment 10:1 Leverage</b>				
<b>Industry</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Agriculture	0.00	0.01	0.14	0.15
Mining	0.00	0.64	0.10	0.75
Construction	201.44	0.38	0.77	202.59
Manufacturing	0.00	3.23	0.35	3.59
TIPU*	0.00	5.23	1.41	6.63
Trade	0.00	45.52	18.86	64.38
Service	0.00	39.98	60.37	100.34
Government	0.00	0.57	0.86	1.43
<b>Total</b>	<b>201.44</b>	<b>95.56</b>	<b>82.86</b>	<b>379.86</b>
*TIPU= Transportation Information & Public Utilities				

Tables 6.2a, 6.2b, and 6.2c demonstrate the overall economic output created by the initial spending in the construction industry. The direct impact of the construction and rehabilitation is estimated to account for \$22.4 million in output at the 8:1 leverage ratio (the initial spending on construction and rehab) and the annual indirect and induced effects create total spending of \$14.8 million, for a total output of \$37.2 million.

Table 6.2a

Lexington Housing Trust Fund Impacts Study				
Construction Activity- Output 5:1 Leverage				
Industry	Direct	Indirect	Induced	Total
Agriculture	\$0	\$374	\$3,585	\$3,959
Mining	\$0	\$64,169	\$11,199	\$75,369
Construction	\$14,000,000	\$19,716	\$41,366	\$14,061,082
Manufacturing	\$0	\$511,555	\$106,520	\$618,075
TIPU*	\$0	\$419,894	\$127,097	\$546,991
Trade	\$0	\$1,609,786	\$664,756	\$2,274,542
Service	\$0	\$2,169,372	\$3,327,365	\$5,496,737
Government	\$0	\$48,295	\$97,791	\$146,086
<b>Total</b>	<b>\$14,000,000</b>	<b>\$4,843,161</b>	<b>\$4,379,679</b>	<b>\$23,222,840</b>

\*TIPU= Transportation Information & Public Utilities

Table 6.2b

Lexington Housing Trust Fund Impacts Study				
Construction Activity- Output 8:1 Leverage				
Industry	Direct	Indirect	Induced	Total
Agriculture	\$0	\$598	\$5,736	\$6,334
Mining	\$0	\$102,671	\$17,919	\$120,590
Construction	\$22,400,000	\$31,545	\$66,185	\$22,497,731
Manufacturing	\$0	\$818,487	\$170,432	\$988,919
TIPU*	\$0	\$671,830	\$203,355	\$875,186
Trade	\$0	\$2,575,657	\$1,063,610	\$3,639,267
Service	\$0	\$3,470,996	\$5,323,784	\$8,794,780
Government	\$0	\$77,272	\$156,465	\$233,738
<b>Total</b>	<b>\$22,400,000</b>	<b>\$7,749,057</b>	<b>\$7,007,486</b>	<b>\$37,156,544</b>

\*TIPU= Transportation Information & Public Utilities

Table 6.2c

Lexington Housing Trust Fund Impacts Study				
Construction Activity- Output 10:1 Leverage				
Industry	Direct	Indirect	Induced	Total
Agriculture	\$0	\$747	\$7,170	\$7,917
Mining	\$0	\$128,339	\$22,399	\$150,737
Construction	\$28,000,000	\$39,432	\$82,732	\$28,122,163
Manufacturing	\$0	\$1,023,109	\$213,040	\$1,236,149
TIPU*	\$0	\$839,788	\$254,194	\$1,093,982
Trade	\$0	\$3,219,572	\$1,329,512	\$4,549,084
Service	\$0	\$4,338,745	\$6,654,730	\$10,993,475
Government	\$0	\$96,591	\$195,581	\$292,172
<b>Total</b>	<b>\$28,000,000</b>	<b>\$9,686,322</b>	<b>\$8,759,358</b>	<b>\$46,445,680</b>

\*TIPU= Transportation Information & Public Utilities

Tables 6.3a, 6.3b, and 6.3c highlight the effect construction activities have on employee compensation through direct, indirect and induced impacts. Employees throughout Lexington would receive an estimated total of \$10.2 million in compensation as a result of 8:1 leveraged trust fund spending.



Table 6.3a

Lexington Housing Trust Fund Impacts Study				
Construction Activity- Wages 5:1 Leverage				
Industry	Direct	Indirect	Induced	Total
Agriculture	\$0	\$97	\$854	\$951
Mining	\$0	\$10,143	\$642	\$10,786
Construction	\$3,341,831	\$6,836	\$12,666	\$3,361,333
Manufacturing	\$0	\$93,646	\$10,145	\$103,791
TIPU*	\$0	\$135,281	\$36,565	\$171,846
Trade	\$0	\$703,427	\$283,299	\$986,726
Service	\$0	\$741,558	\$955,669	\$1,697,227
Government	\$0	\$24,731	\$35,701	\$60,433
<b>Total</b>	<b>\$3,341,831</b>	<b>\$1,715,719</b>	<b>\$1,335,542</b>	<b>\$6,393,093</b>

\*TIPU= Transportation Information & Public Utilities

Table 6.3b

Lexington Housing Trust Fund Impacts Study				
Construction Activity- Wages 8:1 Leverage				
Industry	Direct	Indirect	Induced	Total
Agriculture	\$0	\$155	\$1,367	\$1,522
Mining	\$0	\$16,229	\$1,028	\$17,257
Construction	\$5,346,930	\$10,937	\$20,266	\$5,378,133
Manufacturing	\$0	\$149,834	\$16,232	\$166,066
TIPU*	\$0	\$216,450	\$58,503	\$274,953
Trade	\$0	\$1,125,483	\$453,279	\$1,578,762
Service	\$0	\$1,186,492	\$1,529,071	\$2,715,563
Government	\$0	\$39,570	\$57,122	\$96,692
<b>Total</b>	<b>\$5,346,930</b>	<b>\$2,745,151</b>	<b>\$2,136,868</b>	<b>\$10,228,949</b>

\*TIPU= Transportation Information & Public Utilities

Table 6.3c

<b>Lexington Housing Trust Fund Impacts Study</b>				
<b>Construction &amp; Real Estate Activity- Wages 10:1 Leverage</b>				
<b>Industry</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Agriculture	\$0	\$194	\$1,709	\$1,902
Mining	\$0	\$20,287	\$1,284	\$21,571
Construction	\$6,683,663	\$13,672	\$25,332	\$6,722,666
Manufacturing	\$0	\$187,292	\$20,291	\$207,582
TIPU*	\$0	\$270,562	\$73,129	\$343,691
Trade	\$0	\$1,406,854	\$566,599	\$1,973,453
Service	\$0	\$1,483,115	\$1,911,339	\$3,394,454
Government	\$0	\$49,463	\$71,403	\$120,865
<b>Total</b>	<b>\$6,683,663</b>	<b>\$3,431,438</b>	<b>\$2,671,085</b>	<b>\$12,786,186</b>
*TIPU= Transportation Information & Public Utilities				

As summarized in **Tables 6.1b, 6.2b, and 6.3b**, the combined annual total of direct, indirect, and induced effects of construction related housing trust fund investment (at the 8:1 leverage ratio) include 304 jobs, \$37.2 million of spending, and \$10.2 million in increased wages in Lexington's economy.

## HOUSEHOLD SPENDING IMPACTS

As summarized in **Tables 6.4a, 6.4b, and 6.4c**, the additional rental housing opportunities created through housing trust fund investment can benefit up to 2,285 rent-burdened households each year.<sup>6</sup> By gaining access to housing that costs no more than 30 percent of their gross incomes, these households are estimated to save an

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<sup>6</sup> This represents the number of households that would benefit from the subsidy created by the construction of new units, should this amount be viewed as a direct subsidy rather than dollars spent on construction. In other words, this number represents the number of families that will benefit from the new and rehabilitated subsidized construction projects over time, or if these units were already in place. This shows that the one-time spending on construction provides subsidized benefits to its inhabitants for more than just the year in which it is constructed.

average of \$2,460 per year, based on the actual experience of beneficiary households in Colorado. As shown in **Tables 6.5a, 6.5b, and 6.5c**, this increase in the amount of household income that can be spent on non-housing related purchases will have an annual direct impact on the economy of 36 jobs and nearly \$3.7 million, and combined indirect and induced impacts of 23 jobs and \$2.4 million at the 8:1 leverage ratio.

Table 6.4a

Lexington Housing Trust Fund Impacts Study					
Trust Fund Spending by Renter Income Groups-5:1 Leverage					
Housing Type	Trust Fund Total	Avg Subsidy Amt needed to serve each Household	#of Households served	Income Groups Targeted	IMPLAN Income Groups
Deep Subsidy Rental Units	\$7,000,000	\$10,000	700	0-30% of AMI	\$0 - \$25,000
Affordable Worker Rental Units	\$4,200,000	\$5,766	728	31-60% of AMI	\$25,000 - \$50,000
<b>Total</b>	<b>\$11,200,000</b>		<b>1,428</b>		

Table 6.4b

Lexington Housing Trust Fund Impacts Study					
Trust Fund Spending by Renter Income Groups- 8:1 Leverage					
Housing Type	Trust Fund Total	Avg Subsidy Amt needed to serve each Household	#of Households served	Income Groups Targeted	IMPLAN Income Groups
Deep Subsidy Rental Units	\$11,200,000	\$10,000	1,120	0-30% of AMI	\$0 - \$25,000
Affordable Worker Rental Units	\$6,720,000	\$5,766	1,165	31-60% of AMI	\$25,000 - \$50,000
<b>Total</b>	<b>\$17,920,000</b>		<b>2,285</b>		

Table 6.4c

Lexington Housing Trust Fund Impacts Study					
Trust Fund Spending by Renter Income Groups- 10:1 Leverage					
Housing Type	Trust Fund Total	Avg Subsidy Amt needed to serve each Household	#of Households served	Income Groups Targeted	IMPLAN Income Groups
Deep Subsidy Rental Units	\$14,000,000	\$10,000	1,400	0-30% of AMI	\$0 - \$25,000
Affordable Worker Rental Units	\$8,400,000	\$5,766	1,457	31-60% of AMI	\$25,000 - \$50,000
<b>Total</b>	<b>\$22,400,000</b>		<b>2,857</b>		

Table 6.5a

Lexington Housing Trust Fund Impacts Study							
Economic Impacts of Change in Household Spending- 5:1 Leverage							
Housing Type	# of Households	Impacts					
		Direct		Indirect & Induced		Total	
		Output	Jobs	Output	Jobs	Output	Jobs
Deep Susbsidy Rental Units	700	\$1,119,103	10.9	\$731,141	6.8	\$1,850,244	17.7
Affordable Worker Rental Units	728	\$1,202,081	11.8	\$792,807	7.3	\$1,994,888	19.1
<b>Total</b>	<b>1,428</b>	<b>\$2,321,184</b>	<b>23</b>	<b>\$1,523,948</b>	<b>14</b>	<b>\$3,845,132</b>	<b>37</b>

Table 6.5b

Lexington Housing Trust Fund Impacts Study							
Economic Impacts of Change in Household Spending- 8:1 Leverage							
Housing Type	# of Households	Impacts					
		Direct		Indirect & Induced		Total	
		Output	Jobs	Output	Jobs	Output	Jobs
Deep Susbsidy Rental Units	1,120	\$1,790,565	17.5	\$1,169,826	10.8	\$2,960,391	28.3
Affordable Worker Rental Units	1,165	\$1,923,330	18.8	\$1,268,490	11.7	\$3,191,820	30.5
<b>Total</b>	<b>2,285</b>	<b>\$3,713,895</b>	<b>36</b>	<b>\$2,438,316</b>	<b>23</b>	<b>\$6,152,211</b>	<b>59</b>

Table 6.5c

Lexington Housing Trust Fund Impacts Study							
Economic Impacts of Change in Household Spending- 10:1 Leverage							
Housing Type	# of Households	Impacts					
		Direct		Indirect & Induced		Total	
		Output	Jobs	Output	Jobs	Output	Jobs
Deep Susbsidy Rental Units	1,400	\$2,238,207	21.8	\$1,462,282	13.6	\$3,700,489	35.4
Affordable Worker Rental Units	1,457	\$2,404,161	23.5	\$1,585,612	14.7	\$3,989,773	38.2
<b>Total</b>	<b>2,857</b>	<b>\$4,642,368</b>	<b>45</b>	<b>\$3,047,894</b>	<b>28</b>	<b>\$7,690,262</b>	<b>74</b>

## TAX REVENUES

The economic activity associated with housing trust fund investment and related changes in household spending creates additional public revenues from federal, state, and local taxes on property value, sales, and income due to the various direct, indirect and induced impacts described in the previous sections.

As summarized in **Tables 6.6a, 6.6b, and 6.6c**, investment in construction is estimated to generate tax revenues totaling \$3.6 million each year at the 8:1 leverage ratio, \$1.5 million of which would go to state and local jurisdictions.

Changes in household spending at the 8:1 leverage ratio will generate an additional \$849,922, of which \$420,637 would go to local and state jurisdictions. The breakdown of household tax impacts is shown in **Tables 6.7a, 6.7b, and 6.7c**.

Table 6.6a

Lexington Housing Trust Fund Impacts Study							
Construction Activity- Tax Revenue- 5:1 Leverage							
Taxing Entity	Business Taxes			Personal Taxes			Total
	Sales	Property	Other	Direct Property Tax	Induced Property Taxes	Income Tax	
Federal	\$0	\$0	\$1,065,713	\$0	\$0	\$294,498	\$1,360,211
State/Local	\$332,046	\$188,549	\$192,363		\$30,826	\$166,118	\$909,902
<b>Total</b>	<b>\$332,046</b>	<b>\$188,549</b>	<b>\$1,258,076</b>	<b>\$0</b>	<b>\$30,826</b>	<b>\$460,616</b>	<b>\$2,270,113</b>

Table 6.6b

Lexington Housing Trust Fund Impacts Study							
Construction Activity- Tax Revenue 8:1 Leverage							
Taxing Entity	Business Taxes			Personal Taxes			Total
	Sales	Property	Other	Direct Property Tax	Induced Property Taxes	Income Tax	
Federal	\$0	\$0	\$1,705,141	\$0	\$0	\$471,196	\$2,176,337
State/Local	\$531,274	\$301,679	\$307,781		\$49,321	\$265,789	\$1,455,844
<b>Total</b>	<b>\$531,274</b>	<b>\$301,679</b>	<b>\$2,012,922</b>	<b>\$0</b>	<b>\$49,321</b>	<b>\$736,985</b>	<b>\$3,632,181</b>



Table 6.6c

Lexington Housing Trust Fund Impacts Study							
Construction Activity- Tax Revenue 10:1 Leverage							
Taxing Entity	Business Taxes			Personal Taxes			Total
	Sales	Property	Other	Direct Property Tax	Induced Property Taxes	Income Tax	
Federal	\$0	\$0	\$2,131,426	\$0	\$0	\$588,995	\$2,720,421
State/Local	\$664,093	\$377,099	\$384,725		\$61,652	\$332,236	\$1,819,805
<b>Total</b>	<b>\$664,093</b>	<b>\$377,099</b>	<b>\$2,516,151</b>	<b>\$0</b>	<b>\$61,652</b>	<b>\$921,231</b>	<b>\$4,540,226</b>

Table 6.7a

Lexington Housing Trust Fund Impacts Study							
Economic Impacts of Household Income Change- Tax Revenue 5:1 Leverage							
Taxing Entity	Business Taxes			Personal Taxes		Total	
	Sales	Property	Other	Induced Property Taxes	Income Tax		
Federal	\$0	\$0	\$220,714	\$0	\$47,589	\$268,303	
State/Local	\$111,135	\$63,107	\$56,831	\$4,981	\$26,844	\$262,898	
<b>Total</b>	<b>\$111,135</b>	<b>\$63,107</b>	<b>\$277,545</b>	<b>\$4,981</b>	<b>\$74,433</b>	<b>\$531,201</b>	

Table 6.7b

Lexington Housing Trust Fund Impacts Study						
Economic Impacts of Household Income Change- Tax Revenue 8:1 Leverage						
Taxing Entity	Business Taxes			Personal Taxes		Total
	Sales	Property	Other	Induced Property Taxes	Income Tax	
Federal	\$0	\$0	\$353,142	\$0	\$76,143	\$429,285
State/Local	\$177,816	\$100,971	\$90,930	\$7,970	\$42,950	\$420,637
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$444,072</b>	<b>\$7,970</b>	<b>\$0</b>	<b>\$849,922</b>

Table 6.7c

Lexington Housing Trust Fund Impacts Study						
Economic Impacts of Household Income Change- Tax Revenue 10:1 Leverage						
Taxing Entity	Business Taxes			Personal Taxes		Total
	Sales	Property	Other	Induced Property Taxes	Income Tax	
Federal	\$0	\$0	\$441,428	\$0	\$95,178	\$536,606
State/Local	\$222,270	\$126,214	\$113,664	\$9,963	\$53,687	\$525,798
<b>Total</b>	<b>\$222,270</b>	<b>\$126,214</b>	<b>\$555,092</b>	<b>\$9,963</b>	<b>\$148,865</b>	<b>\$1,062,404</b>

## SUMMARY OF IMPACTS

The projected benefits of creating a statewide housing trust fund with a dedicated revenue source are substantial. As summarized in **Tables 6.8a, 6.8b, and 6.8c**, annual investment of \$4 million for a mix of affordable housing initiatives including new construction of housing, acquisition and rehabilitation of existing housing, and funding assistance to individuals and families is estimated to produce an average of 470 new housing opportunities a year, filling the gap between the total need and available resources, and yielding significant economic benefits for every year of investment.

Table 6.8a

Lexington Housing Trust Fund Impacts Study							
Summary of Economic Impacts- 5:1 Leverage							
Impact Category	Jobs	Output			Taxes		
		Direct	Indirect/ Induced	Total	Federal	State/Local	Total
Construction Activity	190	\$14,000,000	\$9,222,840	<b>\$23,222,840</b>	\$1,360,211	\$909,902	<b>\$2,270,113</b>
Change in Household Spending	37	\$2,321,184	\$1,523,948	<b>\$3,845,132</b>	\$268,303	\$262,898	<b>\$531,201</b>
<b>Total</b>	<b>227</b>	<b>\$16,321,184</b>	<b>\$10,746,788</b>	<b>\$27,067,972</b>	<b>\$1,628,514</b>	<b>\$1,172,800</b>	<b>\$2,801,314</b>

Table 6.8b

Lexington Housing Trust Fund Impacts Study							
Summary of Economic Impacts- 8:1 Leverage							
Impact Category	Jobs	Output			Taxes		
		Direct	Indirect/ Induced	Total	Federal	State/Local	Total
Construction Activity	304	\$22,400,000	\$14,756,544	<b>\$37,156,544</b>	\$2,176,337	\$1,455,844	<b>\$3,632,181</b>
Change in Household Spending	59	\$3,713,895	\$2,438,316	<b>\$6,152,211</b>	\$429,285	\$420,637	<b>\$849,922</b>
<b>Total</b>	<b>363</b>	<b>\$26,113,895</b>	<b>\$17,194,860</b>	<b>\$43,308,755</b>	<b>\$2,605,622</b>	<b>\$1,876,481</b>	<b>\$4,482,103</b>

Table 6.8c

Lexington Housing Trust Fund Impacts Study							
Summary of Economic Impacts- 10:1 Leverage							
Impact Category	Jobs	Output			Taxes		
		Direct	Indirect/ Induced	Total	Federal	State/Local	Total
Construction Activity	380	\$28,000,000	\$18,445,680	<b>\$46,445,680</b>	\$2,720,421	\$1,819,805	<b>\$4,540,226</b>
Change in Household Spending	74	\$4,642,368	\$3,047,894	<b>\$7,690,262</b>	\$536,606	\$525,798	<b>\$1,062,404</b>
<b>Total</b>	<b>453</b>	<b>\$32,642,368</b>	<b>\$21,493,574</b>	<b>\$54,135,942</b>	<b>\$3,257,027</b>	<b>\$2,345,603</b>	<b>\$5,602,630</b>

## VII. OTHER IMPACTS

In addition to the economic impacts of housing trust fund investment, there are many other impacts associated with the increased availability of affordable housing. The social benefits throughout a community associated with housing families and individuals in decent, safe, and affordable homes and expanding access to homeownership are numerous. When affordable housing is integrated into broader community plans for land use, transportation, and economic development, the range of these effects can expand greatly. There are also potential negative impacts that can be seen or perceived as a result of implementing an Affordable Housing Trust Fund and expanding affordable housing opportunities in certain communities. This report examines effects on both the community as a whole and the individuals that comprise it. These effects are typically seen as quality of life measures, including the perceived and actual effects on health, family stability and education, and economic development.

In general, social and other benefits accruing from housing trust fund investment are supported by research but difficult to quantify, and therefore are reviewed in more qualitative terms. Therefore, existing literature on the subjects is used to gather information on social and community impact. One such report, *Meeting Our Nation's Housing Challenges*, a 2002 report to Congress by the congressionally appointed bipartisan Millennial Housing Commission, sums up the potential benefits. The report states:

### Why Housing Matters

*"Decent, affordable, and accessible housing fosters self-sufficiency, brings stability to families and new vitality to distressed communities, and supports overall economic growth. Very particularly, it improves life outcomes for children. In the process, it reduces a host of costly social and economic problems that place enormous strains on the nation's education, public health, social service, law enforcement, criminal justice, and welfare systems. Housing very much matters – to the individual, to the family, to the neighborhood, and to the nation."*

## HEALTH

Housing trust fund investment in both new construction projects and the rehabilitation of existing housing, which is often dilapidated and hazardous, has the potential to

move Lexington families out of dangerous, unfit living situations. The Center for Housing Policy has found a number of different health benefits that may accrue from living in decent affordable housing. Some of these findings, as listed in the summary of the report by the Center for Housing Policy entitled, “Framing the Issues- the Positive Impacts of Affordable Housing on Health,” are as follows:

- Affordable housing may improve health outcomes by freeing up family resources for nutritious food and health care expenditures.
- By providing families with greater residential stability, affordable housing can reduce stress and related adverse health outcomes.
- Well-constructed and managed affordable housing developments can reduce health problems associated with poor quality housing by limiting exposure to allergens, neurotoxins, and other dangers.
- By alleviating crowding, affordable housing can reduce exposure to stressors and infectious disease, leading to improvements in physical and mental health.
- By allowing victims of domestic violence to escape abusive homes, affordable housing can lead to improvements in mental health and physical safety.

While there are a lot of factors that play a role in one’s health, there are documented linkages between housing quality/affordability and physical and mental health, especially the health of children and the elderly who are typically most vulnerable to various hazards such. Housing trust fund investment can help to rehabilitate or replace Lexington’s substandard housing, with a positive impact on public health.

## **Family Stability and Education**

A stable and decent housing situation has been shown to play a major role in creating a much more conducive and positive environment in which to raise children. The Millennial Housing Commission notes, in their 2002 report to Congress, finds that families who cannot afford good-quality housing may have to make frequent moves in search of decent affordable housing. As may be expected, studies have continuously shown a strong correlation between the frequency of moves during childhood and below-average performance in school. Studies have found that children who change schools frequently often have below-average math and reading scores and that these children and teens are significantly less likely to finish high school on time.

On the other hand, similar research has also suggested that homeownership can have positive effects on educational attainment levels of children. A study conducted by Harvard's Joint Center for Housing Studies observed that "children of homeowners have better home environments, high cognitive test scores, and fewer behavior problems than do children of renters. The independent impact of homeownership combined with its positive impact on the home environment results in the children of owners achieving math scores up to nine percent higher, reading scores up to seven percent higher, and reductions in children's behavior problems of up to three percent."

While the provision of affordable housing alone is only one of many factors that determines a child's success, studies have shown there to be a significant correlation between the two. It is very difficult to isolate the impact of the housing provision alone on educational achievement due to the inability of studies to quantify the many aspects of parenting that play a factor in a child's success. However, the stable living situations and created by housing trust fund investment can be expected to improve the educational performance of Lexington schoolchildren to some extent by minimizing school changes and overall family instability.

## **WELFARE TO WORK**

Lexington's efforts to promote successful transitions from welfare to work are also likely to benefit from housing trust fund investment. Studies find that a major barrier to achieving a successful transition from welfare to work is a common mismatch between the largely suburban location of entry-level job growth and the location of housing for welfare recipients, which is often downtown. Welfare recipients are likely to have difficulties finding suitable transportation, so proximity to job centers becomes a very important aspect to successfully making the transition off of welfare. In Lexington, future housing trust fund investment will have the ability to prioritize funding to projects that locate affordable housing closer to areas found to have higher opportunities for entry-level job growth.

## **ENVIRONMENTAL BENEFITS**

Several studies have examined the potential that affordable housing trust funds have to create a few different benefits to the environment. As with any housing development, strategic investment of the housing trust fund monies can be implemented in different

ways in order to have a positive impact on Lexington's growth management and the environmental issues that come with any expanded development. Strategic investment of housing trust fund dollars would allow recipients the opportunity to live closer to employment centers, which will likely improve the chances of success in the welfare to work program. By locating near employment centers for entry-level positions, affordable housing will be able to reduce negative air quality impacts by shortening driving distances and making either public transit or walking/biking a more viable option.

## ECONOMIC DEVELOPMENT AND PROPERTY VALUES

In general, housing affordability is often linked to economic development and the growth of business and industry in an area. Employers consider the cost-of-living and quality-of-life when choosing their ideal location. The cost-of-living is an important aspect for a business to consider when considering the pay required to employ the low-end cross-section of its workers. While Lexington continuously receives praise for the overall quality of life and its highly educated population, the cost of housing is a growing concern for the many people who earn well below the median income.

A related concern lies in the perceived ability of affordable housing to affect the surrounding area's property values. A study conducted by the Arizona State Stardust Center in August 2008, titled *How Does Affordable Housing Affect Surrounding Property Values*, finds that "there is no single, unqualified answer to whether or not introducing affordable housing lowers property values of surrounding homes. Rather it depends on a host of contextual conditions: of site, host community, scale, and other external factors." The study goes on to say that, "In those studies that do discover depressed property values, the impacts are generally slight and often transitory. It is not the affordable housing development *per se* but conditions or characteristics of the affordable housing or neighborhood- and how they interact- that mediate the impact on property values. Conditions that are will supported by research studies include:

- Host neighborhood context and compatibility of affordable housing with that context
- Degree of concentration of affordable housing units
- Replacement
- Management."



A number of other studies have been compiled by the California Department of Housing and Community Development in their August 2005 publication titled *Documents and Websites on Affordable Housing & the Relationship to Property Values*. These studies find that impacts on neighboring residential property values can be positive, neutral, or negative depending on certain neighborhood characteristics. The most consistent finding appears to be that, if implemented and managed correctly, an affordable housing development does not have a negative effect on property values in the area. This may partially be a result of scale, as smaller scale developments, often developed by non-profit community development corporations, tend to be more well-managed than the large-scale developments which are typically implemented by local governments in large cities.

## POSSIBLE NEGATIVE IMPACTS OF AHTE

- **Opportunity Costs** – Tax and fee revenues are finite resources. To a certain degree, agreeing to fund one program takes away from the ability to fund others. Each alternative use of public resources presents its own set of benefits and impacts.
- **Administrative Costs** – There are costs associated with collecting and remitting taxes and fees, and with administering funding programs. Assuming that current collection mechanisms and administrative entities can be used, these costs are expected to be reasonable, allowing efficient use of revenues for the intended purpose. It is assumed that no more than five percent (5%) of the additional tax revenue collected will be used to cover the administrative costs associated with the program's implementation. The increased wages and jobs that these costs will create should also be realized when analyzing this as a negative effect.
- **Industry Impacts** – Because there are so many variables that affect the price of insurance, it is difficult to determine whether a higher tax rate would have an economic impact on insurance sales or values. At the one percent (1%) increase in the tax rates described above, the impacts are a small percentage of total insurance costs, and because insurance is often seen as a necessary expense, the increase is unlikely to have a largely negative effect on the insurance business, although it may negatively impact those who live on the margin.

## VIII. CONCLUSIONS

To address the gap in affordable housing funding, the LFUCG has proposed the creation of a local affordable housing trust fund with a dedicated revenue source that will generate approximately \$4 million annually through insurance tax revenues.

Academic literature and numerous studies show that many positive economic benefits are correlated with affordable housing. In addition, improvements in health, family stability, education, and the environment are some of the positive social and community benefits associated with AHTFs. However, opportunity costs, administrative costs, and potential negative industry impacts should also be considered when adopting the AHTF.

Assuming an 8:1 leverage ratio, the estimated annual economic impacts of a \$4 million AHTF investment include:

- An average of approximately 470 housing opportunities can be produced *each year*, including 150 new construction projects and 320 rehabilitation projects.
- More than 363 new jobs will be directly and indirectly supported by trust fund investment.
- More than \$43.3 million of direct, indirect and induced economic activity will be generated from trust fund investment.

In conclusion, the projected benefits of creating a local housing trust fund with a dedicated revenue source are substantial. Annual investment of \$4 million for a mix of affordable housing initiatives including new construction of housing, acquisition and rehabilitation of existing housing, and funding assistance to individuals and families is estimated to produce an average of 470 new housing opportunities a year.

## Appendix A – Multipliers

Lexington Housing Trust Fund Impacts Study Multipliers- Outputs				
Impact Type	Direct	Indirect	Induced	Total
New Construction	1	0.40919	0.297628	1.706819
Rehabilitation Construction	1	0.30137	0.368585	1.669955

Lexington Housing Trust Fund Impacts Study Multipliers- Employment				
Impact Type	Direct	Indirect	Induced	Total
New Construction	6.197562	4.214893	2.920022	13.332477
Rehabilitation Construction	9.996054	3.042063	3.617414	16.655531

Lexington Housing Trust Fund Impacts Study Multipliers- Wages				
Impact Type	Direct	Indirect	Induced	Total
New Construction	0.215375	0.144702	0.090437	0.450514
Rehabilitation Construction	0.29478	0.105839	0.111989	0.512609

Lexington Housing Trust Fund Impacts Study Multipliers- Indirect Business Tax				
Impact Type	Direct	Indirect	Induced	Total
New Construction	0.00406	0.030123	0.019916	0.054098
Rehab Construction	0.006379	0.022488	0.024687	0.053554

## Appendix B - Commonwealth Economics' Organization

### Commonwealth Economics, LLC

Commonwealth Economics is a leader in developing the following types of reports and analysis for clients in the public and private sector: economic impact analysis, market analysis, fiscal analysis, and feasibility studies. Commonwealth Economics' has helped over twenty companies and municipalities analyze the potential benefits of TIF.

Commonwealth Economics has helped clients successfully obtain over \$750 million in federal, state and local incentives. We have specialized knowledge, experience, and proven processes to help clients take full advantage of available credits and ensure compliance. As Secretary of Finance, John R. Farris helped draft the State's new TIF law. We are experts in tax increment financing (TIF), economic impact analysis, and federal loan and tax credit programs.

### *John R. Farris*

John R. Farris is the Founder and President of Commonwealth Economics. He began his career as an economist at the Center for Economics Research at the Research Triangle Institute. Mr. Farris continued his professional career as a senior economics consultant with the World Bank and the International Finance Corporation. From 2006 - 2007, Mr. Farris served as Secretary of the Finance and Administration Cabinet for the Commonwealth of Kentucky, where he oversaw the collection, investment and distribution of over \$8 billion dollars in annual tax revenue. Currently, Mr. Farris also serves as a Professor of Economics and Finance at Centre College in Danville, Kentucky.

Mr. Farris received a full-tuition fellowship to study economics and finance at the Woodrow Wilson School at Princeton University, where he was awarded a Master's Degree in 1999. Before attending Princeton, Mr. Farris studied economics and set-theoretical logic at Centre College from which he graduated, Phi Beta Kappa, attaining a Bachelor of Science degree in Economics and Philosophy in 1995.

### ***David Larson***

David Larson is a Director for Commonwealth Economics. Prior to joining Commonwealth Economics, Mr. Larson worked as an analyst at Svoboda Capital Partners, a Chicago-based private equity group with over \$250 million under management. While at Svoboda Capital Partners, Mr. Larson was heavily involved in all aspects of the investment process, transaction execution, and management of portfolio companies. Mr. Larson's experience includes working closely with companies and management teams in the healthcare, value-added distribution, consumer products, business services, and direct mailing industries, among others.

Mr. Larson graduated cum laude with a Bachelor of Science degree in Business Administration and Accounting with special attainments in Commerce from Washington and Lee University.

### ***Mallory Howard***

Mallory Howard is a Director at Commonwealth Economics. Mrs. Howard began her career with Bluegrass Capital Advisors, specializing in the formation and administration of hedge funds. She has set-up a variety of private funds and has expertise in dealing with regulatory agencies. She has also worked with early stage companies on business plan development, capital raising, and production of offering documents.

Mrs. Howard received her Bachelor of Business Administration in Business Studies with an emphasis in Marketing and Management from the University of Mississippi.

### ***Casey Bolton***

Casey Bolton is a Senior Associate at Commonwealth Economics. Mr. Bolton has specialized in various forms of economic analysis, including a number of feasibility and impact studies. Mr. Bolton has worked with a wide variety of businesses in conducting these feasibility and impact studies and has guided several of them through the approval process towards receiving millions of dollars in funding. Mr. Bolton has experience in dealing with various forms of economic incentive programs at both the

State and Federal level.

Mr. Bolton received his Bachelor of Science degree in Financial Economics with an emphasis in Political Economy from Centre College in Danville, Kentucky.

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