

FINAL REPORT

COLORADO HOUSING TRUST FUND IMPACTS STUDY

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Colorado Housing Trust Fund Coalition

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**Colorado Housing
Trust Fund Coalition**

TABLE OF CONTENTS

	<u>PAGE</u>
I. EXECUTIVE SUMMARY	1
II. INTRODUCTION	4
Background.....	5
Colorado’s Affordable Housing Need.....	7
Colorado Housing Trust Fund Proposal.....	12
III. ECONOMIC IMPACTS.....	13
Methodology	13
Economic Impact Assumptions	15
Construction and Real Estate Impacts	19
Household Spending Impacts.....	22
New Household Impacts	23
Tax Revenues.....	25
IV. OTHER IMPACTS.....	27
Family Stability and Education	27
Health	28
Welfare to Work.....	29
Household Wealth.....	29
Female-headed Households.....	29
Environmental Benefits.....	31
Economic Development.....	32
V. CONCLUSIONS	33
Appendices	36

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I. EXECUTIVE SUMMARY

This study examines the projected impacts to the Colorado economy of investment by a proposed statewide affordable housing trust fund, 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 from housing trust fund investment.

As estimated by the Colorado Division of Housing in November 2001, Colorado has an unmet need for more than 107,000 affordable housing opportunities across a continuum of need ranging from emergency shelter beds to affordable homeownership opportunities, for very low- to moderate-income households. The market is unable to meet this need without an estimated \$835 million in equity subsidies over 12 years – or \$72.5 million per year at projected annual production capacity. Estimated available funding for equity subsidies is limited, leaving a gap of \$26.5 million per year to meet annual production targets and fulfill the total estimated need in the most efficient timeframe.

To address this funding gap, the Colorado Housing Trust Fund Coalition, a broad-based group of public, private and non-profit organizations and individuals, proposes the establishment of a statewide affordable housing trust fund, with a dedicated revenue source. The Coalition anticipates that a Colorado housing trust fund would serve households at up to 80 percent of area median income, except in high cost communities where trust fund investment could produce housing opportunities for higher income households in need. Fifty percent of revenues would go toward projects that serve households below 50 percent of area median income. Funds would be used to make loans and grants for preservation, production and acquisition of housing and to supplement downpayment assistance programs for first-time homebuyers. Consistent with historic trends, it is expected that every dollar of trust fund investment would leverage ten dollars of additional public and private investment.

This study relies on existing studies of need and extrapolations from base data provided by the Colorado Division of Housing. Using the IMPLAN regional economic model and production, equity subsidy, and household spending assumptions derived from Division of Housing base data, this analysis shows that leveraged investment of \$26.5 million per year for affordable housing can be expected to deliver approximately 39,000 affordable housing opportunities over a 12 year period. This level of funding would fill the estimated gap between the cost of meeting the 2001 Division of Housing estimate of total need and the projected level of available resources. It does not reflect potential increases in demand due to population growth, demographic shifts, loss of affordable housing supply, changes in economic conditions, or other factors.

It is assumed conservatively that \$15.9 million of the total is invested each year in new construction and rehabilitation at a 1:10 leveraging ratio, with corresponding new economic impacts. The balance would be invested in housing and land acquisition or downpayment assistance programs representing redistributions within the economy, but no new impacts.

Estimated economic impacts for *each year* of housing trust investment include:

- Leveraging - each dollar of equity subsidy can be expected to leverage an additional ten dollars of public and private investment in affordable housing.
- Housing Production – an average of approximately 3,400 housing opportunities will be produced *each year*, including 63 shelter beds, 2,100 rental opportunities, and 1,200 homeownership opportunities.
- Employment – more than 3,200 new jobs will be directly and indirectly supported by trust fund investment *each year*.
- Total Output – More than \$334 million of direct, indirect and induced economic activity will be generated from trust fund investment *each year*.
- Construction and Real Estate – the construction and real estate industries will experience direct effects of \$160 million of spending and 1,158 jobs *each year*, generating total direct, indirect and induced impacts of \$290 million and 2,804 jobs.
- New Spending Patterns – formerly rent-burdened households will have an average of \$2,460 of annual income per household to spend on goods and services other than housing, including transportation to work, clothing, health care, and food. Each year of housing production generates new total impacts of almost \$8 million and 79 jobs due to changes in household spending patterns. This represents an ongoing effect.
- New Households – households moving into the region to fill vacancies created by new affordable housing production will generate 358 jobs and ongoing direct, indirect, and induced output of nearly \$36 million annually.
- Tax Revenues – New economic activity will generate more than \$26 million of annual tax revenues, more than \$13 million of which accrues to state and local government. Property taxes and income tax revenue related to changes in household spending are ongoing impacts.

Social and community benefits can also be expected as a result of additional investment in affordable housing:

- Family Stability – an average of approximately 3,300 very-low, low, and moderate income households each year will have access to decent and affordable rental housing and homeownership opportunities, removing a key barrier to opportunity. Stable living situations will allow children a better chance at success in school and later in life.

- Health – helping families move into better quality housing can be expected to yield health benefits, especially to children, and corresponding savings in public healthcare costs.
- Welfare to Work – Colorado families can expect better outcomes as they transition from welfare to work, consistent with research demonstrating a link between rental assistance and employment success.
- Household Wealth – new homeownership opportunities will allow families to build wealth through home equity.
- Female-headed Households – Access to affordable housing can help offset the financial and social challenges experienced by female-headed households who are disproportionately represented in lower income groups. Female-headed households who are no longer rent-burdened will have a combined total of \$947,000 per year to spend on other needs. Women across all income categories and industries will garner a direct benefit of \$4.5 million per year in wages earned as a result of trust fund spending.
- Environmental Benefits – providing affordable housing opportunities close to employment centers and along transit corridors can be expected to have a positive effect on sprawl and traffic congestion, reducing associated air quality impacts by shortening driving distances and making transit more viable.
- Economic Development – a diversity of housing types and prices close to employment centers will help enhance Colorado’s competitive position in attracting and retaining business.

II. INTRODUCTION

STUDY PURPOSE

The Colorado Housing Trust Fund Coalition commissioned this study to better understand and communicate the potential economic and social impacts of public investment in a statewide housing trust fund.

The study examines the direct, indirect, and induced economic impacts of additional spending on affordable housing programs that would result from the creation of a Colorado housing trust fund. These impacts include effects on employment, income, spending, industry sectors, and tax revenues in the state. The study also identifies other qualitative benefits that could be expected to accrue from additional investment in affordable housing, including effects on health, educational achievement, family stability, female-headed households, community health, and growth-related environmental issues.

COLORADO HOUSING TRUST FUND COALITION

The Colorado Housing Trust Fund Coalition is a broad-based group of public, private and non-profit organizations and individuals with the shared purpose of establishing a statewide housing trust fund with a dedicated source of public revenue for the creation and preservation of affordable housing throughout Colorado. The Coalition includes the following voting members and more than fifty supporting organizations.

Archdiocesan Housing Committee
CARE Housing – Fort Collins
Catholic Charities, Archdiocese of Denver
Colorado Affordable Housing Partnership
Colorado Cross Disability Coalition
Colorado Division of Housing
Colorado Energy Assistance Foundation
Colorado Housing and Finance Authority
Colorado League of Women Voters
Colorado Coalition for the Homeless
Colorado Housing Inc., Pagosa Springs
Colorado Municipal League
Community Capital Corporation
Community Resource Center
Denver Department of Human Services
Denver Voice
Enterprise Foundation – Denver Office
Funding Partners for Housing Solutions

Greeley Transitional Housing
Gunnison County Housing Authority
Maurice Head, City of Fort Collins
Housing Advocacy Coalition, CO Springs
Housing Justice Inc.
Inter Faith Community Services
Lutheran Office of Governmental Ministry
Mercy Housing Southwest
Partners in Housing Inc., CO Springs
People United for Families
Rocky Mountain Mutual Housing Assoc.
Rural Community Assistance Corporation
Sierra Club – Rocky Mountain Chapter
Save Our Section 8
Southeast Business Partnership
Speaking for Ourselves
Saint Francis Center
The Resource Assistance Center (TRAC)

ECONOMIC & PLANNING SYSTEMS

Economic & Planning Systems (EPS) is a land economics consulting firm experienced in the full spectrum of services related to public and private real estate development, the financing of government services and public infrastructure, land use and conservation planning, and government organization. The firm has completed a wide range of housing-related studies and fiscal and economic impact analyses, including affordable housing needs analysis and housing strategies for a number of jurisdictions within Colorado. EPS specializes in preparing concise analyses that disclose risks and impacts, support decision-making, and provide solutions to real estate development and land use-related problems. Founded in 1983, EPS has a staff of forty professionals and offices in Denver, Colorado and Sacramento and Berkeley, California.

BACKGROUND

HOUSING TRUST FUNDS

Housing trust funds are dedicated sources of revenue to help low- and moderate-income people achieve affordable housing. Although Colorado has several local housing trust funds in place, it is one of only sixteen states that do not have a housing trust fund at the state level. As reported in the *Housing Trust Fund Progress Report 2002*, published by the Center for Community Change, 34 states have state housing trust funds, and a combined total of 275 trust funds are in place at local and state levels, delivering at least \$750 million each year in support of housing needs.¹

The key features of a typical housing trust fund include:

- **Dedicated Revenue Sources** – one or more ongoing revenue sources earmarked for affordable housing.
- **Orientation to Results** - funds are used to support the production, rehabilitation, and preservation of affordable housing and support services.
- **Commitment** – funds are targeted for the specific purpose of providing affordable housing.
- **Legislative Mandate** – the fund is implemented by law.

Typically, state housing trust funds are created by state legislation providing an ongoing revenue source. The *Housing Trust Fund Progress Report 2002* indicates that state housing trust funds receive more than \$437 million per year from a variety of revenue sources. General fund appropriations and real estate transfer taxes are the most commonly used sources. Additional revenue sources include interest on state funds, interest on real estate escrow accounts, grants and donations, document recording fees, bond proceeds, interest on security deposits, and unclaimed property funds. Housing trust funds

leverage other investment at ratios ranging from 1:1 to 1:25 and averaging 1:8. In most states, 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. Most housing trust funds are overseen by an appointed board that advises on or makes decisions regarding funding awards.²

TRUST FUND ACCOMPLISHMENTS

A number of states have had housing trust funds in place for several years. While housing needs, programs, leveraging ability, and spending priorities vary state by state, the experience of selected states gives a general overview of housing trust fund outcomes and the economic benefits associated with affordable housing production. The size of these states varies considerably. Populations range from approximately 613,000 in Vermont to 5.9 million in Washington. Colorado's population is approximately 4.4 million.

Washington -- Since 1989, the state has invested \$281 million in new and improved housing for households with incomes at or below 80 percent of median income, leveraging more than \$1.124 billion in public and private sector support. More than 18,000 units of housing have been improved or created in every region of the state. As a result of Housing Trust Fund investment, approximately 48,000 jobs have been created, with total wages estimated at more than \$650 million. Over the last nine years, the program will have generated \$79 million of sales tax revenue, and over the next 20 years, is estimated to generate \$317 million in property taxes.

The Washington Office of Community Development notes that the housing created through trust fund investment helps increase the efficiency of programs administered by social and health services agencies and makes a greater proportion of family incomes available for critical needs such as food, clothing, utilities, child care, and medical care.³

Currently, Washington generates approximately \$12.5 million per year from a document recording fee increase of \$10 per document (\$5 million goes to the state), and less than \$1 million total from penalties on late real estate excise tax payments and interest on broker escrow accounts. Additional funding comes from capital appropriations of general obligation bond proceeds. The legislature appropriated \$73 million of capital funds for the current biennium.

Vermont -- A real estate transfer tax of 1.25 percent on real estate sales generates approximately \$20 million per year, 50 percent of which goes to the Vermont Housing and Conservation Trust Fund for affordable housing and conservation activities. Between 1988 and 2001, housing expenditures contributed to an estimated \$290 million in construction activity and the creation of more than 10,000 construction-related jobs. It is estimated that each dollar of construction spending leverages two dollars of other

economic activity. Since its creation in 1987, the fund has created 6,675 units of affordable housing for more than 16,700 Vermonters. Trust fund investment of \$155 million leveraged an estimated additional \$530 million of other public and private funds.

Other benefits cited by the Vermont Housing and Conservation Coalition include stabilization of housing costs resulting in additional household income for other needs, more vital downtowns as a result of housing and conservation investment, attraction and retention of employers, increased state and municipal revenues, and lower health care costs.⁴

Arizona – In 2000, Arizona’s Housing Trust Fund contributed \$9.14 million toward a total investment of \$89.7 million by the Arizona Office of Housing and Community Development. The estimated economic impact to the state totals \$612.5 million, creating 9,929 jobs and \$219.3 million in wages. Construction-related tax benefits are estimated at \$32.9 million with ongoing property tax revenues of \$1.4 million per year. Arizona has a population of 5.3 million.⁵

Nebraska -- Since its creation in 1998, Nebraska’s Affordable Housing Trust Fund has awarded \$15.9 million, leveraging \$78.2 million of other funds and creating 819 units of housing. \$167 million in community investment and 1,773 new jobs will accrue from this investment. Nebraska’s population is 1.7 million.⁶

COLORADO’S AFFORDABLE HOUSING NEED

In *Housing Colorado: The Challenge for a Growing State*, the Colorado Division of Housing quantifies the gap between supply and demand in 2001 for a range of affordable housing types, by household income groups.⁷ This analysis for emergency shelter beds, rental housing, and homeownership opportunities is summarized in **Table 1** and presented in more detail in *Housing Colorado* and the September 2002 *Colorado Housing Trust Fund Revenue Source Study*⁸. It is a snapshot of need and a baseline for development of production targets and estimates of funding needs, but does not reflect potential changes due to population growth, demographic shifts, loss of supply, economic changes, or other factors.

**Table 1
Summary of Affordable Housing Need
Colorado Housing Trust Impacts Study**

Housing Type	Income Group	Need (units) ³
Emergency Shelter Beds	Homeless families/individuals	2,000
Rental Units		
Deep Subsidy	0-30% RMI ¹	47,600
Affordable Worker	31-60% RMI ¹	<u>18,900</u>
Subtotal		66,500
Subsidized Homeownership	60-80% of HUD AMI ²	38,700

¹ Renter Median Income: median income for renter households only (lower than AMI); half of all renter households have incomes above this level and half below it. Used by Division of Housing for analysis of renter need.

² Dept of Housing and Urban Development Area Median Income: median income for all households; half of all households have incomes above this level and half below it. Used by Division of Housing for analysis of homeownership need.

³ Units are rounded and reflect access to affordable housing opportunities as well as the production and acquisition of units.

Source: Colorado Division of Housing, Housing Needs Funding Gap Analysis, 2001.

Emergency Shelters

Based on statewide applications for funding assistance, the Colorado Division of Housing estimated the need in 2001 for approximately 2,000 beds to meet the state's emergency shelter needs.

Rental Units

In 2001, 66,500 renter households were estimated to be rent burdened. Because of an inadequate supply of affordable housing units, rent-burdened households are forced to spend more than the federal standard of 30 percent of gross household income for housing expenses, leaving little for other necessities. Of these, 47,600 are households earning between \$0 and \$10,337 per year (2001) and 18,900 are households earning between \$10,338 and \$20,675 per year, or less than 36 percent of the 2001 U.S. Department of Housing and Urban Development (HUD) area median income for Colorado.

The Division of Housing's supply and demand analysis shows that for renters with household incomes greater than 60 percent of renter median income there appears to be an adequate supply of rental units. However, the analysis cautions that some higher income households elect to rent housing at lower rental rates than the maximum rates they can afford, occupying some of the supply that would otherwise be available at affordable rates to lower income households. Accordingly, the overall estimate of affordable rental need may be lower than the actual need. It is assumed that housing

trust fund revenues would be used to address the entire range of renter need, consistent with current affordable housing project development and eligibility criteria.

Homeownership

Homeownership is unobtainable for many Coloradans who would like to become homeowners if they could afford to do so. In the 2001 Fannie Mae National Housing Survey⁹, 59 percent of renter households earning between 60 and 80 percent of HUD area median income indicated a desire to move into homeownership. Based on this survey data, the Colorado Division of Housing estimated that in 2001, a total of 38,700 households earning between 60 and 80 percent of statewide area median income were interested in homeownership. This group of households earns between \$34,620 per year and \$46,160 per year – a range into which teacher and police officer salaries fall.¹⁰

For households earning 60 percent of area median income in 2001, there was a \$46,900 gap between the \$158,215 price of a “benchmark” 3-bedroom, 2-bath home in Colorado and what they could afford.¹¹ For households at 80 percent of median income, the gap was \$9,800.

FILLING THE GAP

Estimated Cost to Meet Affordable Housing Demand

In *Housing Colorado*, the Division of Housing states that “the lack of funding for affordable housing is the single greatest impediment to meeting the State’s affordable housing need.”¹² The equity subsidies needed to fill the 2001 gap between affordable housing supply and demand exceed \$800 million, as shown in **Table 2**. Based on current capacity to develop affordable housing opportunities, the Division of Housing (DOH) has targeted a goal of producing approximately 52,700 units over a five-year period (“units” represent housing opportunities – a mix of new construction, acquisition and rehabilitation of units, and downpayment assistance). Equity subsidies of \$362.2 million are needed to meet this five-year goal, or \$72.4 million annually. At this level of annual funding and production capacity, the total estimated 2001 need could be met over a 12 year period. This projection does not factor in the potential loss of current affordable units, growth in demand, changes in current funding levels, or fluctuations in real estate costs.

**Table 2
Estimated Cost to Meet Affordable Housing Demand
Colorado Housing Trust Fund Impacts Study**

Housing Type	Need (units)	Subsidy/ Unit	Total Cost	Five Year Production Capacity	Five Year Subsidy Cost	Avg. Ann. Subsidy Cost
Emergency Shelter Beds	1,996	\$9,000	17,964,000	499	4,491,000	898,200
Deep Subsidy Rental Units	47,598	\$10,000	475,980,000	11,900	118,995,000	23,799,000
Afford. Worker Rental Units	18,881	\$5,770	108,867,846	13,217	76,207,492	15,241,498
Subsidized Homeownership	<u>38,686</u>	\$6,000	<u>232,116,000</u>	<u>27,080</u>	<u>162,481,200</u>	<u>32,496,240</u>
TOTAL	107,170		\$834,927,846	52,695	\$362,174,692	\$72,434,938

Source: EPS; CO DOH base data, 2001.

Existing Funding Sources

Many funding sources, both public and private, are used to develop affordable housing in Colorado. They include equity capital, loans, grants, bonds, contributions of land and buildings, in-kind donations, and others. This study assumes that current housing production requires equity subsidies to make them feasible.

This analysis extrapolates from the Division of Housing's count of 2001 affordable housing production and estimates of equity subsidy amounts (**Table 2**) to estimate that approximately \$46 million per year would be available from existing funding sources for equity subsidies. This represents a subset of total funding. It is assumed that this \$46 million will continue to leverage other sources at a 1:10 ratio in the future. The \$46 million estimate does not include State Low Income Housing Tax Credits or Division of Housing housing grants. Neither program was funded out of the state general fund in fiscal year 2003.

Need for Additional Funding

As shown on **Table 3**, assuming there will be \$46 million of ongoing funding from existing sources, there would be a need for an additional \$26.5 million per year in subsidy funds to meet annual production targets. This level of funding would allow 2001 demand to be met over the next 12 years. Again, it represents a target for revenue production; it does not factor in the potential loss of current affordable units, growth in demand, changes in current funding levels, or fluctuations in real estate costs.

Table 3
Need for Additional Funding
Colorado Housing Trust Fund Impacts Study

Description	Amount
Average annual subsidy cost	72,434,938
Projected funding based on current subsidy levels	<u>45,982,258</u>
Additional Annual Funding Required	\$26,452,680

Source: EPS analysis; Colorado Division of Housing 2001 base data.

This targeted amount of \$26.5 million of annual trust fund spending is assumed as a spending input for purposes of estimating the economic impacts of housing trust fund spending. Although this level of annual funding would accelerate the timeframe over which the 2001 need could be met, allowing production at capacity and completion of the 2001 need over a 12 year period, the Colorado Housing Trust Fund Coalition has set a minimum target of \$15 million per year. This amount would allow the 2001 need to be met, but over a longer period of time. At \$15 million, the estimate of combined resources for state affordable housing subsidies total approximately \$61 million per year (\$46 million of current sources plus \$15 million of new trust fund revenues), or approximately 84 percent of the annual \$72.4 million that would be available if there were \$26.5 million of annual housing trust fund revenues. Accordingly, with \$15 million of annual trust fund investment, it would take about 16 percent longer to meet the total need – or about two years.

The *Colorado Housing Trust Fund Revenue Source Study*¹³ analyzes potential statewide revenue sources, and identifies several that, if set at appropriate rates, or combined, could generate revenues ranging from the \$15 million minimum target to \$26.5 million or more. Statewide sources that have the highest revenue generating potential include a real estate transfer tax, sales tax increase, and document recording fee.

COLORADO HOUSING TRUST FUND PROPOSAL

As proposed by the Colorado Housing Trust Fund Coalition, trust fund assets would be targeted to the production and preservation of affordable housing and other related projects targeted to very low-, low-, and moderate-income households. Except in very high cost communities, trust fund eligibility would be limited to projects that serve households with incomes up to 80 percent of area median income, with fifty percent of the funds reserved for projects serving households up to 50 percent of area median income, and priority given to projects serving households up to 30 percent of area median income. In high cost areas, like certain mountain resort communities, 80 percent of median income may be insufficient to afford local housing prices. In such cases, trust funds may be used for projects serving higher income levels consistent with established standards for affordable housing in that community. The Coalition defines housing as affordable when total housing costs represent approximately 30 percent of gross household income, acknowledging that there may be variation from this standard to conform to affordability definitions used by funding partners. This definition of affordability is consistent with the federal standard.

The Coalition proposes that funds be administered by a qualified entity to be determined by the state legislature. Funds would be awarded through a competitive process as loans or grants to a range of organizations including public, for-profit and non-profit entities. The kinds of activities that might be funded include:

- Preservation of existing affordable housing.
- New construction of affordable for sale and rental housing, including necessary infrastructure development and land acquisition.
- Rehabilitation of affordable for sale and rental housing.
- Down payment assistance.
- Development of special needs housing (e.g., senior housing, housing for the developmentally or physically disabled).

The Coalition also proposes a set of criteria for evaluating funding applications, including:

- Responsiveness to local needs and priorities.
- Equitable distribution of funds throughout the state.
- Experience and capacity of applicant.
- Long-term project affordability.
- Mix of income levels, except for special needs projects.
- Leveraging of trust fund dollars with other public and private funds.
- Incorporation of universal design features.
- Energy efficiency.
- Provision of or access to services like childcare and transportation.

III. ECONOMIC IMPACTS

This chapter describes the economic impacts of additional spending on affordable housing by the proposed Colorado Housing Trust Fund.

METHODOLOGY

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 output, jobs, and income. 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. Jobs refer to full-time equivalent employment. If two people were working 20 hours a week building a home for an entire year they would be considered one job. Income refers to wages and benefits paid to all employees (including those that are self-employed).

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

- **Direct Impacts** are the output, jobs, 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.
- **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 Colorado. This study reports only the portion of indirect purchases within Colorado.
- **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 regional economy.
- **Total Impacts** represents the sum of the direct, indirect, and induced impacts and is the measure of total economic impact.

To calculate the economic impacts of investment by the proposed Colorado Housing Trust Fund, this study uses IMPLAN Pro. This regional economic model was calibrated to simulate the effects of a spending scenario on Colorado's economy. Once impacts are calculated using the IMPLAN model, multipliers were derived to create a tool to calculate indirect and induced impacts for alternative spending assumptions. These multipliers are described in **Appendix B** along with an example of their use to calculate the impacts of a \$15 million housing trust fund.

An economic impact demonstrates the effects of new spending in a given industry or portion of the economy. It does not state the creation of new resources or money, but rather a reallocation of economic activity to the regional economy. Economic impacts commonly emphasize only the benefits associated with this new economic activity. While this study does not assume a particular source of funding, it is recognized that there are other impacts associated with taxes or fees that might be implemented as a revenue source for the housing trust fund. As identified in the *Colorado Housing Trust Fund Revenue Source Study*¹⁴, some of these impacts include:

- **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. For example, local jurisdictions might wish to implement real estate transfer taxes for their local funding needs. 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.
- **Impacts on Payers and Equity Issues** – Taxes and fees have varying impacts on payers, as indicated by the following examples. Sale taxes are considered regressive. They are paid at the same rate by consumers of identical essential goods, but represent a higher portion of household income for low-income households than wealthy households. A flat per document recording fee, if set at a modest level (\$10-20 per document), is less likely to be perceived as regressive, but does represent a bigger percentage of a home sale transaction for purchasers of lower-priced homes. A real estate transfer tax based on home value increases the cost of purchasing a home – at a rate of \$.05/ \$100 of value, it results in a tax of \$100 on a \$200,000 home sale. While this may have a negative effect on housing affordability for lower income households, there is an offsetting public benefit (creation of affordable housing units) that also helps this group. Exemptions can sometimes address impacts on certain payers.

- **Industry Impacts** – Because there are so many variables that affect the price of housing, it is difficult to determine whether a real estate transfer tax or document recording fee would have an economic impact on sales or values. At the rates described above, the impacts on a given sale are a small percentage of total closing costs and home value, and unlikely to have a negative effect. To date, there does not appear to be evidence of negative impacts in other states with real estate transfer taxes or document recording fees in place.

ECONOMIC IMPACT ASSUMPTIONS

The economic impacts of housing trust fund investment on the Colorado's economy are based on the spending assumptions summarized in **Tables 4a** and **4b**. As extrapolated from the Division of Housing's 2001 needs analysis, it is expected that a total of \$26.5 million of new housing trust fund equity subsidies will be invested in a mix of housing projects and programs, including new construction, rehabilitation, acquisition, and downpayment assistance, creating opportunities for a range of income groups. This analysis studies the economic impacts associated with new housing trust fund investment. It does not evaluate the impacts of investment from current equity subsidy sources. This analysis can be broken down into two types of impacts -- one-time impacts related to new housing construction and acquisition and on-going impacts related to changes in household spending and new households moving into the regional economy.

ONE-TIME IMPACTS

The actual mix of projects will vary year to year, according to changes in market demand and investment opportunities. For this impact analysis, it is assumed, based on historic project cost data compiled by the Division of Housing, that out of the \$26.5 million of annual housing trust fund investment, \$15.9 million would go toward new rental and homeownership construction and construction-related rehabilitation activities. This investment, leveraged with other public and private funds at a 1:10 ratio, generates new economic activity, with corresponding direct, indirect and induced economic impacts. The remaining \$10.6 million goes to the acquisition of housing opportunities, including \$4.2 million toward property acquisition and \$6.4 million to downpayment assistance programs.

It is assumed that the majority of funds used for property acquisition represent a transfer of capital rather than new economic activity. However, there are some economic impacts related to property acquisition, including closing costs and real estate fees. In order to quantify this real estate activity, 2.8 percent was applied to the \$4.2 million value of property acquisition to capture the economic activity related to property transactions. The \$6.4 million related to downpayment assistance can be considered a transfer payment and does not create any additional economic impacts.

The estimated extent to which housing trust fund dollars would leverage other public and private funds was derived from the Division of Housing's historic leveraging average of 1:10 – a ratio that falls within the leveraging range of 1:1 to 1:25 reported by states with housing trust funds.¹⁵

ON-GOING IMPACTS

Ongoing economic impacts are changes in the regional 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 in FY2001 by the State Division of Housing, households had average annual rent savings of \$2,460 -- income that is freed up for alternative spending in the economy.¹⁶ This annual savings was multiplied by the number of rental opportunities produced through new construction and acquisition to develop a data input for the total increase in spending by beneficiary households.

Another set of ongoing impacts is related to the construction and rehabilitation of new housing units. The creation of new housing units provides an equal amount of vacancy in the previous housing of households served by the trust fund. These vacancies will be filled, creating new vacancies and eventually resulting in a new household moving into the regional economy to fill a vacancy. It assumed that a household of similar income and housing needs would move in to fill a vacancy created by a new housing opportunity.

**Table 4a
Direct Impact Assumptions - Colorado Housing Trust Fund Allocations
Colorado Housing Trust Fund Impacts Study**

	Trust Fund Total	New Construction Funds ¹	Rehab Construction Funds ²	Total Acquisition/ Financial Assistance Funds ³	Property Acquisition Funds ⁴	Net Real Estate Activity ⁵
Emergency Shelters	\$570,500	\$285,250	\$57,050	\$228,200	\$91,280	\$2,556
Deep Subsidy Rental Units	\$15,086,550	\$7,543,275	\$1,508,655	\$6,034,620	\$2,413,848	\$67,588
Affordable Worker Rental Units	\$3,438,085	\$1,719,043	\$343,809	\$1,375,234	\$550,094	\$15,403
Subsidized Homeownership	<u>\$7,357,545</u>	<u>\$3,678,773</u>	<u>\$735,755</u>	<u>\$2,943,018</u>	<u>\$1,177,207</u>	<u>\$32,962</u>
Total	\$26,452,680	\$13,226,340	\$2,645,268	\$10,581,072	\$4,232,429	\$118,508

¹ New construction funds based on CO Division of Housing historic breakdown of 50% of all funds going toward new construction projects.

² Rehab construction funds based on CO Division of Housing historic breakdown of 10% of all funds going toward multifamily property rehab.

³ Acquisition/ fin assist. funds based on CO Div. of Housing historic breakdown of 40% of all funds going toward multifamily property acquisition and financial assistance.

⁴ Acquisition funds based on CO Div. of Housing historic breakdown of 40% of acquisition/fin. assist. funds going toward multifamily property acquisition.

⁵ Net real estate activity only includes fees and closing costs associated with property acquisition, it does not include capital expenditures.

Closing costs and real estate fees of 2.8% of market value were applied.

Source: Colorado Division of Housing, 2001; EPS analysis.

**Table 4b
Direct Impacts Assumptions - Leveraged Funds
Colorado Housing Trust Fund Impacts Study**

	New Construction Direct Impacts¹	Rehab Direct Impacts¹	Real Estate Direct Impacts¹	Total Construction & Real Estate Impacts
Emergency Shelters	\$2,852,499	\$570,500	\$25,558	\$3,448,557
Deep Subsidy Rental Units	\$75,432,748	\$15,086,550	\$675,877	\$91,195,175
Affordable Worker Rental Units	\$17,190,426	\$3,438,085	\$154,026	\$20,782,537
Subsidized Homeownership	<u>\$36,787,727</u>	<u>\$7,357,545</u>	<u>\$329,618</u>	<u>\$44,474,891</u>
Total	\$132,263,400	\$26,452,680	\$1,185,080	\$159,901,160

¹ Direct Impacts based on 1 to 10 leveraging of trust fund monies into Construction and Real Estate allocated funds.

Source: EPS analysis.

CONSTRUCTION AND REAL ESTATE IMPACTS

Housing trust fund investment in 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 of \$15.9 million in subsidies for construction activities (at the 1:10 leverage ratio) would result in \$159 million of *annual* direct spending on construction activities. This construction activity, coupled with the \$1.2 million of direct real estate activity, would cause direct employment of 1,158. As summarized in **Table 5**, these direct jobs would all be in the construction and real estate industries.

The annual indirect and induced effects of housing trust fund investment in construction and real estate activity include 1,646 jobs and total spending of \$130.2 million. 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 recirculated into the economy for a broad range of goods and services across industry segments.

As summarized in **Tables 5** and **6**, the combined annual total of direct, indirect, and induced effects of construction and real estate-related housing trust fund investment include 2,804 jobs and more than \$290 million of spending in Colorado's economy.

Table 5
Construction & Real Estate Activity - Employment
Colorado Housing Trust Fund Impacts Study

Industry	Direct	Indirect	Induced	Total
Agriculture	0	30	7	37
Mining	0	2	2	4
Construction	1,154	12	25	1,191
Manufacturing	0	79	18	97
TCPU ¹	0	66	20	86
Wholesale & Retail Trade	0	364	228	592
FIRE ¹	4	56	55	115
Services	0	272	259	531
Government	0	8	133	141
Other ²	<u>0</u>	<u>0</u>	<u>10</u>	<u>10</u>
Total	1,158	889	757	2,804

¹ TCPU = Transportation, Communications, & Utilities; FIRE = Finance, Insurance, & Real Estate

² Other represents impacts on unclassified industries and import-related activities.

Source: EPS, IMPLAN Regional Model

Table 6
Construction & Real Estate Activity - Output (\$000s)
Colorado Housing Trust Fund Impacts Study

Industry	Direct	Indirect	Induced	Total
Agriculture	\$0	\$1,164	\$564	\$1,728
Mining	\$0	\$390	\$401	\$791
Construction	\$158,716	\$913	\$2,639	\$162,268
Manufacturing	\$0	\$11,157	\$3,788	\$14,945
TCPU ¹	\$0	\$9,309	\$4,121	\$13,430
Wholesale & Retail Trade	\$0	\$25,968	\$11,373	\$37,341
FIRE ¹	\$830	\$6,712	\$11,710	\$19,252
Services	\$0	\$18,117	\$14,701	\$32,818
Government	\$0	\$828	\$6,275	\$7,103
Other ²	<u>\$355</u>	<u>\$0</u>	<u>\$100</u>	<u>\$455</u>
Total	\$159,901	\$74,558	\$55,672	\$290,131

¹ TCPU = Transportation, Communications, & Utilities; FIRE = Finance, Insurance, & Real Estate

² Other represents impacts on unclassified industries and import-related activities.

Source: Economic & Planning Systems, IMPLAN Regional Model

Table 7 highlights the effect construction and real estate-related activities have on employee compensation. Employees would receive an estimated \$89 million in compensation as a result of leveraged trust fund spending.

Table 7
Construction & Real Estate Activity - Wages (\$000s)
Colorado Housing Trust Fund Impacts Study

Industry	Direct	Indirect	Induced	Total
Agriculture	\$0	\$481	\$146	\$627
Mining	\$0	\$110	\$99	\$209
Construction	\$35,069	\$487	\$1,093	\$36,649
Manufacturing	\$0	\$2,882	\$736	\$3,618
TCPU ¹	\$0	\$2,940	\$1,111	\$4,051
Wholesale & Retail Trade	\$0	\$11,571	\$5,133	\$16,704
FIRE ¹	\$111	\$1,964	\$2,106	\$4,181
Services	\$0	\$9,268	\$7,727	\$16,995
Government	\$0	\$432	\$4,979	\$5,411
Other ²	<u>\$0</u>	<u>\$0</u>	<u>\$100</u>	<u>\$100</u>
Total	\$35,180	\$30,135	\$23,230	\$88,545

¹ TCPU = Transportation, Communications, & Utilities; FIRE = Finance, Insurance, & Real Estate

² Other represents impacts on unclassified industries and import-related activities.

Source: EPS, IMPLAN Regional Model

HOUSEHOLD SPENDING IMPACTS

As summarized in **Table 8**, the additional rental housing opportunities created through housing trust fund investment will benefit an average of 2,105 rent-burdened households each year. By gaining access to housing that costs no more than 30 percent of their gross incomes, these households can expect to save an average of \$2,460 per year, based on the actual experience of beneficiary households in 2001.¹⁷ As shown in **Table 9**, 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 46 jobs and nearly \$5.2 million, and combined indirect and induced impacts of 32 jobs and \$2.6 million. More detailed breakdowns of spending, jobs, and wages by industry are shown in **Appendix A**.

Table 8
Trust Fund Spending by Renter Income Groups
Colorado Housing Trust Fund Impacts Study

Housing Type	Trust Fund Total	Avg Subsidy Amt needed to serve each Household	# of Households served	Income Groups Targeted	IMPLAN Income Group
Deep Subsidy Rental Units	\$15,086,550	\$10,000	1,509	0-30% of RMI	\$5,000-\$10,000
Affordable Worker Rental Units	\$3,438,085	\$5,766	596	31-60% RMI	\$15,000-\$20,000
Total	\$18,524,635		2,105		

Source: Base data - Colorado Division of Housing, 2001; EPS analysis.

Table 9
Economic Impacts of Change in Household Spending
Colorado Housing Trust Fund Impacts Study

Housing Type	# of Households	Impacts					
		Direct ¹		Indirect & Induced		Total	
		Output	Jobs	Output	Jobs	Output	Jobs
Deep Subsidy Rental Units	1,509	\$3,711,291	33.4	\$1,639,916	23.4	\$5,351,207	56.8
Affordable Worker Rental Units	596	\$1,466,821	12.7	\$641,164	9.1	\$2,107,985	21.8
Total	2,105	\$5,178,112	46.1	\$2,621,586	32.5	\$7,799,698	78.6

¹ A value of \$2,460 was applied to all renter households to determine direct impacts. This figure is based on 2001 average annual household rent savings for formerly rent-burdened households in CO Division of Housing rental projects.

Source: EPS

NEW HOUSEHOLD IMPACTS

There are substantial impacts resulting from new households moving into the regional economy to fill vacancy units created from those served by a Colorado Housing Trust Fund. These impacts are related to new annual household income being spent in the local economy and represent an ongoing annual impact. As detailed in **Table 10**, the construction and rehabilitation of 1,999 housing units allows 1,999 new households to move into the local economy (this figure assumes that the newly vacant units will be occupied in the long run). The resulting impacts from the new households and their annual income represent \$35.9 million and 358 jobs annually. This annual effect will continue indefinitely and will be further increased proportionally as new housing units are created through housing trust fund investment. These new households also create \$10.7 million dollars in additional labor income for the regional economy.

**Table 10
Impacts of New Households
Colorado Housing Trust Fund Study**

Unit Type	Total New Housing Units ¹	Average HH Income	Income Spent on Local Goods & Services ²	Direct Income Impacts from New HHs		Indirect & Induced Impacts		Total Impacts	
				\$	Jobs	\$	Jobs	\$	Jobs
Deep Subsidy Rental Units	905	\$5,169	\$3,101	\$2,807,365	26	\$1,425,277	18	\$4,232,642	43
Affordable Worker Rental Units	358	\$15,506	\$9,304	\$3,326,544	28	\$1,672,301	21	\$4,998,845	49
Subsidized Homeownership	<u>736</u>	\$40,390	\$24,234	<u>\$17,830,276</u>	<u>154</u>	<u>\$8,912,051</u>	<u>111</u>	<u>\$26,742,327</u>	<u>266</u>
Total	1,999			\$23,964,185	208	\$12,009,629	150	\$35,973,814	358

¹ Total new housing units includes the average annual proposed number of newly constructed and rehabilitated units due to Colorado Housing Trust Fund investment.

² Based on the National Association of Homebuilders' study entitled *The Local Impact of Home Building in Average City, USA*, which estimates that 60% of new household income will be spent locally.

Source: National Homebuilders Association & EPS analysis

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. As summarized in **Table 11**, investment in construction and real estate is expected to generate tax revenues totaling \$22.4 million each year, \$11.2 million of which would go to state and local jurisdictions. Changes in household spending will generate an additional \$671,000 per year, of which \$352,000 would go to local and state jurisdictions. The breakdown of household tax impacts is shown in **Table 12**. As shown in **Table 13**, the tax impact of new households to Colorado would be nearly \$1.7 million for state and local jurisdictions and \$1.5 million for the federal government.

Table 11
Construction & Real Estate Activity - Tax Revenue (\$000s)
Colorado Housing Trust Fund Impacts Study

Taxing Entity	Business Taxes			Personal Taxes			Total
	Sales	Property	Other	Direct Property Tax ¹	Induced Property Tax	Income Tax	
Federal	\$0	\$0	\$1,744	\$0	\$0	\$9,448	\$11,192
State/Local	\$4,210	\$2,872	\$758	\$1,533	\$37	\$1,821	\$11,231
Total	\$4,210	\$2,872	\$2,502	\$1,533	\$37	\$11,269	\$22,423

¹ Direct property tax based on average local property tax rates for Colorado, applied to the total value of construction activity related to Housing Trust Fund investment.
 Source: EPS, IMPLAN Regional Model

Table 12
Economic Impacts of Household Income Change - Tax Revenue (\$000s)
Colorado Housing Trust Fund Impacts Study

Taxing Entity	Business Taxes			Personal Taxes		Total
	Sales	Property	Other	Induced Property Tax	Income Tax	
Federal	\$0	\$0	\$67	\$0	\$252	\$319
State/Local	\$162	\$110	\$30	\$1	\$49	\$352
Total	\$162	\$110	\$97	\$1	\$301	\$671

Source: Economic & Planning Systems, IMPLAN Regional Model

Table 13
New Household Impacts - Tax Revenue (\$000s)
Colorado Housing Trust Fund Impacts Study

Taxing Entity	Business Taxes			Personal Taxes Induced		Total
	Sales	Property	Other	Property Tax	Income Tax	
Federal	\$0	\$0	\$319	\$50	\$1,134	\$1,503
State/Local	<u>\$771</u>	<u>\$526</u>	<u>\$139</u>	<u>\$5</u>	<u>\$219</u>	<u>\$1,660</u>
Total	\$771	\$526	\$458	\$55	\$1,353	\$3,163

Source: EPS, IMPLAN Regional Model

IV. OTHER IMPACTS

In addition to the economic impacts of housing trust fund investment, there are documented social and community benefits associated with housing families and individuals in decent, safe, and affordable homes – and in expanding access to homeownership. When affordable housing is integrated into broader community plans for land use, transportation, and economic development, the range of effects broadens. This report examines effects on both community and individual quality of life, including effects on family stability, educational achievement, health, female-headed households, community fabric, economic development, and growth-related issues.

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. Data on social and community impacts was largely derived from a review of recent literature, including *Meeting Our Nation's Housing Challenges*, a 2002 report to Congress by the congressionally appointed bipartisan Millennial Housing Commission.¹⁸ 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.”

FAMILY STABILITY AND EDUCATION

Decent, affordable, and stable housing contributes to family stability and provides a positive environment for children to grow up in.¹⁹ In their 2002 report to Congress, the Millennial Housing Commission notes that families who cannot afford good-quality housing may have to make frequent moves in search of decent affordable housing. Research shows that disruptive moves during childhood and adolescence have a strong negative impact on school performance. The studies found that children who change schools frequently tend to have lower math and reading scores and are significantly less likely to finish high school on time.²⁰

Other research demonstrates the positive effects that homeownership can have on childhood outcomes. Using a national data set and controlling for a large number of economic, social, and demographic variables, one study 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."²¹ Other studies note correlations of homeownership with completion of high school²² and lower teenage pregnancy rates.²³

In a study of factors that contribute to success in life and access to opportunity in Colorado, the Bell Policy Institute identified the importance of education, identifying some of the education-related barriers to opportunity: "at least one in four Colorado third-graders is not proficient in reading; one in five Colorado students does not complete high school; only 14 percent of Colorado 10th graders are proficient in math (including less than five percent of African-American and Latino students); and Colorado ranks dead last in the nation in providing students from low income families the opportunity to attend college."²⁴

While affordable housing is only one of many factors that have a bearing on educational achievement, it has a direct connection with success in school, and corresponding success later in life. Although difficult to isolate the impact of housing on education, the stable and affordable living situations and homeownership opportunities created through housing trust fund investment can be expected to improve the educational performance of Colorado schoolchildren, breaking down some of the barriers to opportunity in life, and reducing the societal costs of unsuccessful child outcomes.

HEALTH

Housing trust fund investment has the potential to rehabilitate or move Colorado families out of homes with lead-based paint and other health hazards associated with dilapidated older, lower-rent housing stock. Research indicates a relationship between better-quality housing and lower levels of psychological distress, with linkage to reduced health care costs and improved productivity.²⁵ Other research finds that children who live in substandard housing are more likely to suffer from health conditions such as lead poisoning, which in turn are linked to learning disorders, reading difficulties, higher school dropout rates, and behavior problems.²⁶ The incidence of asthma and allergies is increased by dust, molds, and roach allergens in substandard housing, and faulty electrical systems, poor lighting, and other deficiencies increase the risk of illness, injuries, and death.²⁷

Again, while many factors influence health, there are documented linkages between housing quality and affordability and physical and mental health, especially the health of children who are most vulnerable to hazards such as lead-based paint. Housing trust fund investment can help to rehabilitate or replace Colorado's substandard housing, with a positive impact on public health and educational achievement and a reduction in the cost of dealing with the problems that result from inadequate housing.

WELFARE TO WORK

Colorado's efforts to promote successful transitions from welfare to work are also likely to benefit from housing trust fund investment. A Minnesota study that compared the employment success of welfare-to-work individuals who received rental assistance with those who had not, found that workers who received a combination of job assistance and housing assistance had more favorable outcomes.²⁸

Other research examining the barriers to successful transition from welfare to work finds a mismatch between the largely suburban location of entry-level job growth and the central city location of housing for welfare recipients in transition. Transportation from home to work is cited as an important element to successful transition.²⁹ In Colorado, housing trust fund investment has the potential to influence those mismatches by assigning funding priority to projects that locate affordable housing close to employment areas, eliminating the need for long and expensive commutes, and by getting families into affordable living situations thereby freeing up income that can be used for other household needs, including transportation to work.

HOUSEHOLD WEALTH

Housing trust fund investment in homeownership opportunities will allow more Colorado families to build the financial resources and environment that provide access to opportunities. The Bell Policy Institute identified building wealth through homeownership as one of the gateways to opportunity for Coloradans, noting that homeownership represents 44 percent of the gross assets for families earning \$50,000 or less annually.³⁰ The Millennial Housing Commission research supports this conclusion, finding that "homeownership not only insulates families from rising rents and home prices, but it also enables them to build financial resources that can be tapped for other purposes."³¹ The Commission also notes the economic impact of capital gains on home sales, citing a 1999 Federal Reserve Board estimate that the capital gains on an average home resale, net of transaction costs, exceeded \$25,000. If multiplied by national sales of more than 5 million homes per year, capital gains contribute \$125 billion per year into sellers' savings, spending in the economy, or purchase of trade-up homes. If estimated average capital gains are multiplied by 2000 annual home sales in Colorado, the impact exceeds \$6 billion. While equity growth may be limited under some affordable homeownership programs, it can be expected that a portion of the Colorado households benefiting from housing trust fund homeownership programs will see a substantial change in household wealth over time.

FEMALE-HEADED HOUSEHOLDS

Housing trust fund investment has the potential to offset the housing challenges faced by female-headed households. Of particular concern are the female-headed households that are disproportionately represented in the lower income groups. As shown on

Table 14, when compared to all households, a greater percentage of female-headed households are in income groups below \$50,000. The 2000 Census reports that 26.1 percent of female-headed households with children under 18 years old have incomes below the poverty level, compared to 9.2 percent of all families with children.³² These households are most vulnerable to homelessness and extreme rent burden.

Women are also disproportionately underrepresented in homeownership and the asset building associated with it. Fannie Mae reports that women-headed households represent a growing segment of the housing market, but that only about half of the women who head households own their own homes.³³ The McAuley Institute characterizes the situation as a catch-22: "If more women could own their homes, their assets and disposable incomes would rise; however, because of their lower incomes and assets they are less able to buy homes."³⁴

Additional investment in affordable housing through housing trust fund investment has the potential to impact female-headed households by providing additional access to housing opportunities, including shelter beds, deep subsidy rental units, affordable worker rental units, and homeownership – with the social benefits associated with safe and stable housing situations. There are also measurable economic benefits. **Table 15** shows the projected economic impact of changes in household spending for formerly rent-burdened female-headed households, and **Table 16** shows the economic impacts of investment of trust fund dollars in construction and real estate-related activities on wages earned by females across industry segments.

Table 14
Income Distribution of Female Headed Households - Colorado
Colorado Housing Trust Fund Impacts Study

	Female Households		All Households		Difference
	#	%	#	%	%
Less than \$10,000	21,743	14.3%	114,658	6.9%	7.4%
\$10,000 to \$19,999	27,972	18.4%	169,345	10.2%	8.2%
\$20,000 to \$29,999	28,387	18.7%	202,691	12.2%	6.4%
\$30,000 to \$39,999	23,993	15.8%	204,757	12.3%	3.4%
\$40,000 to \$49,999	17,454	11.5%	182,659	11.0%	0.5%
\$50,000 to \$74,999	20,702	13.6%	351,663	21.2%	-7.6%
\$75,000 to \$99,999	6,721	4.4%	197,339	11.9%	-7.5%
\$100,000 to \$150,000	3,411	2.2%	150,572	9.1%	-6.8%
\$150,000 or more	<u>1,755</u>	<u>1.2%</u>	<u>85,624</u>	<u>5.2%</u>	-4.0%
Total	152,138	100.0%	1,659,308	100.0%	

Source: US Census, 2000

Table 15
Change in Household Spending for Female Headed Households
Colorado Housing Trust Fund Impacts Study

IMPLAN Income Group	Total Trust Fund Households	% of Income - Female Headed Households	# of Female Headed Households	Impacts		
				Direct ¹	Indirect & Induced	Total
\$5,000-\$10,000	1,509	19.0%	287	\$705,145	\$311,584	\$1,016,729
\$10,000-\$20,000	596	16.5%	98	\$242,025	\$105,792	\$347,818
Total	2,105		385	\$947,171	\$417,376	\$1,364,547

¹ A value of \$2,460 was applied to all renter households to determine direct impacts. This figure is based on 2001 average annual household rent savings for formerly rent-burdened households in CO Division of Housing rental projects.
Source: EPS

Table 16
Construction & Real Estate Activity - Female Wages (\$000s)
Colorado Housing Trust Fund Impacts Study

Industry	Direct	Indirect	Induced	Total
Agriculture	\$1	\$113	\$34	\$148
Mining	\$0	\$26	\$22	\$48
Construction	\$3,858	\$58	\$124	\$4,039
Manufacturing	\$13	\$900	\$233	\$1,146
TCPU ¹	\$17	\$802	\$307	\$1,126
Wholesale & Retail Trade	\$150	\$5,104	\$2,311	\$7,566
FIRE ¹	\$120	\$1,154	\$1,228	\$2,502
Services	\$309	\$5,551	\$4,666	\$10,526
Government	\$9	\$200	\$2,310	\$2,520
Other ²	\$2	\$0	\$54	\$56
Total	\$4,478	\$13,909	\$11,290	\$29,677

¹ TCPU = Transportation, Communications, & Utilities; FIRE = Finance, Insurance, & Real Estate

² Other represents impacts on unclassified industries and import-related activities.

Source: Economic & Planning Systems, IMPLAN Regional Model, US Census 2000

ENVIRONMENTAL BENEFITS

Strategic investment of housing trust fund monies can have a positive impact on growth management and related environmental issues confronting Colorado. Bruce Katz, Director of the Brookings Institution Center on Urban and Metropolitan Policy, observed what happens when the supply of affordable housing is limited in scale and location:

- The working poor get concentrated in particular parts of a metropolis, often far from educational and employment opportunities, often because suburbs practice exclusionary zoning and limit affordable housing within their borders.
- The resulting jobs/housing imbalance increases traffic congestion and has a negative effect on employers by limiting the number of workers within a reasonable commuting distance.
- Moderate-income families in search of affordable housing move further and further away from urban centers.³⁵

These effects are evident in Colorado, in both the Front Range and throughout the state. Well-known examples include the Aspen area, where the nation's most expensive housing market excludes service workers who must drive long distances to find affordable housing. The same effect is felt in the Vail Valley and Telluride regions. Strategic investment of housing trust fund dollars to provide affordable housing opportunities close to employment centers can be expected to have a positive effect on sprawl and congestion, reducing associated air quality impacts by shortening driving distances and making transit more viable.

ECONOMIC DEVELOPMENT

Housing affordability is linked to economic development and business success. In choosing where to locate, employers consider cost-of-living and quality-of-life indices, including the availability of housing affordable to a cross-section of workers. Colorado enjoys high rankings on a number of quality of life measures, but the cost of housing is a growing competitive concern. In their first quarter 2002 Housing Opportunity Index measuring the cost of housing, the National Association of Home Builders ranked the Denver metro area at 146 out of 199 areas surveyed.³⁶

A study of the southeast Denver business corridor illustrates the issue for employers, estimating that over 80 percent of new jobs in the area would have hourly wages at or below \$20.³⁷ According to a recent workforce housing survey, employees earning \$20 an hour can afford to purchase only 1.4 percent of the homes in Douglas County and 12 percent of the homes in Arapahoe County. Given that sixty-nine percent of workers in the South Metro Urban Region earn less than \$20 an hour – approximately \$40,000 a year or below – most cannot afford to live where they work.³⁸ In the release of the survey results, the director of the Economic Development Group of the South Metro Denver Chamber noted, “The availability of workforce housing, along with affordable healthcare, quality public schools and a good transportation infrastructure, is key in terms of creating an environment that is attractive to relocating and growing companies.”

V. CONCLUSIONS

Additional public investment in statewide affordable housing programs is projected to yield both economic and social benefits for Colorado. Available resources, however, are insufficient to produce the 107,000 affordable housing opportunities indicated by the Colorado Division of Housing's 2001 need analysis. To address the gap in affordable housing funding, the Colorado Housing Trust Fund Coalition has proposed the creation of a statewide affordable housing trust fund with a dedicated revenue source of at least \$15 million. This analysis projects that annual trust fund revenues of \$26.5 million would be optimal to address the estimated need in the most efficient manner, recognizing that the actual need may change over time due to changes in population, loss of supply, economic conditions, current funding sources, and other factors.

The projected benefits of creating a statewide housing trust fund with a dedicated revenue source of \$26.5 million per year are substantial. As summarized in **Table 17** and below, annual investment of \$26.5 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 39,000 housing opportunities over a 12 year period, filling the gap between the total need and available resources, and yielding significant economic benefits for *every year* of investment.

- Leveraging - each dollar of equity subsidy can be expected to leverage an additional ten dollars of public and private investment in affordable housing.
- Housing Production – an average of approximately 3,400 housing opportunities will be produced *each year*, including 63 shelter beds, 2,100 rental opportunities, and 1,200 homeownership opportunities.
- Employment – more than 3,200 new jobs will be directly and indirectly supported by trust fund investment *each year*.
- Total Output – More than \$334 million of direct, indirect and induced economic activity will be generated from trust fund investment *each year*.
- Construction and Real Estate – the construction and real estate industries will experience direct effects of \$160 million of spending and 1,158 jobs *each year*, generating total direct, indirect and induced impacts of \$290 million and 2,804 jobs.
- New Spending Patterns – formerly rent-burdened households will have an average of \$2,460 of annual income per household to spend on goods and services other than housing, including transportation to work, clothing, health care, and food. Each year of housing production generates new total impacts of almost \$8 million and 79 jobs. This represents an ongoing effect.
- New Households – households moving into the region to fill vacancies created by new affordable housing production will generate 358 jobs and ongoing direct, indirect, and induced output of nearly \$36 million annually.

- Tax Revenues – New economic activity will generate more than \$26 million of annual tax revenues, more than \$13 million of which accrues to state and local government. Property taxes and income tax revenue related to changes in household spending are ongoing impacts.

**Table 17
Summary of Economic Impacts
Colorado Housing Trust Fund Impacts Study**

Impact Category	Jobs	Output (\$000)			Taxes (\$000)		
		Direct	Indirect/ Induced	Total	Federal	State/Local	Total
Construction/Real Estate Industry	2,804	\$159,901	\$130,230	\$290,131	\$11,192	\$11,231	\$22,423
Change in Household Spending	79	\$5,177	\$2,814	\$7,991	\$319	\$352	\$671
New Households	<u>358</u>	<u>\$23,964</u>	<u>\$12,009</u>	<u>\$35,973</u>	<u>\$1,503</u>	<u>\$1,660</u>	<u>\$3,163</u>
Total	3,241	\$189,042	\$145,053	\$334,095	\$13,014	\$13,243	\$26,257

Source: EPS

Social and community benefits can also be expected as a result of additional investment in affordable housing:

- Family Stability – an average of approximately 3,300 very-low, low, and moderate income households each year will have access to decent and affordable rental housing and homeownership opportunities, removing a key barrier to opportunity. Stable living situations will allow children a better chance at success in school and later in life.
- Health – helping families move into better quality housing can be expected to yield health benefits, especially to children, and corresponding savings in public healthcare costs.
- Welfare to Work – Colorado families can expect better outcomes as they transition from welfare to work, consistent with research demonstrating a link between rental assistance and employment success.
- Household Wealth – new homeownership opportunities will allow families to build wealth through home equity.
- Female-headed Households – Access to affordable housing can help offset the financial and social challenges experienced by female-headed households who are disproportionately represented in lower income groups. Female-headed households who are no longer rent-burdened will have a combined total of \$947,000 per year to spend on other needs. Women across all income categories and industries will garner a direct benefit of \$4.5 million per year in wages earned as a result of trust fund spending.

- Environmental Benefits – providing affordable housing opportunities close to employment centers and along transit corridors can be expected to have a positive effect on sprawl and traffic congestion, reducing associated air quality impacts by shortening driving distances and making transit more viable.
- Economic Development – a diversity of housing types and prices close to employment centers will help enhance Colorado’s competitive position in attracting and retaining business.

APPENDICES

Appendix A – Supplementary Tables

Appendix Table 1
Economic Impacts of Household Income Change- Output (\$000s)
Colorado Housing Trust Fund Impacts Study

Industry	Direct	Indirect	Induced	Total
Agriculture	\$11	\$52	\$17	\$80
Mining	\$7	\$34	\$12	\$53
Construction	\$0	\$116	\$90	\$206
Manufacturing	\$281	\$114	\$111	\$506
TCPU ¹	\$305	\$140	\$121	\$566
Wholesale & Retail Trade	\$870	\$87	\$329	\$1,286
FIRE ¹	\$809	\$232	\$339	\$1,380
Services	\$1,219	\$325	\$429	\$1,973
Government	\$83	\$31	\$232	\$346
Other ²	<u>\$1,971</u>	<u>\$0</u>	<u>\$3</u>	<u>\$1,974</u>
Total	\$5,556	\$1,131	\$1,683	\$8,370

¹ TCPU = Transportation, Communications, & Utilities; FIRE = Finance, Insurance, & Real Estate

² Other represents impacts on unclassified industries and import-related activities.

Source: EPS, IMPLAN Regional Model

Appendix Table 2
Economic Impacts of HH Income Change - Employment (# of Jobs)
Colorado Housing Trust Fund Impacts Study

Industry	Direct	Indirect	Induced	Total
Agriculture	0.1	0.5	0.2	0.8
Mining	0	0.1	0	0.1
Construction	0	1.2	0.8	2
Manufacturing	1.1	0.6	0.5	2.2
TCPU ¹	1.2	0.6	0.5	2.3
Wholesale & Retail Trade	16.5	0.9	6.1	23.5
FIRE ¹	3.2	1.8	1.5	6.5
Services	23.1	4.9	7	35
Government	0.4	0.3	4.7	5.4
Other ²	<u>0.4</u>	<u>0</u>	<u>0.3</u>	<u>0.7</u>
Total	46.0	10.9	21.6	78.5

¹ TCPU = Transportation, Communications, & Utilities; FIRE = Finance, Insurance, & Real Estate

² Other represents impacts on unclassified industries and import-related activities.

Source: EPS, IMPLAN Regional Model

Appendix Table 3
Economic Impacts of Change in Household Income - Wages (\$000s)
Colorado Housing Trust Fund Impacts Study

Industry	Direct	Indirect	Induced	Total
Agriculture	\$3	\$10	\$3	\$16
Mining	\$1	\$7	\$2	\$10
Construction	\$0	\$43	\$30	\$73
Manufacturing	\$41	\$22	\$17	\$80
Transportation, Communications, & Utilities	\$63	\$32	\$26	\$121
Wholesale & Retail Trade	\$342	\$30	\$119	\$491
Finance, Insurance, & Real Estate	\$122	\$60	\$49	\$231
Services	\$698	\$141	\$181	\$1,020
Government	\$24	\$13	\$155	\$192
Other ¹	<u>\$5,561</u>	<u>\$0</u>	<u>\$2</u>	<u>\$5,563</u>
Total	\$6,855	\$358	\$584	\$7,797

¹ Other includes unclassified activity and the direct income change related to the household spending impacts.

Source: Economic & Planning Systems, IMPLAN Regional Model, US Census 2000

Appendix B - Multipliers

The total impacts of any new economic activity can be expressed as a multiple of the initial direct impacts or as a summation of direct, indirect, and induced impacts. The use of IMPLAN's input-output analysis generates multipliers that can be used to determine the total impacts of any given direct impact. These multipliers are especially useful if the assumptions or values related to the direct impacts change and the total impacts need to be recalculated.

In order to allow for analysis of different scenarios, the multipliers for all of the total impacts related to the economic impacts of the CHTF are shown in **Appendix Tables 4, 5, 6, and 7**. As shown in these tables, all impacts are based on the values derived from the output multipliers. These tables express the multipliers that can be used for any direct impact amount and the resulting impacts of a \$15 million CHTF are shown in **Table 8**.

**Appendix Table 4
Multipliers - Output
Colorado Housing Trust Fund Impacts Study**

Impact Type	Direct ¹	Indirect ²	Induced ²	Total ²
New Construction	1.00	0.47	0.34	1.81
Rehabilitation Construction	1.00	0.48	0.38	1.86
Real Estate	1.00	0.30	0.32	1.63
Change in Household Income	1.00	0.20	0.30	1.50
New Households	1.00	0.20	0.30	1.50

¹ This is the base for the impacts and is comprised of the leveraged total in each impact category.

² Indirect, induced, and total multipliers are based on the direct output value.

Source: Economic & Planning Systems, IMPLAN Regional Model

Appendix Table 5
Multipliers - Employment
Colorado Housing Trust Fund Impacts Study

Impact Type	Direct ¹	Indirect ²	Induced ²	Total ²
New Construction	output*7.26	0.76	0.64	2.40
Rehabilitation Construction	output*7.32	0.79	0.70	2.50
Real Estate	output*4.77	0.71	0.99	2.70
Change in Household Income	output*8.73	0.24	0.48	1.72
New Households	output*8.66	0.25	0.48	1.72

¹ This is the base for the employment impacts and is based on millions of dollars of output times the multiplier value.

² Indirect, induced, and total multipliers are based on the direct output value.

Source: Economic & Planning Systems, IMPLAN Regional Model

Appendix Table 6
Multipliers - Wages
Colorado Housing Trust Fund Impacts Study

Impact Type	Direct ¹	Indirect ²	Induced ²	Total ²
New Construction	output*0.21	0.90	0.68	1.58
Rehabilitation Construction	output*0.27	0.71	0.58	1.29
Real Estate	output*0.13	0.83	1.16	1.99
Change in Household Income	output*0.24	0.39	0.53	1.92
New Households	output*0.24	0.39	0.53	1.92

¹ This is the base for the wage impacts and is multiplied by output.

² Indirect, induced, and total multipliers are based on the direct output value.

Source: Economic & Planning Systems, IMPLAN Regional Model

Appendix Table 7
Multipliers - State and Local Taxes
Colorado Housing Trust Fund Impacts Study

Impact Type	Sales ¹	Property ¹	Income ¹
Construction & Real Estate	1.5%	1.0%	0.6%
Change in Household Income	2.1%	1.4%	0.6%
New Households	2.1%	1.4%	0.6%

¹ Tax impacts are based on a percent of total output impacts
Source: Economic & Planning Systems, IMPLAN Regional Model

Appendix Table 8
Total Impacts of a \$15 million Housing Trust Fund (\$000s)
Colorado Housing Trust Fund Impacts Study

Impact Type ¹	Output	Employment	Wages	State/Local Taxes		
				Sales	Property	Income
New Construction	\$136,070	1,315	\$41,527	\$2,041	\$1,361	\$816
Rehabilitation Construction	\$27,148	266	\$8,285	\$407	\$271	\$163
Real Estate	\$1,316	13	\$402	\$20	\$13	\$8
Change in Household Income	\$3,864	38	\$1,781	\$81	\$54	\$23
New Households	<u>\$20,397</u>	<u>203</u>	<u>\$9,401</u>	<u>\$437</u>	<u>\$301</u>	<u>\$124</u>
Total	\$188,795	1,835	\$61,396	\$2,986	\$2,000	\$1,134

¹ All impacts are based on a 1 to 10 leveraging of initial Colorado Housing Trust Fund allocation. Impacts are based on the same allocation of funds used in Tables 4a and 4b for the \$26.5 million trust fund.
Source: Economic & Planning Systems, IMPLAN Regional Model

Endnotes

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