

HOUSING AND THE VERMONT ECONOMY

FIRST IN A SERIES OF VHFA ISSUE PAPERS

**Vermont Housing
Finance Agency**
www.vhfa.org



*The benefits of
developing housing
that is affordable to
ordinary working
Vermonters extend
beyond their families to
employers and to the
economy as a whole*

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INTRODUCTION

THIS ISSUE PAPER OUTLINES CONCERNS being raised by many of the state's employers about Vermont's housing situation and describes some of the economic benefits of addressing those concerns by creating more affordable housing.

Vermont's housing shortage, a major driver of our state's soaring housing costs, has been thoroughly documented. The [2005 Vermont Housing Needs Assessment](#), for example, found the Green Mountain State currently has a shortage of 21,000 affordable rental units and will need 12,300 more single-family units in just five years.¹ Current rates of production will not produce enough housing to meet our state's needs anytime soon.

As a result of Vermont's persistent housing shortage, thousands of Vermonters are experiencing a form of "sticker shock" at the prices they must pay for a home, condominium or apartment. The median price of a single-family residence in Vermont, for example, jumped 87 percent in 10 years.²

Vermont's employers have come to see the rapid rise in housing costs as an economic concern, particularly in regards to the negative impact those costs have on companies' ability to hire and retain employees and on employee performance.

A report released in March 2005, by the [New Hampshire Workforce Housing Council](#) described the kind of effects a shortage of affordable, or workforce, housing can have.

The report estimated that the annual losses due to New Hampshire's tight housing market, very similar to Vermont's, include:

- 1,300 to 2,800 fewer jobs
- \$57 million to \$121 million less personal income
- \$21 million to \$33 million less in state and local revenues
- A \$123 million to \$253 million reduction in Gross State Product³

In the wake of this report, [Vermont Housing Finance Agency](#) decided to conduct research to determine if our state's housing shortage is having a similar impact on our economy. To begin defining the relationship between housing development — or the lack of it — and Vermont's economy, VHFA conducted research first, to determine the levels of recognition and concern among the state's employers regarding the housing shortage; and, second, to quantify the benefits to Vermont's economy of building 25 modest single-family houses.

EMPLOYER CONCERNS

VHFA collected surveys from 108 Vermont employers across the state, asking their opinions about the housing market, both rental and homeownership; about the degree to which their employees were affected by rising housing costs; and about the ways those housing costs are affecting their businesses.

¹ 2005 Vermont Housing Needs Assessment by Gent Communications Consulting, LLC for the Vermont Department of Housing & Community Affairs. This report is included in the HUD Consolidated Plan, Vol. 1. www.dhca.state.vt.us/Housing/ConPlan/index.htm

² Vermont Housing Finance Agency (VHFA) analysis of Vermont Department of Taxes' Property Transfer Tax receipts for homes sold in 1996 and 2005. This includes all valid records for primary residence homes including single-family, condominiums, and mobile homes with land. It excludes any transactions that were not deemed at "arm's length." www.state.vt.us/tax/propertytransferdata.shtml.

³ Dr. Lisa K. Shapiro et. al. for the New Hampshire Workforce Housing Council. "Housing New Hampshire's Workforce." March 28, 2005. www.workforcehousingnh.com/docs/ImpactStudy.pdf.

The employers surveyed ranged from small businesses with fewer than 25 employees to large companies employing more than 500 workers. The survey respondents came from 13 industries, the majority from Education and Health Services (28), Manufacturing (23), Professional and Business Services (14), and Leisure and Hospitality (12). VHFA collected these surveys through a web-based questionnaire and telephone interviews conducted between July and October, 2005.

The surveys show a significant level of concern among Vermont's employers about the cost and availability of housing in our state and the impact on their employees, their businesses and the economy as a whole. There were particular concerns about how housing costs could affect competitiveness and the ability of a company to do business in Vermont.

Specifically, the surveys found:

- 96 respondents (89% of the sample) described the cost and availability of housing as an obstacle to economic development that needs to be addressed. In fact, 73 respondents (68%) described the obstacle as a “serious” problem.
- 99 respondents (92%) said a shortage of homes for sale that are affordable to their employees was a problem. 76 respondents (70%) characterized that shortage as a “serious” problem.
- 95 respondents (88%) said a shortage of rental housing that is affordable to their employees was a problem. 67 respondents (62%) characterized that shortage as a “serious” problem.
- 97 respondents (90%) said the availability of affordable housing was a problem for their employees. 66 respondents (61%) called it a “serious” problem for employees.

- 88 respondents (81%) said the availability of affordable housing was a problem for their companies. 52 respondents (48%) called it a “serious” problem.
- 61 respondents (56%) said their companies felt pressure to pay higher salaries so employees could afford housing. 21 (19%) said that pressure was felt “frequently.”
- 53 respondents (49%) said housing costs had posed problems in their efforts to recruit employees. 15 (14%) said those problems occurred “frequently.”

A particular concern was the commuting distance some employees were required to travel if affordable housing was not available near their workplace. Seventy-two respondents (67%) said employees have extended commutes because local housing is too expensive, and 53 respondents (49%) said that situation has affected absenteeism, tardiness or early departures.

Not surprisingly, most respondents said low- and middle-income employees were affected by housing problems, but some reported the impact is also felt by higher-paid employees.

ECONOMIC BENEFITS OF BUILDING AFFORDABLE HOMES

Creating more affordable housing located close to people's workplaces would alleviate employers' concerns and would help stimulate Vermont's economy. How does this stimulus work? The economy is a complex network of consumers, industries, and government agencies that sell and buy goods and services to and from each other when a dollar is spent on home building. This dollar moves through the economy many times, from home buyer to builder to craftspeople and vendors. Vendors spend the dollar again to restock supplies and craftspeople make household purchases with

their wages. Because of the buying and selling between players in the economy, the economic activity spurred by that initial expenditure expands beyond a dollar as it manifests itself into income for Vermont businesses, jobs, and wages.

Using a model based on relationships between players in the economy, VHFA studied the effects of building 25 single-family houses in Vermont in 2005. Building these homes would create a number of benefits for the state. VHFA's analysis estimates **\$6.3 million in additional income for Vermont businesses and 61 Vermont jobs, paying just more than \$2 million in wages.**

Estimated Impact of Building 25 Homes in Vermont in 2005

Industry	Type of impact		
	Additional income generated for Vermont businesses	Number of Vermont jobs created or supported	Additional wages and salaries of Vermont workers
Construction	\$3,650,666	29.3	\$986,211
Retail trade	\$560,598	9.6	\$255,538
Professional (Scientific, technical services)	\$223,422	3.2	\$136,040
Health and social services	\$222,564	3.0	\$119,447
Accommodations and food services	\$93,267	2.1	\$35,371
Administrative and waste services	\$137,610	1.9	\$54,557
Manufacturing	\$352,147	1.9	\$81,606
Transportation and warehousing	\$157,296	1.5	\$62,337
Finance and insurance	\$271,129	1.5	\$81,547
Real estate and rental	\$135,145	1.1	\$20,931
Wholesale trade	\$143,058	1.1	\$57,319
Other services†	\$366,160	5.1	\$133,204
TOTAL	\$6,313,062	61.3	\$2,024,108

Note: Figures shown are estimates of the total direct, indirect, and induced economic impacts of building 25 1,500-square-foot homes in Vermont in 2005. All figures in 2005 dollars.

†Other services include the following industries: Agriculture, forestry, fishing and hunting, arts, educational services, information, utilities, management of companies, and mining.

VHFA's analysis was based on the assumption that each new home built contains 1,500 square feet of living space, an unfinished basement, and a one-car garage. The analysis assumed the use of average-cost materials and locating the construction in a housing tract in Vermont.

The analysis looked exclusively at the short-term economic impact of constructing homes. It did not include the costs of the raw land on which the home is located or the many expenditures typically made after a home is sold, such as the costs of moving and decorating. Furthermore, the analysis excluded the long-term spending of homeowners on local goods and services while they live in the

home. Although the amount of these types of expenditures vary widely from household to household, much of this spending increases the economic benefit of the new home beyond the estimates presented here. A detailed explanation of the methodology VHFA employed appears at the end of this issue paper. Additional research is necessary to determine the impact of housing development on state and local revenues.

This analysis focused on a house that would be priced at the lower end of the market for new homes. Studies consistently show that the greatest need for new housing development in Vermont's market is owner-occupied homes (as well as rental units) affordable to low- and moderate-income households.

The table on the previous page explains the results of VHFA's analysis in greater detail.

As would be expected, the majority of the income, jobs and wages benefits likely to result from home building occur in the construction industry. However, the benefits to other areas of the economy, such as the retail trade industry, are also significant.

CONCLUSIONS

Two things are clear from this threshold analysis: Vermont's business community is concerned about the impact of rising housing costs, and addressing these concerns through affordable housing development creates additional economic benefits. While a majority of employers who responded to VHFA's survey believed the real estate market is primarily responsible for addressing the housing shortage, nearly half said government shoulders responsibility in this area, and about a third said employers themselves should assume some responsibility for making housing more available and affordable to their employees.

Just as there is no single reason for Vermont's current housing problems, there is no single solution. It remains to be seen how well housing market forces will respond to the need for moderately-priced housing, as much of Vermont's current production is geared towards the upper end of the price ladder. Certainly, investment from federal and state government — both direct funding and tax credits — and the involvement of the non-profit sector will continue to be necessary to assure affordability. And employers are beginning to recognize a role for themselves, either through housing benefits to their employees, through partnership with developers in individual projects, and/or activity in local or regional housing task forces.

The various barriers to affordable housing development are well-known. They include: local zoning that limits density, complexities and duplications in the permitting process, cost/availability of developable land, and local opposition to development. The cost of land is largely a market issue; however, other barriers are the product of conscious decisions by policymakers and other citizens, and they can be lowered or eliminated through a deliberative decision-making process as well.

The benefits of developing housing that is affordable to ordinary working Vermonters extend beyond their families to employers and to the economy as a whole. Affordable housing development stimulates job creation and other economic activity, and adding housing stock reduces the pressures on businesses and the state's economy that result from the current housing shortage.

ECONOMIC IMPACT STUDY METHODOLOGY

VHFA's analysis relied on an economic impact modeling tool called [IMPLAN](#)® to estimate the short-term effects on the state's economy of building 25 single-family houses in Vermont in 2005. IMPLAN® is an input-out-

put analysis tool that is typically used to examine the total impact of a stimulus such as housing construction on a regional economy. This impact is measured by using identified linkages within a regional economy between businesses, and between businesses and final consumers. Using input-output analysis on the flow of funds to and from individual industries, allows the analyst to develop an estimate of the total economic impact of a stimulus (a change in one or several economic activities) to the economy.

This tool also allowed us to narrow the geographic scope of our study to the economic impact that would be likely to occur within Vermont. This was accomplished through estimates of the extent to which Vermont companies are used to meet the total demand for each type of goods and services required to build a home.

Because input-output models are based on monetary flows, VHFA described the stimulus (home building) in terms of the additional expenditures that occur when the stimulus takes place. Building a home involves “bricks and mortar” or “hard” costs (the direct costs of construction) and “soft” costs (the transaction costs required to build the home). Expenditures were included if they are critical to home construction and if they are unlikely to occur otherwise. Expenditures that might occur regardless of whether the home is constructed or that are not essential to the home’s construction were excluded, as shown in the table to the right.

VHFA also excluded long-term impacts that are likely to occur when new owner-occupied homes are added to an area’s housing stock, because it is difficult to predict who will buy the homes. For example, we do not know whether the home buyer is likely to be a former renter or home owner and we do not know if their former residence is likely to be

in Vermont or in another state. Each of these different types of buyers is likely to have different types of spending patterns after moving into a new home. Each of these potential buyers would also have differing incremental impacts on the Vermont economy and would therefore change the size of the stimulus. In this analysis, it was assumed that all activity associated with the construction of these homes was “incremental” to the Vermont economy. This study also excludes the social impacts of building homes. If a young family who might have left the area otherwise buys the newly-built home, their presence in the community might provide societal advantages, such as the employment skills of the family’s adults and their civic involvement.

VHFA relied primarily on two resources to estimate the costs associated with home construction: (1) estimates from the 2006 *National Building Cost Manual* (by Dave Ogershok, published by Craftsman Book Company) available through the [Craftsman web site](#) and (2) a break-down of single-family home building costs included in the Building a Balance fact sheet series prepared by the [National Association of Home Builders](#). ■

INCLUDED	EXCLUDED
Cost of preparing land for construction (such as establishing water and sewer)	Cost of raw land
Direct costs of building the structure (such as building the foundation and framing the home)	Costs of marketing the home and real estate professional fees
Indirect costs of construction (such as permit fees and costs of obtaining plans and specs)	Transactions necessary to buy the home (such as closing costs and Vermont Property Transfer Tax)
Cost of purchasing essential move-in items (blinds and basic appliances)	Homeowner’s insurance premiums, and moving expenses



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The Vermont Legislature established VHFA in 1974 to finance and promote affordable housing opportunities for low- and moderate-income Vermonters. Since its inception, the Agency has helped almost 25,000 households with affordable mortgages and nearly 7,000 families into affordable rental units.