

A F F O R D A B L E H O U S I N G

ISSUES

SHIMBERG CENTER FOR AFFORDABLE HOUSING

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Local Economic Contribution of Home Building

At various times the Shimberg Center for Affordable Housing receives inquiries about the economic impact of home building in a community. Generally, the issue at hand is whether the construction of a new home represents an asset or liability. Because the question continues to arise, we have reprinted the content of the December 1997 newsletter that first addressed the question.

Answering the question, however, is not easy. The National Association of Home Builders (NAHB) has investigated the issue extensively and published articles describing their work. They also have developed a model for estimating the economic impact based on an input-output matrix developed by the Bureau of Economic Analysis of the U. S. Department of Commerce.

Presented in this newsletter is a discussion of the factors that should be considered when attempting to forecast the local economic contribution of home building. The NAHB economic impact model is also discussed briefly. At the end of the newsletter are references to selected publications that may be of further assistance.

When a home is built it affects the local economy in a variety of ways. Some of these effects are short-lived, such as the wages paid to the construction workers; and some of the effects go on year after year, such as real estate tax payments. Another aspect of the economic impact is whether the effect is either a direct effect, such as the wages or real estate taxes, or a ripple effect, such as the goods and services purchased by the construction workers who received the wages.

Short-term versus Long-term Effects

It is not uncommon for the beginner to estimate the economic impact on a community of new home construction by considering only the short-term benefits. Typically these economic benefits include: wages paid to local craftsmen, purchases made at local building supply outlets, permit and impact fees paid to the local government, and transportation and food expenses paid for by the workers during construction. Other short-term costs to the builder, the buyer, or the seller that cause money to enter the local economy only during the actual construction period includes appraisal fees, title searches, closing costs, broker fees, and attorney fees.

In the long term, the real estate taxes paid year after year are the most obvious long-term economic benefit to the community. Probably the second most obvious long-term economic benefit is the purchases made by the family occupying the completed home.

Direct versus Ripple Effects

Direct economic impacts are those that take place during the construction period and are directly related to the development, construction, and sale of the home. The short-term impacts already discussed are direct effects. Another important category, however, are the ripple effects. Ripple effects refer to the economic activity that takes place as a secondary or tertiary effect of the development, construction, and sale of the home. Most, but not all, ripple effects are long-term.

Consider the short-term, direct economic effect of the wages paid to the workers building the home. Once paid by the builder, the workers use the income to purchase food, clothing, shelter, and entertainment for their families.

These purchases are the first economic ripple and they occur in the short term. The ability of the workers who are constructing the home to make purchases as a result of the wages paid by the builder continues to ripple through the local economy. That is, when the worker's family buys food, the employee of the food vendor earns a wage and that wage is again spent in the community, and so forth. The continuing effects of recycling wages in the local economy produce more jobs, wages, and local taxes. This recycling is the ripple effect, which some people call the multiplier effect.

Area of Impact

The NAHB states that the area within which economic impact should be measured is the metropolitan statistical area (MSA) as defined by the U. S. Office of Management and Budget. In a non-metropolitan area the area of impact may be a county. These geographic areas encompass the places where the workers live, where the vendors are located that supply the building materials, where the homeowners work, and where the workers and homeowners shop and go for entertainment.

Household Formation and Housing Construction

In a given local area, studies have shown that there is a close relationship between the number of new homes and the number of new households. The relationship is complicated by changes in vacancy rates and by demolitions; but, new homes and new households are closely tied. Also, not every homebuyer moves into a local area from outside. However, a move into a new home by a household from elsewhere in the same locale will ultimately be balanced by a household moving in from outside the area.

Local Economic Impact Model

The purpose of the model is to quantify the impact on the local economy of building a home within the boundaries of that local economy. The model is divided into three phases. Phases I and II focus on the one-time effects that occur as a result of construction. The third phase addresses the ongoing annual effect including tax payments and the result of the completed unit being occupied.

Phase I - Construction looks at jobs, wages, and local taxes and user charges and fees generated by the actual development, construction, and sale of the home. The jobs include on-site and off-site construction work as well as retail and wholesale sales of components, transportation to the site, and all of the professional services required to build a home. The inputs required to build housing are estimated by multiplying national estimates by the ratio of a typical new home price in the area being analyzed to the national average. The inputs are then translated into wages, jobs, profits, and taxes using the Bureau of Economic Analysis (BEA) input-output tables as well as BEA's National Income and Product Accounts (NIPA).

Phase II is the Ripple Effect. Included are the wages and profits distributed during the construction period that are spent by local workers and business owners on locally supplied goods and services. Also included are the continuing effects from recycling income back into the community that produces more jobs, wages, and local taxes in the community. The process begins with estimating the impact on spending of the local wages, proprietor's income, and taxes estimated in Phase I. The Consumer Expenditure Survey (CES) provides

an estimate of consumer spending patterns on locally produced goods and services. The spending input is converted into local output, which can again be converted into local business profits.

Permanent Impact is addressed in Phase III. Roughly 30 percent of the new home-owner's income is captured by local businesses and workers as the occupants of the new home buy clothing, food, and entertainment. In turn, that spending causes its own ripple effect as local businesses buy from other local businesses. The impact of a new household causes a permanent increase in the level of economic activity, jobs, wages, and local tax receipts. The third phase of the model begins with the income of new home occupants and follows local spending patterns through multiple income-spending iterations. The income of new homebuyers and renters is disaggregated into spending on 47 locally produced commodities using CES data for new home occupants. As in Phase II, the initial impact of spending is fed into an input-output table, generating income and taxes that are fed back into the CES local spending tendencies to generate additional waves of economic activity. The total effect is the sum of these waves.

Impact of 1,000 Single Family Homes

The NAHB developed data for an "average" city in the United States and then exercised the model to show the economic impact of building 1,000 single family homes. The results are shown in the following table.

Economic Impact of 1,000 New Single Family Detached Homes

	Local Income	Local Business Owner's Income	Local Wages & Salaries	Local Taxes	Local Jobs Supported
Phase I	\$66,359,000	\$18,107,000	\$48,252,000	\$ 6,691,000	1,565
Phase II	\$32,317,000	\$ 4,795,000	\$27,522,000	\$ 2,097,000	1,062
Phase III	\$26,204,000	\$ 3,965,000	\$22,239,000	\$ 4,068,000	864

Additional Information

For additional reading on the subject please see:

Emrath, Paul. Local Economic Impact of Home Building. Housing Economics. National Association of Home Builders, Washington, DC. March 1997. Pages 5-9.

The Local Economic Impact Model was developed by the Economics, Mortgage Finance and Housing Policy Division of the National Association of Home Builders in Washington, DC. (800-368-5242) This same division of the NAHB publishes Housing Economics monthly, which was the source of most of the material presented in this newsletter. To subscribe call 202-822-0245.

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