WICHITA STATE UNIVERSITY
W. FRANK BARTON SCHOOL OF BUSINESS
Center for Economic Development and Business Research

Economic Impact of Proposed WABA Incentives

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Fiscal Benefit-Cost Model Methodology

The Fiscal Benefit-Cost model (FBC) was developed by the Center for Economic Development and Business Research, W. Frank Barton School of Business at Wichita State University at the request of the Greater Wichita Economic Development Coalition, the city of Wichita and Sedgwick County. The model was designed to assist city, county and area economic development agencies in accessing the potential economic and fiscal impacts of providing incentive packages as part of the region's economic development efforts.

The FBC model was created to imitate the cash flows of the economy. Actual tax rates for retail sales, personal income, corporate income, property, and guest taxes were used in the creation of this model. This allows the Center to allocate tax collections identically to that of the area. Information on average wages, inflation rates, substitution and household demographics are also used. The FBC model is an input-output model and uses RIMS II multipliers.

Data and Assumptions

Assumptions	
Expected Demand - 18 mos.	787
Expected Demand with Incentives - 18 mos	1,000
Difference	*213*
Average Price of a New Home	$258,379

Expected demand was based on the Wichita Area Association of Realtors Multiple Listing System data for September 2011. The number of new homes sold between Oct. 1, 2010, and Sept. 30, 2011, were used to estimate the number of new homes that will be sold in 2012. The Wichita State University Center for Real Estate expects new home construction to remain stable through 2012, according to its forecast. Assuming new home sales remain constant, CEDBR expects there to be 525 new homes built

and sold in 2012 and another 262 in the first half of 2013. These 787 homes are expected to be built and sold regardless of homebuyer incentives.

The Wichita Area Builders Association would like to increase the demand for new homes and hopes to achieve this by securing incentives to new home owners. WABA is asking the city to provide property tax abatements to the first 1,000 home owners in a 12 – 18 month time period. CEDBR assumed that 667 homes would be built and sold in 2012 and an additional 333 would be built and sold in the first half of 2013. All homes built and sold would need to be in existing developments to be considered for incentives. The analysis below is based on the sale of 1,000 new homes. If 1,000 homes are not sold the analysis below is no longer valid.

The average price of a new home sold between October 2010 and September 2011 was $258,379. CEDBR held this price constant throughout the analysis period. Property values were expected to remain constant throughout the analysis period.

Incentives included in the analysis:

- Five-yr property tax abatement for new home buyers – abatements are expected to start in 2012 and 2013

Limitations

CEDBR did not assume *ANY* new residents. All homes are expected to be built for existing Wichita residents. CEDBR did not account for a change in the price of new homes due to additional supply or higher demand. In addition, CEDBR assumed that all new homes were net new homes.

All costs associated with the creation of a new development, including specials, are viewed as sunk costs. Because they have already occurred, these sunk costs are not included in the analysis.

It was beyond the scope of this analysis to account for changes in household consumption due to a change in homeownership.

Findings

CEDBR ran two analyses over a six-year analysis period, one with "No Incentives" and one with "Incentives". The results for the analyses are summarized in the table below. The "No Incentives" scenario is expected to occur with or without city provided incentives and should be considered the baseline analysis.

Based on the "Incentives" analysis, CEDBR estimated the total value of new homes sold to be $258.4 million, based on 1,000 homes sold at an average price of $258,379. This construction activity is expected to generate direct support for 1,990 jobs, or a total of 3,560 jobs in 2012. Directly supported jobs were estimated to be 993 in 2013, with a total of 1,777 jobs supported. Please note, the jobs supported in 2012 and 2013 are not net new jobs – they are jobs that already exist. The analysis simply identifies a funding stream for these jobs.

Public benefits are expected to total $3 million. Public benefits are sales tax revenues, from construction worker spending and construction material purchases, and property tax revenues.

Public costs refer to incentives or other city costs. Incentives include a five-year property tax abatement. There are not expected to be any net new "other" costs associated with this scenario. Therefore, public costs are expected to be $2 million.

Based on the public benefits and costs, the Wichita general fund is expected to have a net gain of $730,457. In addition, the return on investment is expected to be 1.48. In other words, for every dollar invested, the city will receive the initial dollar plus an additional 48 cents in return.

New Homes Impact	No Incentives	Incentives
Expected Demand - 18 mos.	787	1,000
Average Price of a New Home	$258,379	$258,379
Total Value of New Homes Sold	$203,344,273	$258,379,000
Direct Supported Jobs - 2012	1,566	1,990
Total Supported Jobs	2,802	3,560
Direct Supported Jobs - 2013	782	993
Total Supported Jobs	1,398	1,777
Public Benefits - City of Wichita General Fund	$2,364,429	$3,004,315
Public Costs - City of Wichita General Fund	$0	$2,032,312
Net Public Benefits - City of Wichita General Fund	$2,364,429	$730,457
Return on Investment	*N/A*	1.48

Disclaimer

In the preparation of this report, the Center for Economic Development and Business Research assumed that all information and data provided by the applicant or others is accurate and reliable. CEDBR did not take extraordinary steps to verify or audit such information, but relied on such information and data as provided for purposes of the project.

This analysis requires CEDBR to make predictive forecasts, estimates and/or projections (hereinafter collectively referred to as "FORWARD-LOOKING STATEMENTS"). These FORWARD-LOOKING STATEMENTS are based on information and data provided by others and involve risks, uncertainties and assumptions that are difficult to predict. The FORWARD-LOOKING STATEMENTS should not be considered as guarantees or assurances that a certain level of performance will be achieved or that certain events will occur. While CEDBR believes that all FORWARD-LOOKING STATEMENTS it provides are reasonable based on the information and data available at the time of writing, actual outcomes and results are dependent on a variety of factors and may differ materially from what is expressed or forecast. CEDBR does not assume any responsibility for any and all decisions made or actions taken based upon the FORWARD-LOOKING STATEMENTS provided by CEDBR.

Multiplier Impacts Using RIMS II[1]

Effective planning for public- and private-sector projects and programs at the national, state, and local levels requires a systematic analysis of the economic impacts of these projects and programs on the affected regions. In turn, systematic analysis of economic impacts must account for the inter-industry relationships within regions because these relationships largely determine how regional economies are likely to respond to project and program changes. Thus, regional input-output (I-O) multipliers, which account for inter-industry relationships within regions, are useful tools for conducting economic impact analysis.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: BEA's national I-O table, which shows the input and output structure of nearly 500 U.S. industries, and the BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.

Using RIMS II for impact analysis has several advantages. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. The accessibility of the main data sources for RIMS II keeps the cost of estimating regional multipliers relatively low. Empirical tests show that estimates based on relatively expensive surveys and RIMS II-based estimates are similar in magnitude.

RIMS II is widely used in both the public and private sector. In the public sector, for example, the Department of Defense uses RIMS II to estimate the regional impacts of military base closings. State transportation departments use RIMS II to estimate the regional impacts of airport construction and expansion. In the private sector, analysts and consultants use RIMS II to estimate the regional impacts of a variety of projects, such as the development of shopping malls and sports stadiums.[2]

[1] This section is taken from *Measuring Gross Economic Impacts Associated with the Amtrak High Speed Rail Corridor Program*, prepared by the Center for Urban Transportation Research, University of South Florida, March 2000, pp. 4-7.

[2] RIMS II multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Source: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.