



Impact of Home Building Cochise County AZ. Metropolitan Statistical Area (MSA)

April 2005
SAHBA Communications

Objective

This NAHB report estimates the costs (current and capital expenses) that new homes impose on local jurisdictions, compared to the revenue generated. From the perspective of a local government, the results answer the question whether residential development pays for itself.

Overview

Home building generates local economic impacts such as income and jobs for local residents, and revenue to local governments. It imposes costs on government, such as providing primary and secondary education, police and fire protection, and water and sewer service. These services require annual expenses; and capital investment in buildings, other structures, and equipment that local governments own and maintain.

Method Used to Estimate Costs

The Census of Governments is the source of each jurisdiction's costs related to new home building. Once every five years, all units of US Government are required to report line item expenses, revenues, and intergovernmental transfers to the Governments Division of the US Census Bureau. Census of Governments data is aggregated for each local government in the Tucson MSA, to produce total annual expenses for all new single-family construction.

Government Costs Compared to Revenue: Single-Family Construction

The core economic assumptions include: property taxes, construction-related fees, and sales taxes. The NAHB model has local governments financing their capital investment by borrowing at the current municipal bond rate. In a given year, the difference between revenues and current expenses is **“operating surplus.”**

In 2004, the Cochise County MSA recorded 625 new home permits. In the first year, these homes resulted in an estimated:

- ▶ \$645,000 in current expenditures by local government to provide public services to the new households at current levels
- ▶ \$6.58 million in tax and other revenue for local governments
- ▶ \$11 million in capital investment for new structures and equipment undertaken by local governments

In a typical year after the first year, the 625 homes result in:

- ▶ \$1.29 million in local government expenditures needed to continue providing services at current levels
- ▶ \$2.46 million in tax and other revenue for local governments

Conclusion

All government debt incurred by investing in services, infrastructure and equipment can be **entirely paid off by the end of the seventh year.** After that, the operating surplus from home building is available to finance other projects, reduce taxes or decrease construction-related fees.

Government Expenses and Revenue Tables

1: Total Annual Local Government Expenses per Single-Family Housing Unit (2003 dollars)

Service Category	Expense
Education	\$ 715
Police Protection	\$ 396
Fire Protection	\$ 125
Corrections	\$ 115
Water Supply	\$ 43
Sewerage	\$ 32
Recreation & Culture	\$ 149
Other General Government	\$ 471
Gas Utilities	\$ 18
Total	\$2,064

2: Local Government Capital Expenses per Single-Family Housing Unit (2003 dollars)

Infrastructure Category	Expense
Schools	\$11,991
Hospitals	\$ 2,397
Other Buildings	\$ 1,139
Conservation & development	\$ 75
Sewer systems	\$ 1,157
Water supply	\$ 445
Other structures	\$ 211
Equipment	\$ 209
Total	\$17,623

3: Costs & Revenue Generated per Year by 625 Single Family Homes

Year	Current Expenses	Revenue	Operating Surplus	Cap Invstmt Start of Year	Debt Outstdg End of Year	Interest on Debt	Net Income to Government
1	\$ 645,000	\$6,583,500	\$5,938,500	\$11,014,000	\$5,578,257	\$502,757	- \$5,578,257
2	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$4,663,888	\$254,631	+ \$ 914,369
3	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$3,707,781	\$212,893	+ \$ 956,107
4	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$2,708,031	\$169,249	+ \$ 999,751
5	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$1,662,645	\$123,614	+ \$1,045,386
6	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 589,540	\$ 75,895	+ \$1,093,105
7	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 0	\$ 25,998	+ \$1,143,002
8	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 0	\$ 0	+ \$1,169,000
9	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 0	\$ 0	+ \$1,169,000
10	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 0	\$ 0	+ \$1,169,000
11	\$1,290,000	\$2,459,000	\$1,169,000	\$ 130,000	\$ 0	\$ 0	+ \$1,039,000
12	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 0	\$ 0	+ \$1,169,000
13	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 0	\$ 0	+ \$1,169,000
14	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 0	\$ 0	+ \$1,169,000
15	\$1,290,000	\$2,459,000	\$1,169,000	\$ 0	\$ 0	\$ 0	+ \$1,169,000

After 15 years, these 625 homes will generate an accumulative \$41 million in revenue compared to only \$31 million in costs for local governments, including annual current expense, capital investment and interest on debt.