Fiscal Impacts of Rural Community Growth:

A Case Study of the Mountain View East Apartments, Heyburn, Idaho

by James Duffield, Gerald Marousek and Stephen M. Smith

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# Preface

The authors are Research Associate, Agricultural Economist and Assistant Agricultural Economist, respectively. The cooperation and assistance of Heyburn city officials and staff made this study possible and are appreciated by the authors. The study was conducted as a part of Idaho Agricultural Experiment Station Project H-745: Fiscal Impacts of Rural Community Growth Under Different Taxing and Financing Structures.

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## Introduction

Most Idaho communities grew during the 1970s, a trend that may continue. Growth of the private sector--business, industry and residential--results in increased demand for public services. At the same time high inflation rates and resistance to tax increases are limiting the ability of local governments to provide growthinduced services. The combination of these pressures is forcing local government officials to become more efficient managers of funds and more efficient producers of public services. Specifically, it is important that local governments know the public costs of new or proposed developments, what revenues from what sources will be available to cover costs, and when the revenues will be available relative to the need to make expenditures. A series of case studies, including this one, has been conducted by the Department of Agricultural Economics and Applied Statistics, University of Idaho, to provide information that will help cities in Idaho meet this challenge.\*

<sup>\*</sup> For other case studies see University of Idaho Agricultural Experiment Station Research Bulletin 123, <u>Initial and Long-term Fiscal Impacts</u> of Developments on Rural Municipal Governments.

This report presents a case study of the Mountain View East Apartments in Heyburn, Idaho. The case study is specifically designed to identify the fiscal impacts of the Mountain View East Apartments on the city of Heyburn. It does not include any costs and revenues pertaining to other taxing districts (e.g. school districts). Although the costs and revenues reported in this study are site specific, the method of estimating fiscal impacts can serve as a guide for similar studies in Heyburn and other Idaho cities.

## Estimating Net Fiscal Impacts

Net fiscal impact is estimated by the sum of development-related revenues minus the sum of development-related costs. The net impact of the Mountain View East Apartments was based on revenues and costs associated with providing water, sewer, and other city services.

Net fiscal impact of the development was divided into two categories: (1) costs and revenues associated with the initial year of development, and (2) costs and revenues calculated on a yearly basis over a ten-year period. The primary components of the initial impact include building permits, inspection fees, hook-up charges and capital costs. Property tax revenues generated in the initial year were not included in the impact analysis. This assumption is based on the tax structure which contains a lag between tax payment dates and the time a new development appears on the tax rolls.

The ten-year impact includes costs and revenues expected to occur each year over a ten-year period. The components used for calculating yearly net impacts include projected user fee revenues and service-

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related operation and maintenance costs. The following pages provide a detailed description for estimating the net fiscal impact of the Mountain View East Apartments.

#### The Mountain View East Apartments Case Study

Construction of the Mountain View East Apartments began in February, 1980 and first occupancy occurred in September, 1980. There are eight complexes on the site, with 24 two- and threebedroom units. The site was previously unimproved and was under county tax jurisdiction until 1981 when it was annexed by the City of Heyburn. The site encompasses 2.39 acres and is located on the east end of town just east of Highway 30.

<u>Initial Impact</u>. Two main conditions formed the basis for estimating the intial impact of the development. These conditions were that:

- The developer paid all the capital costs for pavement, curbs, gutters, sewer line, water line and power line on the developed site; and
- 2) Hook-up charges equal hook-up and inspection costs.

The initial impact estimates are shown in Table 1. The impact was estimated by subtracting the development-related costs from the development-related revenues, resulting in a positive value of \$769.

<u>Ten-year Impact</u>. To estimate the ten-year impact, the following conditions were incorporated.

- 1) No costs or revenues occur in the year of construction.
- The development has 24 single family units that are continuously occupied.

- 3) Tenants paid \$5 per month for water and \$3.50 per month for sewer, resulting in \$102 annual revenue from each unit. This amount was multiplied by the 24 units to determine the yearly revenue in the second column of Table 2.
- 4) Operation and maintenance costs (0&M) for 180 feet of water line and 200 feet of sewer line were estimated from 1979 national averages. The 0&M costs for the water line were estimated at 70¢ per foot and sewer line at 37¢ per foot.
- 5) Annual O&M costs for sewer and water systems were inflated by 11 percent each year. This increase was derived from the Implicit Price Deflator for Gross National Product for Local Governments.\*
- 6) Property tax-revenues are based on historical data recorded by the County Assessor's Office. Property taxes after 1982 are increased 5% annually, the maximum allowed under the 1% Initiative.

Under these conditions, the ten-year impact of the Mountain View East Apartments was estimated to be \$27,906. (Table 2).

The final step for estimating net fiscal impact is deriving net present value of the ten-year impact. Net present value converts revenues and costs occurring in the future to today's equivalent, assuming a particular interest or discount rate. The method sums the present values of each year's cash flow and adds it to the initial year cash flow. Assuming a 10 percent discount rate, the net present value of the Mountain View East Apartments was \$16,312. At a 15 percent discount rate the net present value was \$12,989. (Table 2).

# Conclusion

The net fiscal impact of the Mountain View East Apartments was positive. This indicates that the development will pay its own way

<sup>\*</sup> See University of Idaho College of Agriculture Current Information Series No. 614 for indexing example.

and will not become a burden to the city of Heyburn. However it is important to recognize that certain costs were not included in the analyses. For example, the costs associated with providing additional police and fire protection were impossible to quantify and consequently were excluded from the case study. Admittedly, these costs are small and would have little effect on the Mountain View East case study. However, they might be important factors in other cases.

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Development-related Revenues:	Value In Initial Year (1980)	Conditions Used or Source of Data				
direct contribution by developer to cover capital costs	\$0	Condition 1				
hook-up charges	650	City of Heyburn				
user fees	0	City of Heyburn				
formula funding	0	City of Heyburn				
grants	0	City of Heyburn				
building permits	769	City of Heyburn				
other permits or fees	0	City of Heyburn				
Total	\$1419					
Development-related Costs:	Value In Initial Year (1980)	Conditions Used or Source of Data				
material capital costs installation	\$0	Condition 1				
hook-up and inspection	650	Condition 2				
building inspection	0	City of Heyburn				
operations and maintenance	0	City of Heyburn				
new personnel	0	City of Heyburn				
Total	\$650					

Table 1. Initial Impact Estimate for Mt. View East Apartments, Heyburn

Initial Impact: \$1419 - \$650 = \$769

Table 2.	Estimate of	the	Ten-year	net	impact	of	Mt.	View	East	Apartments,	Heyburn
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Year	Annual Proprietary Service Revenues (water and sewer) Generated by the Development	Annual Proprietary Service Costs (O&M) Associated with the Development	Annual Property Tax Revenue Generated by the Development	Annual "other" Service Costs (e.g. fire, streets) Associated with the Development	Annual Other Revenues Generated By the Development	
	Conditions 1,2,3	Conditions 1,4,5	Conditions 1,6	Condition 1	Condition 1	
1980	\$0	\$0	\$0	\$0	\$0	
1981	2448	200	0	0	0	
1982	2448	222	831	0	0	
1983	2448	246	873	0	0	
1984	2448	273	916	0	0	
1985	2448	304	962	0	0	
1986	2448	337	1010	0	0	
1987	2448	374	1061	0	0	
1988	2448	415	1114	0	0	
1989	2448	461	1170	0	0	
Totals	\$22,032	\$2832	\$7937	\$0	\$0	

Ten-year Impact: \$769 initial impact + \$22,032 - \$2832 + \$7937 - \$0 + \$0 = \$27,906

Net present value at 10% discount rate: \$16,312 Net present value at 15% discount rate: \$12,989