

The Economic Impact of Home Construction On Montana Counties



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Introduction

The construction industry contributes substantially to Montana's economy accounting for 5.5 percent of Gross State Product, a measure of the value of all goods and services sold in the state. Construction activity provided 1.2 billion dollars to the economy in 2000. This sector also supplies 6.4 percent of employment statewide and 7.7 percent of personal income earned. Between September 2001 and September 2002, statewide 1,110 construction jobs were added to the economy. These jobs were in general construction and specialty building trades. While there is no question that the overall construction industry is important to the state, it is sometimes unclear how valuable the home construction portion of the industry is. Many local entities question whether there are benefits associated with home building or if this activity simply creates additional pressure on schools and other public services. During the recent recession, low interest rates caused home construction to be one of the few bright spots in the state and national economy. This study elaborates the economic benefits to the local economy from home construction which have contributed to that bright spot.

This study uses results from an input-output model, developed by the National Association of Home Builders, to assess the impacts to local areas from new home construction. The model uses coefficients developed by the U.S. Bureau of Economic Analysis to provide the initial and on-going multiplier effects associated with home construction. Using the results from the NAHB model, one can look at local area effects on business and government to gain a better understanding of the extent of the impact on local communities of home construction. It should be noted that the results published in this study only examine the issue from the perspective of home construction. It does not evaluate the economic merits of using the land for homes versus using the land for agricultural or other purposes. In order to make that comparison, it would be necessary to utilize an input-output model that reflected the existing or prospective use of the land for purposes other than housing. Then, the initial and on-going impacts of differing land usage would have to be compared. Additionally, although this study reports the increase in tax revenues flowing into local governments from construction and occupation of new homes, the study does not address the overall fiscal impact of expansion. Increased costs to local governments for providing greater levels of public services is not calculated or subtracted from the increased revenues. The study results cannot be used alone to evaluate net benefits or costs to society in a particular area, or to represent the overall impact on a community.

The good news for local areas is that home construction does have positive economic benefits that continue beyond the first year while the construction is taking place. As the homes are occupied, spending by the residents generate additional demand for local businesses' products and adds to their profitability. This in turn helps to generate greater demands for employment as businesses seek to expand. This economic engine helps to provide the critical mass necessary to achieve continued growth in local economies. The following NAHB chart summarizes the categories of economic benefits that occur in the economy.

	Economic Benefits
One Time Construction Year Impacts	Jobs created in construction, and complementary industries; government revenue from local income, sales and other taxes, building permits, impact and other fees; additional spur to economic activity as income earned in construction is spent.
On-going Impacts that recur Year after Year	Continuing revenue collected from real estate taxes; local income and government revenue generated by the spending of new home occupants

Single Family Homes

The current study evaluated nine different areas within Montana to better examine the differing economic benefits that occur across the state. Information was provided for single family housing as well as multi-family housing. The input data provided information on average unit selling price, raw land costs, fees levied by local governments and tax information. The input data is summarized in Appendix A. The effects are broken into direct and indirect effects (Phase I and II) occurring during the initial year of construction and the on-going effects (Phase III) that occur after the housing unit has been purchased and occupied. Table 1 summarizes the initial year effects on the various communities.

The Local Jobs category reflects the local area jobs sustained during the first year of construction. The Local Income category is a summation of the Local Business Owners' Income and Local Wages and Salaries. Local taxes reflect additional tax revenues that accrue to both city and county governments as a result of increased economic activity.

Table 1: Overall First Year Impact ¹

2002 housing impact data Single Family construction	# of homes	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
First year Impact						
Cascade County	182	544	\$18,155,879	\$3,401,745	\$14,755,236	\$687,188
Flathead County	711	2850	\$97,321,130	\$18,049,783	\$79,272,207	\$6,068,402
Gallatin County	814	2508	\$75,798,576	\$13,688,537	\$62,108,890	\$9,398,941
Lewis and Clark County	284	541	\$20,227,470	\$3,760,848	\$16,465,545	\$1,100,500
Missoula County	501	1540	\$52,163,567	\$9,699,828	\$42,463,739	\$2,758,159
Park County	119	385	\$10,585,591	\$1,951,600	\$8,632,909	\$828,673
Ravalli County	396	1234	\$38,195,263	\$7,087,488	\$31,107,775	\$2,153,187
Silverbow County	30	75	\$2,392,000	\$448,000	\$1,945,000	\$103,000
Yellowstone County	607	1882	\$66,529,491	\$12,351,877	\$54,177,613	\$3,865,330

¹ # of homes is based on 2001 housing starts.

As the table indicates, the initial year impact on jobs was considerable. In the five areas with high construction activity, home building supplied between 1200 and 2850 jobs in the first year. Not all of these jobs are construction industry jobs. This also includes jobs created as a result of the increased demand for other goods and services resulting from the increased spending related to the construction income known as a ripple effect. The ripple effect occurs as construction related workers earn higher incomes and then turn around and spend a portion of this income within the economy. The spending may impact a variety of businesses from retail to automotive to video stores. These businesses then have greater profits, which lead to higher incomes being generated in other industries. The spending patterns of typical households are used as a basis for calculating these ripple effects. The data is collected through the U.S. Bureau of Labor Statistics Consumer Expenditures Survey, which captures detailed information on average spending for a large number of goods and services. The values are then adjusted to reflect the extent of availability of these goods and services at the local level. As can be seen from Table 1, the effect on local businesses owner's income ranged from as much as \$ 18 million to as little as \$ 448,000 during the first year. As one would expect the impacts are reduced in areas that had fewer homes constructed.

In order to obtain a clearer picture of the impact of first year activity on differing sectors of the economy, it is useful to separate the construction industry related effects from the effects occurring in non-construction related industries. Table 2 shows the direct construction industry related impacts while Table 3 shows the activity in other sectors that occur as a result of the spending by people earning from construction activity.

Table 2: Phase I Construction Related Impacts

2002 housing impact data Single Family construction	# of homes	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
Phase I Impact						
Cascade County	182	385	\$13,120,545	\$2,405,709	\$107,185,867	\$444,521
Flathead County	711	1974	\$68,881,989	\$12,631,413	\$56,250,576	\$4,225,641
Gallatin County	814	1638	\$50,788,771	\$9,313,862	\$41,474,910	\$7,991,686
Lewis and Clark County	284	378	\$14,393,636	\$2,638,833	\$11,753,727	\$774,545
Missoula County	501	1073	\$37,130,376	\$6,809,771	\$30,320,605	\$1,947,624
Park County	119	263	\$7,400,718	\$1,356,600	\$6,043,036	\$622,045
Ravalli County	396	855	\$27,058,650	\$4,961,647	\$22,097,003	\$1,680,215
Silverbow County	30	53	\$1,722,000	\$316,000	\$1,406,000	\$61,000
Yellowstone County	607	1307	\$47,223,455	\$8,658,340	\$38,563,970	\$2,622,698

Table 3: Phase II Non-Construction Related Impacts

2002 housing impact data Single Family construction	# of homes	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
Phase II Impact						
Cascade County	182	159	\$5,035,333	\$996,036	\$4,040,400	\$242,667
Flathead County	711	876	\$28,439,141	\$5,418,370	\$23,021,630	\$1,842,761
Gallatin County	814	869	\$25,009,805	\$4,374,675	\$20,633,980	\$1,407,254
Lewis and Clark County	284	165	\$5,833,833	\$1,122,015	\$4,711,818	\$325,955
Missoula County	501	467	\$15,033,191	\$2,890,057	\$12,143,134	\$810,535
Park County	119	122	\$3,238,964	\$595,000	\$2,589,873	\$206,627
Ravalli County	396	378	\$11,136,614	\$2,125,841	\$9,010,772	\$472,972
Silverbow County	30	22	\$670,000	\$132,000	\$539,000	\$42,000
Yellowstone County	607	574	\$19,306,036	\$3,693,538	\$15,613,643	\$1,242,632

As can be seen from the tables, the construction industry related impacts on local businesses during the first year are sizable for many counties, ranging from a high of \$ 12 million to a low of \$ 316,000. While construction related jobs rose by between 53 and 1,974, it is interesting to look at the ripple effect of job creation. Non-construction related job activity rose between 22 and 876 jobs as a result of the construction spending activity. For non-construction related businesses, incomes rose from a low of \$ 132,000 in Silverbow County to a high of slightly more than \$ 5.4 million in Flathead County.

This increase in non-construction related businesses also contributes to the economy in terms of increased revenue to local governments. This increased revenue comes from a variety of sources. The additional taxes associated with individuals include income and wage taxes, estate taxes, hunting and fishing licenses, motor vehicle registrations and other licenses. Additional taxes generated from businesses arise from business property taxes, business and occupation licenses, income taxes, motor vehicle licenses, and user charges for government services typically purchased by businesses. Local government revenues throughout the nine counties increased between \$ 103,000 and \$ 9.4 million as a result of the first year's construction activity (Table 1). The direct construction related local tax revenues are comprised partially of the permit and impact fees assessed on new construction in different jurisdictions but does not include property taxes that would be assessed on the home.

An aspect of home construction that many fail to recognize is the on-going impact in the local economy after the construction phase is completed. Once a home is sold and occupied, the residents generate demand in the local economy through their spending on goods and services. The sale of the property itself generates income for financial services firms, including banks, mortgage companies, realtors, and title and insurance companies. Additionally as the homes are occupied, the households spend on items such as furniture, landscaping, garden supplies, childcare and medical and health services. The properties move onto the local property tax rolls and contribute to local government revenues. As people move into a community, they increase the demand for local goods and services providing additional income to those businesses. The effects of this increased economic activity are captured as Phase III or on-going impacts (Table 4).

Table 4: Phase III On-going Impacts

2002 housing impact data Single Family construction	# of homes	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
On-going Impact						
Cascade County	182	137	\$4,184,897	\$775,430	\$3,408,364	\$605,564
Flathead County	711	636	\$20,024,783	\$3,663,196	\$16,361,587	\$3,311,130
Gallatin County	814	646	\$18,048,266	\$3,335,331	\$14,712,935	\$2,530,528
Lewis and Clark County	284	169	\$5,801,561	\$1,068,227	\$4,733,333	\$832,636
Missoula County	501	394	\$12,273,968	\$2,268,860	\$10,005,108	\$1,661,490
Park County	119	101	\$2,541,191	\$470,591	\$2,070,600	\$369,982
Ravalli County	396	305	\$8,692,757	\$1,625,524	\$7,066,220	\$927,714
Silverbow County	30	21	\$618,000	\$114,000	\$503,000	\$95,000
Yellowstone County	607	472	\$15,366,262	\$2,795,636	\$12,570,626	\$2,419,983

Table 4 sheds light on the question of whether or not home construction is merely an on-going drain on local government resources. The on-going effect on the local economy is significant as a result of increased occupant spending in many sectors. In some counties, as many as 646 additional full time jobs were created or sustained as a result of the home construction. Local businesses continue to benefit in terms of increased income and local governments generate substantial revenues. On-going effects on local business revenues show gains in the \$ 1.6 to \$ 3.7 million range for a number of areas. This is an example of additional demand breeding more demand. As households spend income on new homes, workers in other industries see higher incomes as well, spawning more demand and spending which benefits local communities. Additionally, local tax revenues rise providing additional dollars to help pay for the increased pressure on schools and other public resources. In order to get a clearer picture of the extent of the construction impact on any individual area, it may be beneficial to examine the impacts on a per home basis.

Differing County Impacts

As many Montanans are aware, there are significant differences in the size of the major cities within the nine counties and the availability of goods and services within that area. For this reason, it may be useful to examine the impacts on a per home basis, which will allow for a comparison of the level of benefits generated in different areas of the state. Table 5 shows the first year impacts on a per home constructed basis while Table 6 shows the on-going impacts in each county.

Table 5: First Year Impacts per Home Constructed

2002 housing impact data Single Family construction	# of homes	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
First Year Impact Per Home Constructed						
Cascade County	1	2.99	\$99,758	\$18,691	\$81,073	\$3,776
Flathead County	1	4.01	\$136,879	\$25,386	\$111,494	\$8,535
Gallatin County	1	3.08	\$93,119	\$16,816	\$76,301	\$11,547
Lewis and Clark County	1	1.91	\$71,223	\$13,242	\$57,977	\$3,875
Missoula County	1	3.07	\$104,119	\$19,361	\$84,758	\$5,505
Park County	1	3.24	\$88,955	\$16,400	\$72,545	\$6,964
Ravalli County	1	3.12	\$96,453	\$17,898	\$78,555	\$5,437
Silverbow County	1	2.50	\$79,733	\$14,933	\$64,833	\$3,433
Yellowstone County	1	3.10	\$109,604	\$20,349	\$89,255	\$6,368

An examination of Table 5 indicates the variability between counties in the extent of the impacts. The number of jobs created is similar across most counties with the notable exception of Flathead and Lewis and Clark counties. An examination of average housing costs and raw land costs shows that in Lewis and Clark county, average home prices, raw land costs and impact/permit fees are lower than average while in Flathead county, all three categories are higher than average. Higher prices for homes, raw land and fees translates into more dollars of income filtering into construction related businesses and local governments, therefore creating higher levels of income and its associated ripple spending. This, in turn, leads to more job creation in non-construction related industries. The opposite is true when homes, raw land and fees are lower than average. Examining local business owners' income shows that local businesses benefit to a greater extent in areas where there is a greater availability of goods and services. In Yellowstone, Missoula, Cascade and Flathead counties, because of a larger population base or less proximity to alternative areas to purchase goods and services, local businesses gain a greater amount of the benefits.

Table 6: On-going Impact per Home Constructed

2002 housing impact data Single Family construction	# of homes	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
Ongoing Impact Per Home Constructed						
Cascade County	1	0.75	\$22,994	\$4,261	\$18,727	\$3,327
Flathead County	1	0.89	\$28,164	\$5,152	\$23,012	\$4,657
Gallatin County	1	0.79	\$22,172	\$4,097	\$18,075	\$3,109
Lewis and Clark County	1	0.59	\$20,428	\$3,761	\$16,667	\$2,932
Missoula County	1	0.79	\$24,499	\$4,529	\$19,970	\$3,316
Park County	1	0.85	\$21,355	\$3,955	\$17,400	\$3,109
Ravalli County	1	0.77	\$21,951	\$4,105	\$17,844	\$2,343
Silverbow County	1	0.70	\$20,600	\$3,800	\$16,767	\$3,167
Yellowstone County	1	0.78	\$25,315	\$4,606	\$20,709	\$3,987

An examination of Table 6 indicates that for each home constructed, approximately $\frac{3}{4}$ of an on-going additional job is created. Local business owners benefit in the range of \$ 3,761 to \$ 5,512 worth of added income. At the same time, local government revenues increase in the range of \$ 2,343 to \$ 4,657 for each home. The impacts in the nine regions are fairly similar with the exceptions of Flathead and Lewis and Clark counties. Again, the higher values in Flathead County and the higher incomes necessary to purchase these homes help to sustain higher numbers of other jobs and pump more dollars into the local economy. Alternatively, in Lewis and Clark County, lower housing prices become more affordable for families with lower income levels and the ripple effects of lower spending are translated through that economy. The differences in local taxes generated are tied primarily to the property tax levies in the various counties as well as the values of the homes.

Multi-family Home Construction

In most of the nine counties examined, multi-family home construction is taking place as well as single-family home construction. The exception to this was Park County which had no multi-family housing constructed during the study period. The effects on communities can be slightly different with multi-family construction as the square footage per unit typically is smaller, there are more common structural elements and the amount of land per unit is smaller than with traditional single-family homes. In this study, per unit refers to the individual units occupied by a family within the multi-family structure rather than the entire structure itself. This allows for a more representative comparison of single-family units to multi-family units.

Table 7: Overall First Year Impact of Multi-family Construction

2002 housing impact data Multi Family construction	# of units	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
First Year Impact						
Cascade County	54	59	\$2,029,000	\$399,000	\$1,630,000	\$68,000
Flathead County	140	311	\$10,924,000	\$2,123,000	\$8,801,000	\$665,000
Gallatin County	340	622	\$19,320,000	\$3,637,000	\$15,683,000	\$2,518,000
Lewis and Clark County	8	12	\$442,000	\$86,000	\$356,000	\$20,000
Missoula County	244	221	\$7,680,000	\$1,470,000	\$6,210,000	\$698,000
Park County	N/A	N/A	N/A	N/A	N/A	N/A
Ravalli County	54	127	\$4,041,000	\$789,000	\$3,252,000	\$181,000
Silverbow County	34	38	\$1,237,000	\$241,000	\$995,000	\$63,000
Yellowstone County	20	27	\$997,000	\$194,000	\$804,000	\$62,000

Table 7 shows the overall first year impact of multi-family construction activity in the eight areas. As one would expect because of land usage, construction differences and fewer units constructed, the first year impacts from multi-family construction are well below those of single-family construction although not insignificant. Overall, local business income increased between \$ 194,000 and \$ 3.6 million across these areas. Tables 8 and 9 show the first year direct and indirect effects for multi-family that correspond to Tables 2 and 3 for single family dwellings.

Table 8: Phase I Multi-Family Construction Related Impacts

2002 housing impact data Multi Family construction	# of units	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
Phase I Impact						
Cascade County	54	41	\$1,471,000	\$288,000	\$1,183,000	\$41,000
Flathead County	140	213	\$7,740,000	\$1,515,000	\$6,225,000	\$458,000
Gallatin County	340	398	\$12,896,000	\$2,518,000	\$10,351,000	\$2,157,000
Lewis and Clark County	8	8	\$317,000	\$62,000	\$255,000	\$13,000
Missoula County	244	147	\$5,289,000	\$1,035,000	\$4,254,000	\$575,000
Park County	N/A	N/A	N/A	N/A	N/A	N/A
Ravalli County	54	88	\$2,891,000	\$566,000	\$2,325,000	\$131,000
Silverbow County	34	26	\$884,000	\$173,000	\$711,000	\$41,000
Yellowstone County	20	19	\$705,000	\$138,000	\$567,000	\$43,000

Table 8 shows the economic activity generated in construction related industries while Table 9 shows the additional economic activity that took place in the rest of the local area economy during the construction year. While the number of construction related jobs for single family dwellings were between 1.5 and 2.5 jobs per home, the number associated with multi-family are smaller ranging from .5 to 1.3 jobs per unit. As would be expected, the amount of increase in local construction related income is also smaller as are local tax revenues. This correlates to fewer materials per unit required and economies of scale for specialized trades in dealing with multiple units at one site rather than a number of individual sites for single-family homes.

Table 9: Phase II Multi-Family Non-Construction Related Impacts

2002 housing impact data Multi Family construction	# of units	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
Phase II Impact						
Cascade County	54	18	\$558,000	\$111,000	\$447,000	\$27,000
Flathead County	140	98	\$3,184,000	\$608,000	\$2,576,000	\$207,000
Gallatin County	340	224	\$6,451,000	\$1,119,000	\$5,332,000	\$361,000
Lewis and Clark County	8	4	\$125,000	\$24,000	\$101,000	\$7,000
Missoula County	244	74	\$2,391,000	\$435,000	\$1,956,000	\$123,000
Park County	N/A	N/A	N/A	N/A	N/A	N/A
Ravalli County	54	39	\$1,150,000	\$233,000	\$927,000	\$50,000
Silverbow County	34	12	\$353,000	\$68,000	\$284,000	\$22,000
Yellowstone County	20	9	\$292,000	\$56,000	\$237,000	\$19,000

The phase II first year effects on non-construction related businesses are also smaller for multi-family construction. This is understandable with fewer dollars of wages being associated with multi-family construction, fewer additional dollars would be spent in the local economy in the ripple effect. Despite this, local business owner's incomes in non-construction related industries increased between \$ 24,000 and \$ 1.1 million. The combined impacts during the first year, as shown in Table 7, ranged from \$ 86,000 to \$ 3.6 million for local businesses.

The on-going impacts in local communities of multi-family construction are summarized in table 10.

Table 10: Multi-Family On-going Impact

2002 housing impact data Multi Family construction	# of units	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
Ongoing Impact						
Cascade County	54	28	\$915,000	\$199,000	\$717,000	\$120,000
Flathead County	140	78	\$2,618,000	\$544,000	\$2,073,000	\$532,000
Gallatin County	340	217	\$6,500,000	\$1,385,000	\$5,116,000	\$1,019,000
Lewis and Clark County	8	5	\$172,000	\$37,000	\$136,000	\$29,000
Missoula County	244	127	\$4,238,000	\$917,000	\$3,321,000	\$566,000
Park County	N/A	N/A	N/A	N/A	N/A	N/A
Ravalli County	54	30	\$903,000	\$192,000	\$711,000	\$148,000
Silverbow County	34	18	\$572,000	\$123,000	\$450,000	\$87,000
Yellowstone County	20	12	\$411,000	\$87,000	\$324,000	\$65,000

Multi-family construction provides on-going benefits to the local economy but at a lower level than single-family construction. This is related to differing spending patterns by occupants of multi-family units. One example of the spending differences is that many multi-family units have a common yard area which reduces the need for occupants to purchase lawn and garden equipment, landscaping items or outdoor furniture. The same is true of other items associated with exterior home maintenance. The differences in the spending patterns between the two groups of housing occupants are reflected in the on-going impacts in terms of numbers of jobs and income. Even though multi-family contributes at a lower level, the impacts are sizable for some counties. These impacts are more apparent when the impacts are converted to a per unit basis. Table 11 shows the first year impacts on a per unit basis while Table 12 displays the on-going effects in local communities.

Table 11: First Year Impacts per Multi-Family Unit Constructed

2002 housing impact data Multi Family construction	# of units	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
First year Impact Per Unit Constructed						
Cascade County	1	1.09	\$37,574	\$7,389	\$30,185	\$1,259
Flathead County	1	2.22	\$78,029	\$15,164	\$62,864	\$4,750
Gallatin County	1	1.83	\$56,824	\$10,697	\$46,126	\$7,406
Lewis and Clark County	1	1.50	\$55,250	\$10,750	\$44,500	\$2,500
Missoula County	1	0.91	\$31,475	\$6,025	\$25,451	\$2,861
Park County	N/A	N/A	N/A	N/A	N/A	N/A
Ravalli County	1	2.35	\$74,833	\$14,611	\$60,222	\$3,352
Silverbow County	1	1.12	\$36,382	\$7,088	\$29,265	\$1,853
Yellowstone County	1	1.35	\$49,850	\$9,700	\$40,200	\$3,100

During the initial construction year, local business incomes rose from \$ 6,025 in Missoula County to \$ 14,611 in Ravalli County for each multi-family unit constructed. Smaller local business incomes during the construction year for multi-family units may be partially attributable to lesser local purchases of appliances and other durable goods since multiple quantities are being ordered at once. With the exception of Missoula County, each unit constructed created at least 1 additional job in that community.

Table 12: On-going Impact per Multi-Family Unit Constructed

2002 housing impact data Multi Family construction	# of units	Local Jobs	Local Income	Local Business Owners' income	Local Wages & Salaries	Local Taxes
<u>Ongoing Impact Per Unit Constructed</u>						
Cascade County	1	0.52	\$16,944	\$3,685	\$13,278	\$2,222
Flathead County	1	0.56	\$18,700	\$3,886	\$14,807	\$3,800
Gallatin County	1	0.64	\$19,118	\$4,074	\$15,047	\$2,997
Lewis and Clark County	1	0.63	\$21,500	\$4,625	\$17,000	\$3,625
Missoula County	1	0.52	\$17,369	\$3,758	\$13,611	\$2,320
Park County	N/A	N/A	N/A	N/A	N/A	N/A
Ravalli County	1	0.56	\$16,722	\$3,556	\$13,167	\$2,741
Silverbow County	1	0.53	\$16,824	\$3,618	\$13,235	\$2,559
Yellowstone County	1	0.60	\$20,550	\$4,350	\$16,200	\$3,250

Table 12 displays the on-going effects of multi-family construction in the eight of the nine regions (data was not available for Park County). Each unit constructed generates about ½ of a full time job in the local economy and approximately \$ 4,000 worth of additional income to local businesses. One significant difference between single family and multi-family on-going effects is in the area of local government revenues. On a per unit basis, multi-family housing generates greater on-going levels of local taxes than single-family units. This may be somewhat related to the demographics of multi-family housing occupants. They may be younger, have fewer children and have more disposable income than single-family occupants. This would allow them to purchase a greater percentage of newer vehicles yielding higher vehicle property taxes. Rather than representing a drain on local resources due to higher population density, it would appear that multi-family housing provides more dollars per unit to local governments than single-family housing.

Comparison with the Earlier Study

The results discussed in this report are to some extent a follow up on an earlier study undertaken in 1999. One question that always plagues researchers is whether the results across time periods are consistent and if not, what changes have occurred that contributed to inconsistency. Table 13 shows a comparison for single-family homes of results from the earlier study with the results of the current study.

Table 13: Comparison of On-going Impact Single Family Construction

Single Family On-going Impact per home	# of Jobs		Local business Income	
	1998	2002	1998	2002
Cascade County	0.82	0.75	\$4,024	\$4,261
Flathead County	0.77	0.89	\$3,735	\$5,152
Gallatin County	0.71	0.79	\$3,820	\$4,097
Lewis & Clark County	0.63	0.59	\$3,652	\$3,761
Missoula County	0.75	0.79	\$4,009	\$4,529
Park County	0.50	0.85	\$3,500	\$3,955
Ravalli County	0.71	0.77	\$3,286	\$4,105
Silver Bow County	0.71	0.70	\$3,524	\$3,800
Yellowstone County	0.72	0.78	\$4,110	\$4,606

The results across these two time periods are fairly consistent with changes in population and economic growth of various communities during the period. The number of jobs created reflects changes in the extent of local economic opportunities available within differing counties. There may be some transfer of jobs between neighboring counties that are consistent with where people are doing most of their purchasing.

Table 14: Comparison of On-going Impact Multi-Family Construction

Multi-Family On-going Impact per unit	# of Jobs		Local business Income	
	1998	2002	1998	2002
Cascade County	0.38	0.52	\$2,077	\$3,685
Flathead County	0.35	0.56	\$2,066	\$3,886
Gallatin County	N/A		N/A	\$4,074
Lewis & Clark County	0.36	0.63	\$2,643	\$4,625
Missoula County	0.38	0.52	\$2,344	\$3,758
Park County	0.50	N/A	\$2,000	N/A
Ravalli County	0.36	0.56	\$1,929	\$3,556
Silver Bow County	0.35	0.53	\$2,200	\$3,618
Yellowstone County	0.37	0.60	\$2,530	\$4,350

Table 14 displays the comparison of the earlier study and the current one with respect to multi-family units. In the earlier study, multi-family data for Gallatin County were not available and in the current study, Park County had no multi-family construction. In terms of on-going impact, multi-family units have a more significant impact on job creation or continuation now than they did 4 years ago. The contribution to local business income is higher as well.

Conclusion

Consumer expenditures on housing can be a major driving force in a local area's economy. As consumers purchase and occupy the homes, demand increases for goods and services supplied by local businesses. Because of the ripple effect, many types of businesses beside construction businesses earn higher profits. This translates into more jobs being made available within a local economy producing additional demand for goods and services. These ripple effects are easy to see when local economies are shrinking but not as intuitive when economies are growing. Home construction plays an important role in the expansion of local economies. There are both short-term benefits during the construction year and long term benefits in terms of increased demand for goods and services. While it is easy to recognize the increased demand on public services and the associated costs from new housing, the benefits are easy to overlook. This is not to say that increased pressure on public services will not be costly to local governments which may require expansion of existing water treatment facilities or other fixed infrastructure, however this should be weighed against the long term benefits to the community of the increased population and associated demand.

APPENDIX A

SUMMARY OF INPUTS

	<u>Single-Family</u>			<u>Multi-Family Per Unit</u>			<u>Avg. Mills</u>
	<u>Average Price</u>	<u>Permit/ Impact Fees</u>	<u>Raw Land Cost</u>	<u>Average Price</u>	<u>Permit/ Impact Fees</u>	<u>Raw Land Cost</u>	
Billings/Yellowstone County	\$180,000	\$2,052	\$2,870	\$85,000	\$1,197	\$1,435	517
Bozeman/Gallatin County	\$149,200	\$8,306	\$7,174	\$92,300	\$5,483	\$3,587	474
Butte/Silverbow County	\$132,400	\$645	\$1,722	\$62,500	\$625	\$861	507
Great Falls/Cascade	\$167,000	\$1,000	\$2,870	\$66,000	\$250	\$1,435	501
Hamilton/Ravalli County	\$159,300	\$3,140	\$3,730	\$128,750	\$1,630	\$1,865	394
Helena/Lewis&Clark County	\$117,400	\$1,504	\$2,009	\$95,000	\$753	\$1,004	604
Kalispell/Flathead County	\$228,300	\$3,465	\$7,748	\$134,900	\$1,952	\$3,874	490
Livingston/Park County	\$146,450	\$3,493	\$4,878				423
Missoula/Missoula County	\$183,000	\$2,456	\$14,348	\$58,500	\$1,905	\$7,174	523