

The Economic Impact of Home Sales: Ten Counties in Montana



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Introduction

When discussing the economic engines in the economy of a state or region, most people would talk about mining, construction or manufacturing. One sector that is often overlooked is the real estate sector. In Montana, finance, insurance and real estate provide more employment than construction, manufacturing or mining. In fact, this sector accounts for the fourth largest employment in the state.¹ The basic function of the real estate industry is the marketing of lands and residential, commercial and industrial buildings built by the construction industry and the manufactured homes produced by the manufacturing sector. The marketing of these real properties is the final stage in the production of real assets. Regardless of how many millions of dollars are spent in the production, the value of these goods is only realized after they are marketed and sold. Since resources have already been allocated to produce these homes and buildings, substantial economic losses would be incurred if the properties remain unsold. The real estate industry provides a vital service in the movement of these assets between buyers and sellers. The purchase and sale of homes with the assistance of the real estate sector plays a major role in local economies. Like other industries, the real estate sector has both direct and indirect impacts on the local economy. The direct effects are focused on the real estate industry and businesses directly involved in home sales. Examples may be title companies, mortgage companies, and appraisal firms that are an integral part of the home sale process. Indirect effects are generated as real estate related businesses require more goods and services from other types of businesses such as accounting firms, advertising firms, and printing firms. Induced effects result from the increased incomes received by workers in all industries that they then spend on goods and services.

The economic impacts of home sales include two components. One component is the incomes that are generated by real estate companies as a result of sales and purchases of homes. The other component is expenditures on new homes that did not exist previously and the expenditures associated with trading up. When a new home is constructed, it represents the addition of a product that was not available in the area previously. Since new homes are an addition to the existing stock of houses in the area, they represent an inflow of funds into the local area. In order for a family to purchase a new home, they must either sell their existing home to another person in the area or sell it to someone who is moving into the area from elsewhere. If a person from outside the area purchases the new home, this represents an inflow of money into the local economy. If an existing area home owner purchases the new home, they must be able to sell their existing home. That existing home will be sold to someone within the local area who was not a home owner or a person who is new to the area economy. Unless the population of an area increases to absorb new homes being built, not all existing owners will be able to sell and trade up. So either way, the value of the new home represents an

¹ Northwest Area Foundation. *Montana: Employment by Industry, 1969-2000*.

increase in the production level of the real estate industry in the area. The change in the value of existing homes is another element in the economic effects. When a home owner sells their existing home in order to purchase a different existing home, they are trading up. It would be incorrect to count the full value of the sale on these two residences as an increase in the production level of the industry because both existed in the stock of housing previously.² The change in the value of the existing homes (appreciation) does represent an increase in the output value of the industry. For this reason, this study has estimated an average change in the value of the existing home stock and used that to estimate that portion of the impact on the economy. The combined value of the components is then estimated for the area.

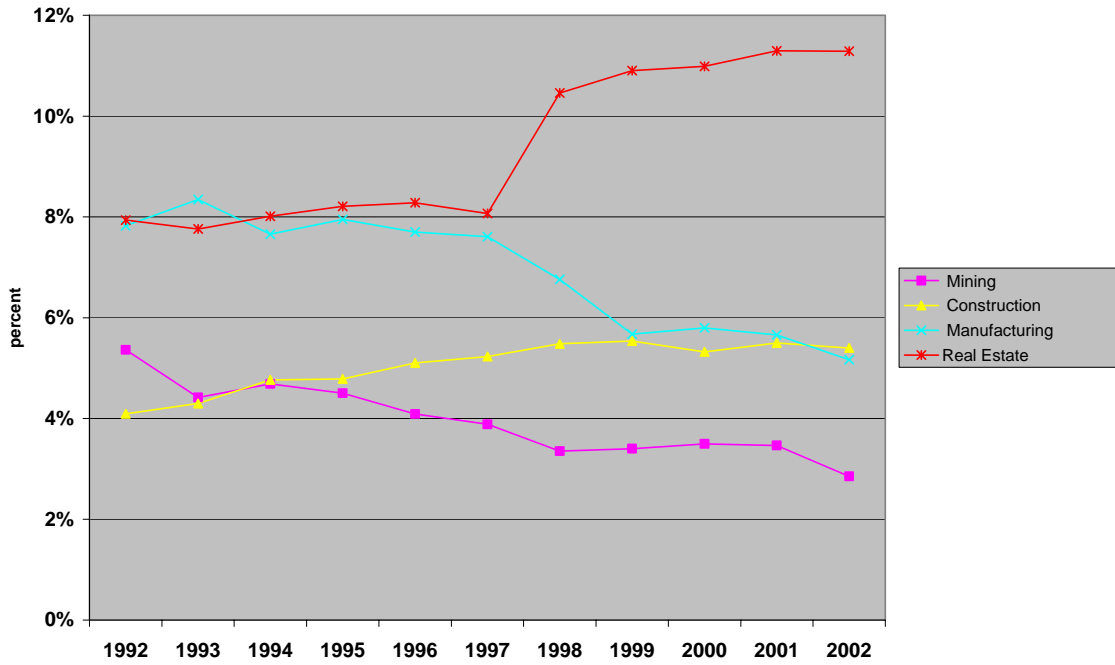
Importance of Real Estate Sector to Montana

An examination of Gross State Product provides an insight into the relative importance of the real estate industry to the economy of Montana. Gross State Product (GSP) is a measure of the dollar value of final demand goods and services produced by an industry in the state. The larger the contribution to GSP, the more important the industry is to the economic well being of the state. Figure 1 shows the percent of GSP contributed by selected industries in Montana over the past 10 years.

Figure 1

² A partial explanation of what is occurring is as follows. For most homes, a mortgage would exist on the current residence. When the home owner sells this residence and purchases a different one, the change in the banking sector is the difference between the old mortgage amount and the new mortgage amount, not the full value of the new mortgage. The appreciated value of the “new” residence would be financed but the value of the “old” residence would be paid off. So the net change for the banking system is much smaller than the full value of the “new” mortgage.

Percentage Of Montana Gross State Product- Selected Industries

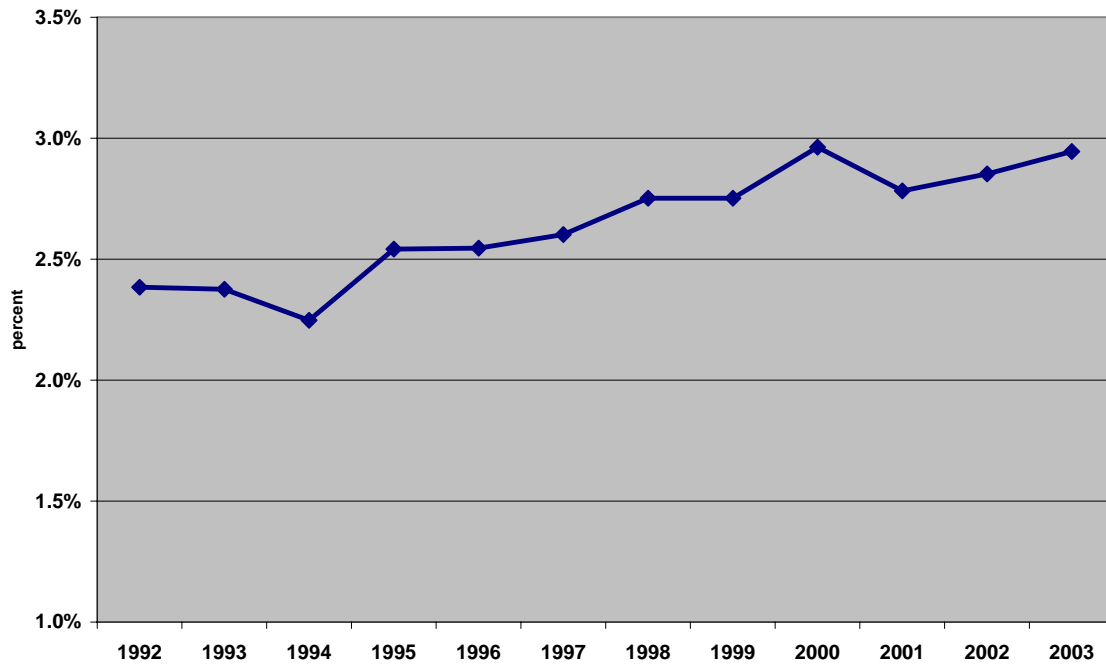


Source: U.S. Bureau of Economic Analysis, Regional Economic Data

Figure 1 indicates that the real estate sector has played a more important role in Montana’s economy during the past ten years than have construction, mining or manufacturing. The real estate industry has accounted for between 7.8 and 11.3 percent of the total value of goods and services produced in the Montana economy.

An examination of state employment data indicates the relative importance of the real estate sector in providing jobs in the economy. Figure 2 illustrates the contribution of the real estate industry to Montana in terms of percentage of jobs.

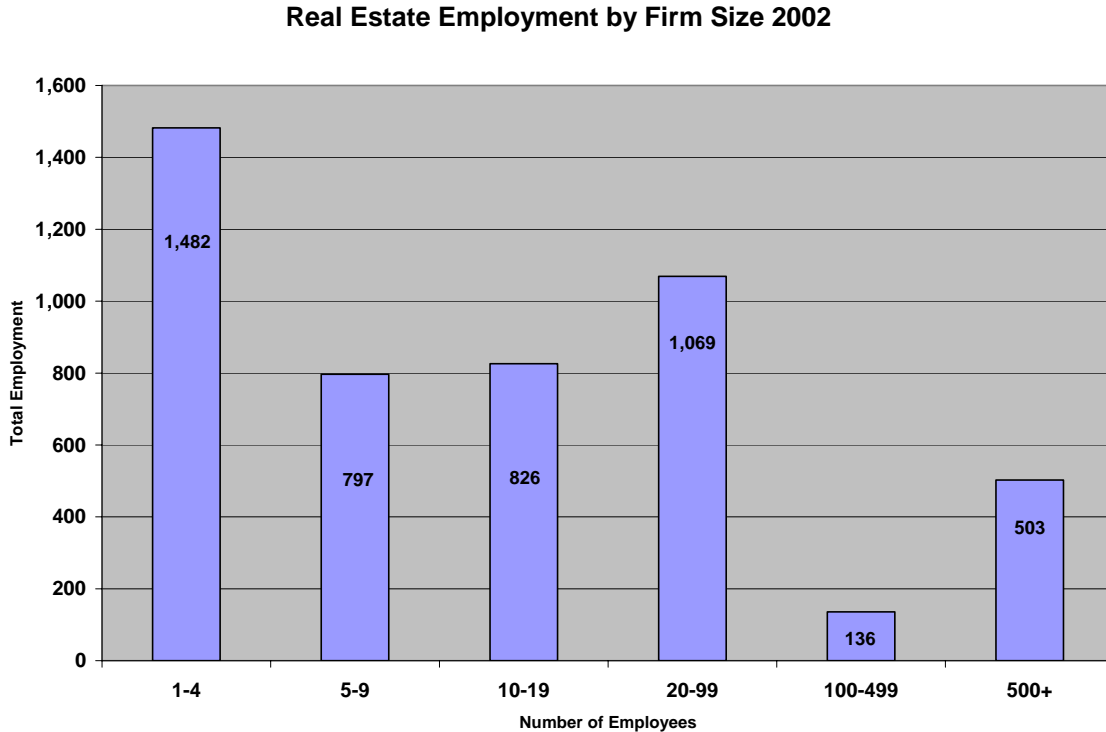
Figure 2

Real Estate Employment as a Percent of Total Employment

Over the past ten year period, employment in the real estate sector has grown from 2.2 percent of total jobs to 2.9 percent of total jobs within the state. Statewide, real estate businesses have gone from providing around 10,000 jobs in 1992 to over 17,000 jobs by 2002. As shown in Figure 2, the relative importance of the real estate industry as an employer has grown over the 10 year period.

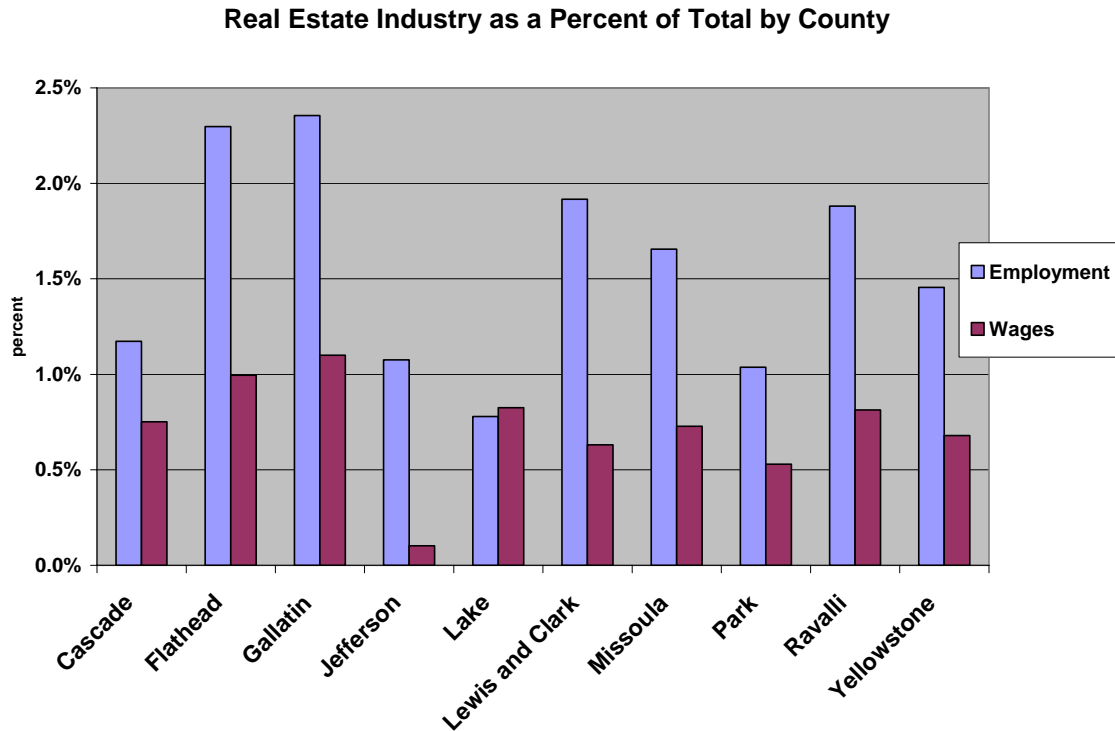
Although the industry provides a significant number of jobs, most real estate firms are small in size. Figure 3 below details the distribution of jobs by size of firm. The predominant type of firm, 31 percent of total firms, has 4 employees or less while firms with less than 20 employees account for 64 percent of all firms.

Figure 3



Importance of Home Sales to Local Areas

Not only is the real estate industry important to the state of Montana, as a whole, it also provides significant economic benefits at the local or county level. This study evaluated the economic impact of home sales in ten counties in Montana. The counties evaluated contain the largest cities in Montana or serve as bedroom communities for the larger population areas. The counties include Cascade (Great Falls), Flathead (Kalispell), Gallatin (Bozeman), Jefferson, Lake, Lewis and Clark (Helena), Missoula (Missoula), Park (Livingston), Ravalli (Hamilton), and Yellowstone (Billings). A simple review of the number of jobs that the real estate industry provides in each county or the percentage of the total wage bill paid by the real estate industry in each county understates the importance of this sector. Figure 4 below shows the percent of total jobs in the county related to real estate. This figure also shows the percent of total wages earned in the county from employment by real estate businesses. For most of the ten counties, the real estate industry supplies less than 2 percent of the jobs in that county. As a contributor to wage earnings, real estate businesses account for less than 1 percent of the overall wage bill in all but one of the ten counties. These numbers imply that the real estate sector plays a very small role in the economy of the local area. In fact, home sales and the businesses that facilitate these sales are a significant economic engine in many counties.

Figure 4

Capturing the Full Economic Effect

Figure 4 does not truly reflect the importance of the real estate industry to local regions because it does not reflect earnings from self employment in real estate nor does it account for demand generated for other goods and services. To capture the full effects of home sales on the local economy, it is necessary to use an input-output model which tracks the spending between different sectors of the economy that are associated with a change in any particular sector. This study utilized IMPLAN, an input-output model developed by the Minnesota IMPLAN Group based on a model originally developed at the University of Minnesota. Input-output models divide the effects of an action into three different categories: direct effects; indirect effects; and induced effects. The magnitude of these effects was based on data from the various counties on home sales during 2003.

As most people who have purchased a home are aware, the sale and purchase transaction involves a number of other businesses besides the real estate firm. Other types of firms that are frequently involved are: banks or mortgage firms, appraisers, engineers or inspectors, title companies and attorneys. These firms would be included in the direct effect component of home sales. The sale of a home not only generates demand for the services provided by real estate firms but may also generate demand for the services of plumbers, HVAC companies, roofing and siding firms and landscape companies to correct deficiencies prior to the closing of the sale. An increase in the housing market may cause the real estate firm to utilize more advertising or accounting services. These types of business to business transactions are captured in the indirect effects component of the economic impact. The third component is referred to as the

induced effect. The induced effect results from increased spending by workers in the previously mentioned businesses and home owners spending to redecorate or improve their new purchase. The full measure of the importance to or impact on a local economy needs to include all three of these effects. The extent of the indirect and induced effects on a local area will be dependent on the availability of goods and services within the local area and the regional spending patterns. In smaller areas, the indirect and induced effects will typically be smaller because some goods and services will have to be purchased outside of the county.

Local Employment Impacts

Table 1 **Employment Impacts by County**

Employment Impact (Numbers of Jobs)	Cascade	Flathead	Gallatin	Jefferson	Lake	Lewis and Clark	Missoula	Park	Ravalli	Yellowstone
Direct	350.0	647.0	904.7	43.4	235.2	292.1	600.6	69.6	197.6	544.2
Indirect	100.7	218.6	304.7	8.2	72.6	80.5	204.3	19.2	55.2	182.7
Induced	73.2	138.3	176.8	3.4	48.2	50.4	131.4	11.0	32.1	111.8
TOTAL JOBS	523.9	1004.0	1386.2	55.1	356.0	422.9	936.3	99.8	285.0	838.8

Table 1 summarizes the job creation and continuation that occurs as a result of home sales within each of the ten study areas. All of the numbers in Table 1 represent full time equivalent jobs in the subject county. For employment purposes, the counties have been broken out into two groups. The more populous counties which contain larger towns and cities make up one group. These include Cascade, Flathead, Gallatin, Lake, Missoula and Yellowstone. An examination of the employment multipliers for these counties shows a range between 1.46 and 1.55. This means that for every job directly supported by the real estate sector, approximately another one-half of a full time equivalent job is created. The difference in the multipliers is related to the ability of the local economy to serve as a source of supply for the goods and services desired by the businesses and the consumers. Figure 5 displays the three effects on jobs in the local economies for the larger counties.

Figure 5 Larger County Employment Impacts

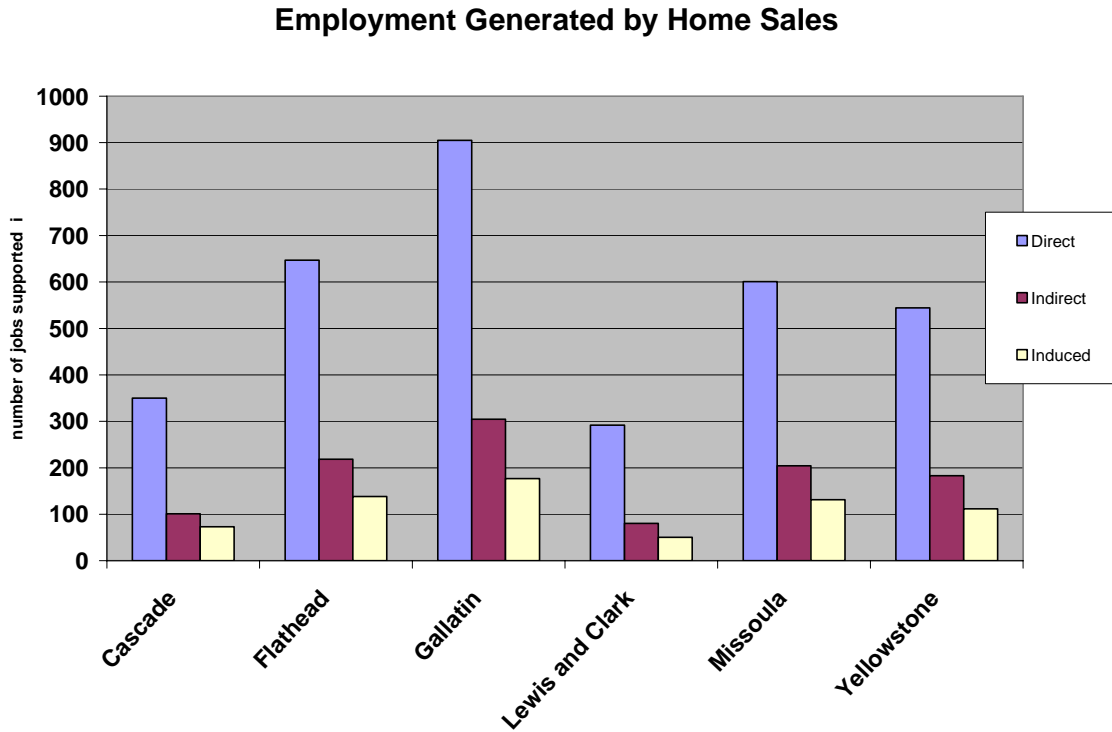
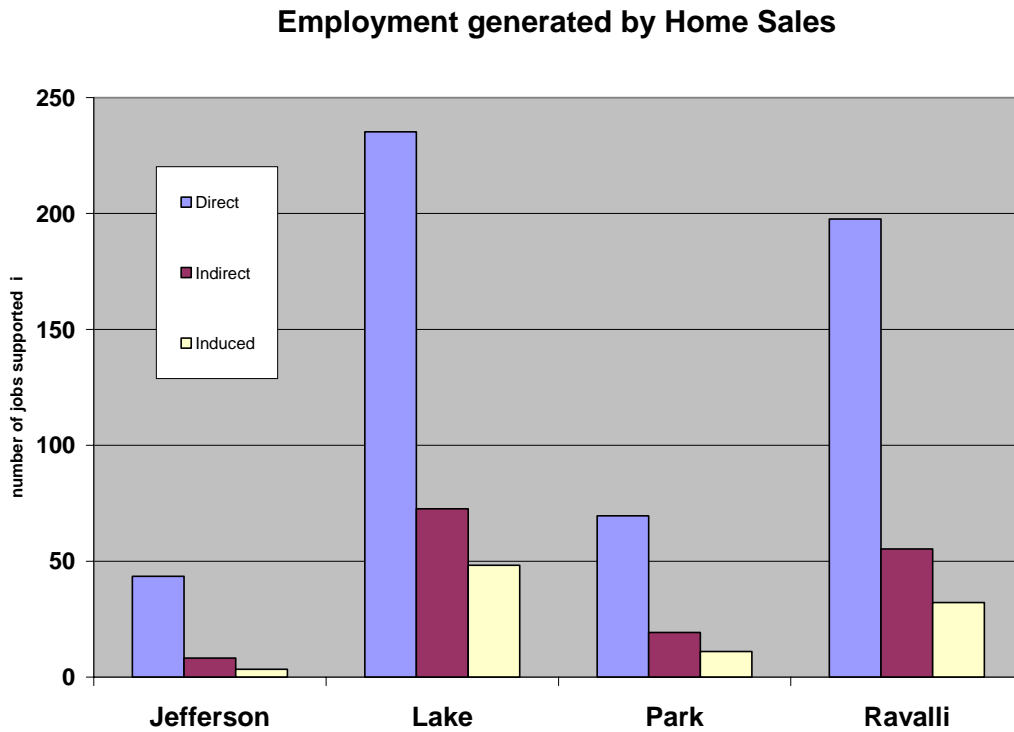


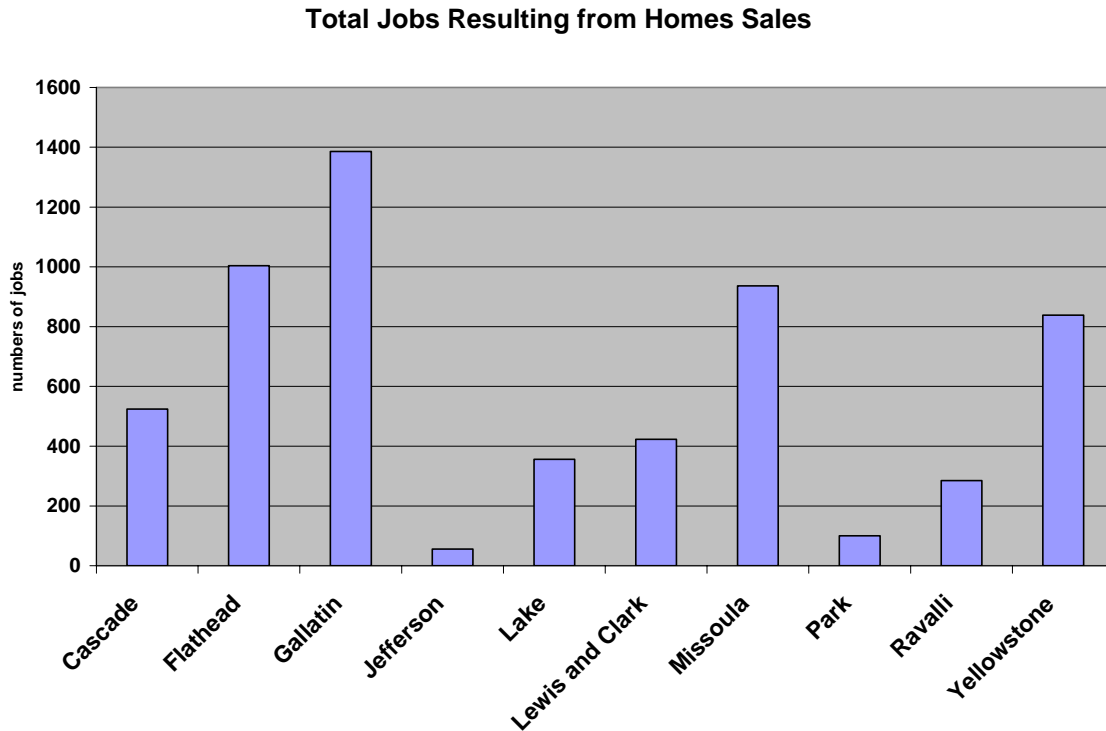
Figure 5 shows the relative significance of the economic impacts for the 6 largest counties. In Gallatin County, 900 real estate sector jobs are supported while in Missoula and Flathead Counties, around 600 jobs are supported. The variability across the counties is related to two factors. Because many real estate professionals work on a commission basis, the number of jobs directly supported by home sales will be affected by both the number of sales and the dollar value of the sales. Additionally, the proportion of new home sales to existing home sales has an impact on the extent of the economic impact. In both Gallatin and Flathead counties, the proportion of new to existing homes is higher than for the other four counties and the total dollar value of homes sold was higher than in the other counties. Figure 6 displays the impacts on employment in the smaller population counties. From a multiplier viewpoint, the impacts are similar to the larger counties but the overall magnitude of homes sales is much smaller and therefore would not display well graphically with the larger counties.

Figure 6 Smaller County Employment Impacts



The multipliers in these less populated counties typically range from 1.27 to 1.44, meaning that for each job in the real estate sector, between one quarter and four tenths of another job is supported in the local economy. In Park, Ravalli and Jefferson Counties, the induced portion of the effect is smaller than for the more populous counties probably relating to consumers in those areas going to the nearby but out of county population centers to shop. Figure 7 below summarizes the total numbers of jobs that exist in these counties as a result of the real estate sector and home sales. Increases in the number of homes sold which helps to support increases in the real estate industry, in turn creates additional jobs in the rest of the county's economy.

Figure 7



The Value of Output Produced in Local Economies by Home Sales

Another measure of the economic contribution of a sector to the overall economy in an area is the value of output produced. At the county level, the direct portion is similar to the GSP contribution at the state level. When dealing with home sales, there are two different components that contribute to the dollars value of goods and services produced in the economy. The first is the dollar value of earnings for services in the real estate sector that are related to the purchase and sale of properties. The second component is the increased value of housing as a commodity. As the value of housing increases so does the wealth of the consumer sector that owns housing. New construction adds to the overall value of the housing stock and appreciation in existing homes also adds to the overall level of wealth. In measuring the contribution to the economy of existing home sales, it is only appropriate to utilize the appreciated value of the homes because this represents the gain from previous time periods in consumer wealth. In this study, the increased value in housing was combined with the increased earnings for the industry to examine the effect on output by county. Table 2 summarizes the overall impacts on output by county in millions of dollars. As the table indicates, Gallatin

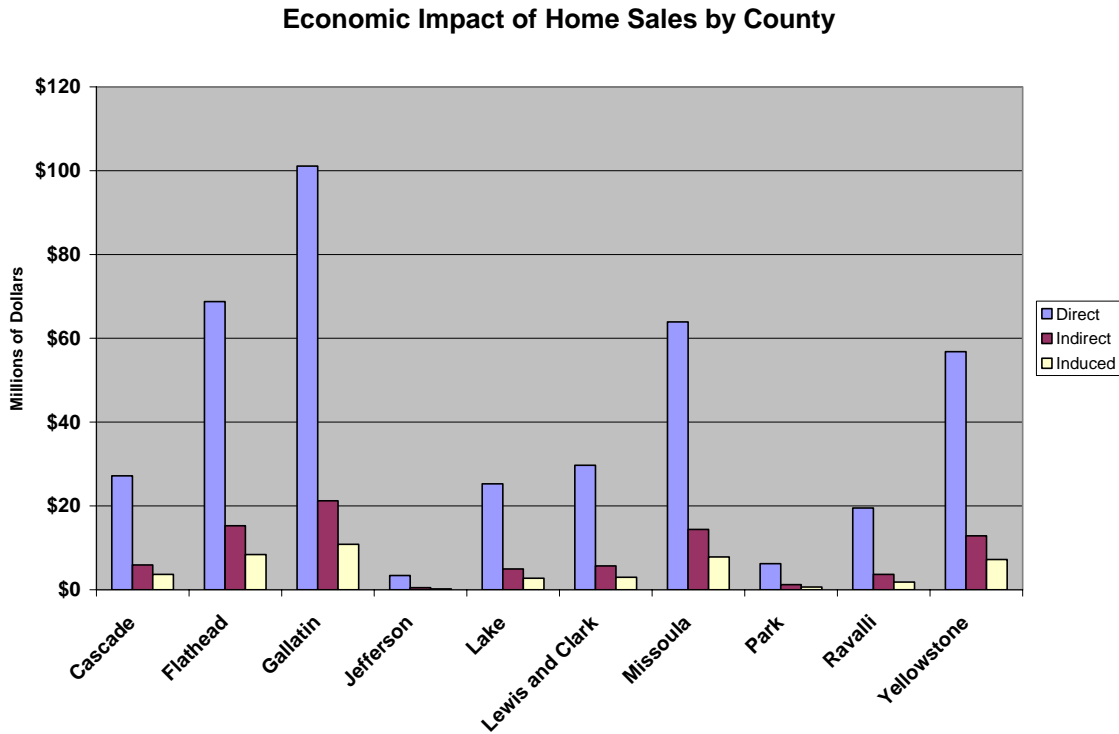
County received the largest economic impact at \$ 133 million while Jefferson County received an impact of slightly over \$ 4 million.

Table 2 **Value of Output related to Homes Sales**

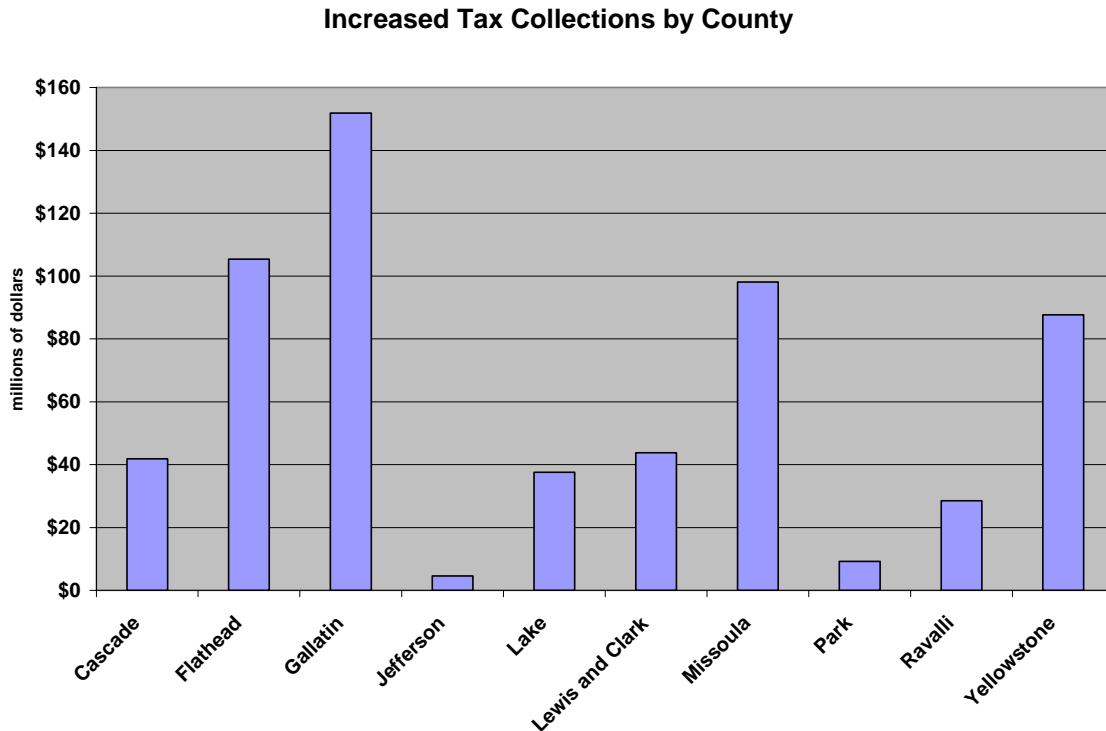
Output impacts (millions of dollars)	Cascade	Flathead	Gallatin	Jefferson	Lake	Lewis and Clark	Missoula	Park	Ravalli	Yellowstone
Direct	\$27.14	\$68.77	\$101.11	\$3.36	\$25.26	\$29.73	\$63.90	\$6.20	\$19.50	\$56.84
Indirect	\$5.92	\$15.27	\$21.25	\$0.49	\$4.94	\$5.66	\$14.39	\$1.22	\$3.66	\$12.84
Induced	\$3.67	\$8.37	\$10.84	\$0.18	\$2.72	\$3.01	\$7.79	\$0.62	\$1.82	\$7.21
Total Output	\$36.73	\$92.41	\$133.20	\$4.03	\$32.93	\$38.39	\$86.08	\$8.04	\$24.98	\$76.88

For most of the counties, the indirect impact is about 20 percent of the direct impact, meaning that other non real estate related businesses receive about 20 cents for every dollar spent in the real estate sector. The induced effect varies from 5 percent of the direct to 13 percent of the direct effect. This is a result of increased earnings by workers and business owners who then spend additional dollars on other goods and services. The output multipliers for home sales vary from 1.2 to 1.36. This means that for every dollar of goods and services produced in the real estate industry from home sales, another 20 to 36 cents of output is produced in that county. A portion of this output is related to the increased spending by home owners to furnish or update the home as they move in and would be reflected in the induced effects. Figure 8 shows the overall impact of home sales on the ten counties.

Figure 8



Another effect that results from the home sales and the change in the earnings levels of firms and the change in the value of the housing stock in the county is the increased tax collections that will occur. Property tax collections will increase when property is reappraised or new property is added to tax roles. Additionally, business tax increases will occur as more businesses move into the area as a result of higher demand for their services or products. Consumers who have increased incomes and increase their spending will generate additional tax payments for items such as new vehicles. Figure 9 shows an assessment of the likely effect on tax collections by county that are a result of the increased home sales.

Figure 9

Increases in tax collections range between \$ 151 million in Gallatin County to a low of \$ 4 million in Jefferson County. For Flathead, and Missoula Counties, tax revenues are expected to increase around \$ 100 million based on home sales. These revenue increases assume that there will be a re-evaluation of existing property as it changes hands and that the assessment value change approximates the appreciation in the home.

Summary

Simply looking at the dollar value of income reported by an industry often understates the impact of the industry on the state or local economy. Such is the case with the real estate industry. The economic impact of selling and purchasing homes in an area is significant. For each job in the real estate sector, home sales create another half of a full time job. For every dollar of output produced by the real estate sector, another 25 to 36 cents of output is produced in the local economy. Many of these dollars are from outside of the local area and are an addition to the income base in the area. Additionally, communities benefit in the increased tax collection that can be used to provide services to area residents. It is more difficult to recognize economic impacts in an industry such as real estate that is a service producing industry than it is in manufacturing, a goods producing industry. However, it is clear that the services provided by the real estate sector in producing home sales do have a significant impact on jobs, taxes and dollars of income generated in local communities.

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