



# Survival Rates for Montana's New Business Startups

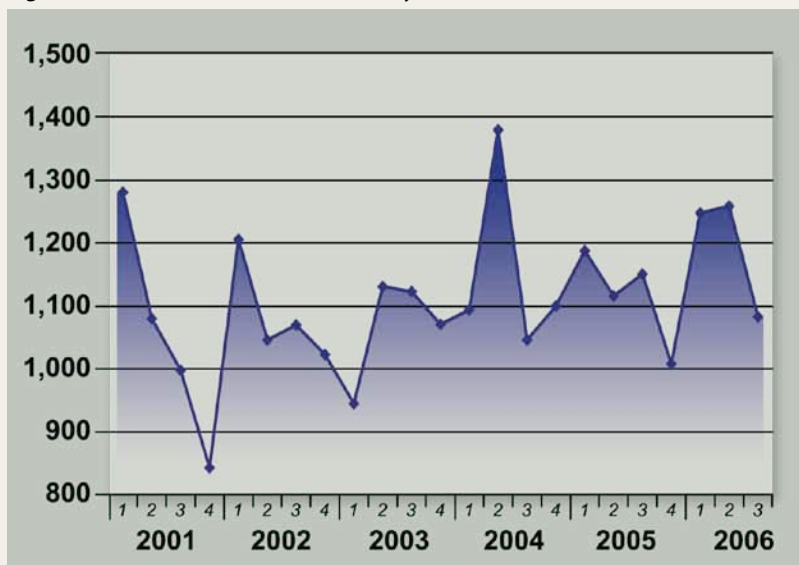
by Barbara Wagner, Economist

New businesses are the agents of economic evolution. Each new startup adds a new variation on established business models or generates new ideas, products, and services that allow the business to compete in an ever-changing economy. But not every new idea works, and not every new product finds a receptive market. Only the businesses that fulfill a need in the current economic climate survive.

Montana is a fertile ground for new business startups. According to the January 2009 Economy at a Glance, Montana's entrepreneurial rate is almost double that of the U.S. average and seems to be increasing over time. However, many of the new businesses may not be successful in staying open and hiring employees.

One useful measure for determining whether businesses remain open is the survival rate for new business startups. The survival rate is the percentage of new businesses that are successful in staying open for a certain period of time. This study calculates survival rates for Montana businesses that started in the first quarter of 2001 through the third quarter of 2006.

**Figure 1: Montana Business Births by Quarter**



This study uses data from the Quarterly Census of Employment and Wages (QCEW) to determine when a business began and how many employees it hired each quarter. Because the data for the QCEW comes from the mandatory reporting by businesses for unemployment insurance (UI), the QCEW is a fairly accurate data source. However, it excludes businesses that are not covered by the UI program, such as the self-employed or independent contractors.

To be included in the study as a new Montana business, the business had to be a new company, rather than an additional branch of the same company. For example, two McDonald's establishments in two separate locations would be considered one business. Opening a third McDonald's would increase the number of employees hired by the business, but would not be considered a new business.

Further, businesses were required to have had at least one employee during the year in order to be included in the study. The combination of the employee requirement and the exclusion of the self-employed workers means that many small start-ups where the owner provides all of the necessary labor are not represented in the study. Of the 40,140 establishments reported in the QCEW for 2007, 84% (33,866) reported employing at least one employee during the year. However, the study includes seasonal businesses that only have employees for a portion of the year, such as construction or guide services. There were 25,467 businesses that met these requirements and were included in the sample.

Figure 1 displays the breakdown of the start dates for these businesses by quarter. During the time period of 2001 to 2006,



the number of new business births per quarter trended upward, which is not surprising due to the economic conditions during this time period. Montana's economy was growing during the 2001 to 2006 timeframe. During periods of economic expansion when economic optimism is high and demand is strong, there are a greater number of business startups.

**Figure 2: Percentage of New Business Births by Industry**

	Average Births, 2001-2006	Share of New Births	New Births as a % of Existing Businesses
Agriculture, Forestry, Fishing, and Hunting	106	2%	13%
Mining, Quarrying, and Oil and Gas Extraction	50	1%	18%
Utilities	8	0%	8%
Construction	895	20%	23%
Manufacturing	143	3%	11%
Wholesale Trade	206	5%	11%
Retail Trade	406	9%	10%
Transportation and Warehousing	156	4%	15%
Information	83	2%	17%
Finance and Insurance	169	4%	14%
Real Estate and Rental and Leasing	200	5%	16%
Professional and Technical Services	502	11%	18%
Management of Companies and Enterprises	7	0%	33%
Administrative and Waste Services	277	6%	21%
Educational Services	47	1%	20%
Health Care and Social Assistance	280	6%	12%
Arts, Entertainment, and Recreation	117	3%	13%
Accommodation and Food Services	384	9%	13%
Other Services	332	8%	11%
<b>TOTAL</b>	<b>4,411</b>		

**Figure 3: Survival Rate of Montana New Businesses**

Birth Year	2001	2002	2003	2004	2005	2006	Average
1 year (4 quarters)	72%	72%	74%	72%	73%	71%	72%
2 years (8 quarters)	59%	60%	60%	61%	61%	58%	60%
3 years (12 quarters)	51%	52%	52%	53%	40%		50%
4 years (16 quarters)	45%	46%	45%	35%			43%
5 years (20 quarters)	40%	41%	30%				37%

Figure 1 also shows that the number of Montana business births appears to vary seasonally, which is likely due to the industry mix of starting businesses. The industry mix for startups are shown in Figure 2 using the average number of new business births per year by industry for the years 2001 to 2006. The largest number of new businesses occurred in the Construction industry with an average of 895 births per year and representing approximately 20% of new businesses. The large number of startups in Construction explains the seasonal variation in business startups.

The distribution of average number of births per year by industry is primarily an indication of the relative size of the industry in the economy. However, some industries had higher rates of new business births than others, as shown in the last column of Figure 2 that displays the average births as a percent of the existing businesses in 2000. The 895 average births per year in the Construction industry represent approximately 23% of existing construction businesses in 2000. The high rate of new construction businesses relative to the number of existing establishments likely is due to rapid growth and high demand in the Construction industry during 2001 to 2006, which encouraged more entrepreneurs to start businesses in this rapidly growing industry.

In addition, the Construction industry does not require the owner to hold an advanced degree or to purchase inventory or commercial real estate. Industries like construction with low barriers to entry and low startup costs generally have greater rates of business startups.<sup>1</sup> Conversely, Utilities companies have significant startup costs, resulting in low numbers of establishments entering the industry.

The survival rate for all Montana new businesses is shown in Figure 3. The survival rate shows the percentage of new businesses that are still open and hiring at least one employee for various time

<sup>1</sup>Headd, Brian. 2003 "Redefining Business Success: Distinguishing Between Closure and Failure" *Small Business Economics*, v. 21, p 51-61. Printed by the U.S. Business Administration.



frames. Of the 4,198 new business births in 2001, 72% of the establishments were still hiring employees four quarters (one year) after their inception quarter. Eight quarters (two years) after, 59% of businesses were still operating, while 40% of businesses were in operation a full five years after the inception quarter.

The survival rates for Montana businesses may seem low, but national research indicates Montana is fairly consistent with the national averages. The Bureau of Labor Statistics found that 66% of new establishments born in the second quarter of 1998 were still in existence two years after their birth and 44% survived after four years.<sup>2</sup> Further, it is important to realize that a business closure does not always represent failure. Some businesses may be bought out by other businesses or close due to

the personal reasons of the owner. Research indicates that about one-third of closed businesses are successful at closing.<sup>3</sup>

The impact of the national recession is evident in the business survival rates for the years 2003 through 2006. The national recession impacted the business climate primarily during 2008. The percentage of businesses surviving was much lower when the survival period included 2008, which would be the five-year period for businesses born in 2003, four years for businesses born in 2004, and so on for those born in 2005 and 2006. For those born in 2006, the two-year survival rate was 58% compared to a rate of 59% to 61% in prior years. The four-year survival rate for businesses born in 2004 was only 35%, compared to a rate of about 45% in other birth years when 2008 was not included in the survival period.

The success rate for new businesses varies significantly by the industry and by size class. Figure 4 examines the survival rate by industry using an average of the survival rates for businesses starting in years 2001 to 2003. Although the low barriers to entry in the Construction industry result in a high rate of new startups, the high competition in the industry also results in a lower than average number of these businesses being successful. In comparison, the Utilities industry has relatively high startup costs, resulting in a low number of startups and a high success rate compared to the other industries, with 57% of Utility businesses remaining in business after five years compared to 37% of all businesses.

The size of the business also plays an important role in determining its success. Larger businesses, particularly Montana subsidiaries of large national or multi-national corporations, have a larger

**Figure 4: Breakdown of Survival Rates by Industry for Businesses Starting in 2001 to 2003**

Industry	Average of 2001 to 2003				
	Year 1	Year 2	Year 3	Year 4	Year 5
Agriculture, Forestry, Fishing, and Hunting	66%	54%	47%	42%	34%
Mining, Quarrying, and Oil and Gas Extraction	69%	56%	51%	44%	32%
Utilities	86%	81%	71%	57%	57%
Construction	66%	54%	48%	42%	35%
Manufacturing	74%	61%	53%	45%	40%
Wholesale Trade	75%	62%	53%	45%	37%
Retail Trade	79%	65%	57%	50%	39%
Transportation and Warehousing	68%	56%	44%	41%	34%
Information	67%	54%	48%	37%	30%
Finance and Insurance	72%	60%	54%	48%	41%
Real Estate and Rental and Leasing	77%	67%	60%	54%	44%
Professional and Technical Services	74%	62%	54%	49%	38%
Management of Companies and Enterprises	71%	71%	47%	47%	24%
Administrative and Waste Services	66%	52%	45%	40%	35%
Educational Services	71%	62%	48%	44%	36%
Health Care and Social Assistance	82%	70%	61%	55%	46%
Arts, Entertainment, and Recreation	71%	61%	53%	47%	34%
Accommodation and Food Services	76%	61%	53%	44%	34%
Other Services	74%	59%	50%	43%	36%

<sup>2</sup>Knaup, Amy E. 2005. "Survival and Longevity in the Business Employment Dynamics Data" *Monthly Labor Review*, May 2005. Printed by the Bureau of Labor Statistics, U.S. Department of Labor.

<sup>3</sup>Hedd, 2003.



asset pool to utilize when establishing new businesses in Montana, thus allowing for the business to grow more quickly and more easily adapt to changes in demand. Further, subsidiaries of larger businesses are more successful because their product, marketing, and business plan have already proved successful in other areas. Experience in other markets helps these businesses avoid costly mistakes in Montana. Figure 5 shows the survival rate by the size of the business at peak employment.

**Figure 5: Success Rate of Montana New Businesses by Size Class**

# of Employees	Year 1	Year 2	Year 3	Year 4	Year 5
1	52.3%	36.6%	29.1%	24.1%	18.7%
2 to 4	73.3%	59.3%	50.6%	44.1%	35.7%
5 to 9	85.0%	73.1%	65.9%	58.4%	48.7%
10 to 49	87.2%	79.2%	71.2%	63.6%	52.6%
50 or More	81.7%	75.7%	72.4%	67.2%	57.5%

**Figure 6: Five-year Survival Rate by Industry and Size Class**

	1 Employee	2 to 4 Employees	5 to 9 Employees	10 to 49 Employees	50 or More Employees
Agriculture, Forestry, Fishing, and Hunting	5%	16%	28%	37%	25%
Mining, Quarrying, and Oil and Gas Extraction	7%	21%	12%	16%	28%
Utilities	7%	33%	20%	17%	100%
Construction	7%	14%	21%	28%	19%
Manufacturing	9%	23%	24%	29%	23%
Wholesale Trade	8%	25%	42%	29%	46%
Retail Trade	8%	15%	28%	34%	29%
Transportation and Warehousing	9%	16%	25%	25%	28%
Information	7%	15%	29%	27%	29%
Finance and Insurance	11%	28%	32%	33%	26%
Real Estate and Rental and Leasing	15%	22%	32%	38%	22%
Professional and Technical Services	10%	23%	34%	35%	20%
Management of Companies and Enterprises	6%	15%	14%	0%	0%
Administrative and Waste Services	8%	14%	22%	29%	29%
Educational Services	5%	22%	29%	42%	50%
Health Care and Social Assistance	15%	22%	28%	32%	33%
Arts, Entertainment, and Recreation	9%	10%	26%	26%	35%
Accommodation and Food Services	2%	13%	15%	21%	26%
Other Services	9%	20%	29%	38%	63%

By the end of the fifth year, only 18.7% of the smallest businesses were successful, compared to 57.5% of large businesses. Yet, over 90% of new Montana businesses start with less than 10 employees, with 55% starting with only one employee.

Figure 6 combines the influence of both size and industry in one table using the five-year success rate. The success rates for small businesses are higher in the Finance and Insurance, Real Estate and Rental and Leasing, and the Health Care and Social Assistance Industries. These industries may be more suitable for smaller businesses, perhaps because the personal relationships and trust that are important in these industries are more easily fostered in smaller businesses. In many industry categories, the second largest size class, 10 to 49 employees, outperforms the largest size category. This is the case in Agriculture, Forestry, Fishing, and Hunting; Construction; Retail Trade; and the Professional and Technical Services industry sectors.

In conclusion, about 37% of Montana new businesses remain open and hiring employees after five years, but this rate of success varies by industry and size. Small businesses and businesses in industries with low startup costs are particularly sensitive to business closure, yet these types of businesses comprise the majority of new business startups. The businesses survival rate may seem low, but this rate is fairly consistent with the national averages. Further, not all business closures are failures, some are businesses that close successfully after being purchased by other owners or closed for the owner's personal reasons. However, the statistics on survival rates by size and industry may suggest targets for specialized technical assistance from government or private programs that work to provide information and help for entrepreneurs in order to improve Montana's new business survival rates.