

Survival Rates for Montana's New Business Startups

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Montana's economy is in constant evolution

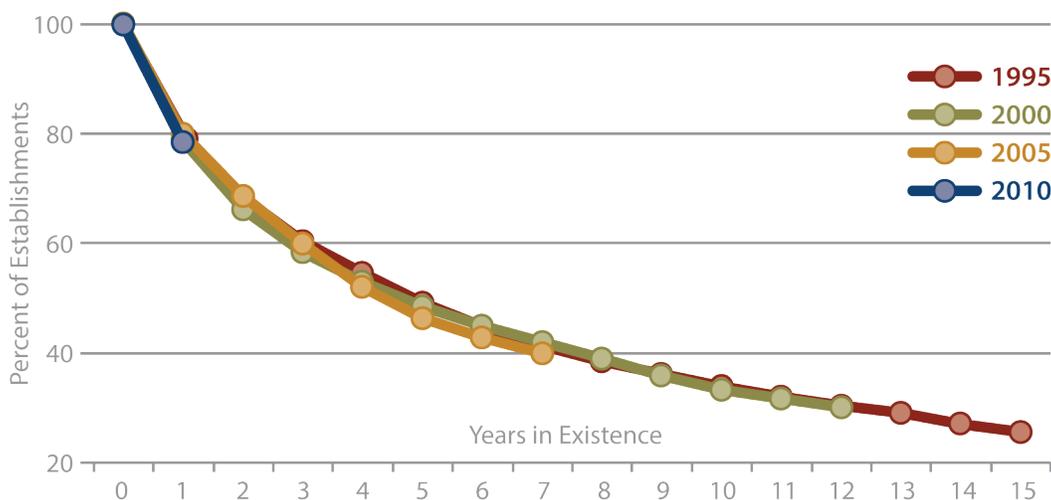
with new businesses opening and existing businesses closing all the time. Currently, Montana has one of the highest rates of entrepreneurial activity, and ranks number one among states with a business startup rate of 530 per 100,000 adults.¹ The jobs and wages created from these new businesses help fuel continued economic growth, and make Montana's economy vibrant and dynamic. However, starting a business is just the beginning. Business owners must constantly compete with new processes, technologies, products, and services in order to keep a business in operation and growing. It is an economic reality that not all new businesses will succeed, and many businesses, new and existing, will close.

in the minority, but the rate of business closures slows significantly as firms gain experience. Figure 1 also demonstrates that survival rates of businesses are fairly consistent over time, with firms starting in 1995, 2000, 2005, and 2010 having very similar survival rates. The recent recession had an impact on the survival rates of businesses starting in 2005, with lower than usual survival rates in the fourth and fifth years (corresponding to the worst of the recession in 2009 and 2010). However, even with the recession, 2005 U.S. businesses were only off the trend line slightly.

Figure 1 illustrates the survival rates for U.S. businesses by birth year. Roughly 20% of businesses don't last a full year. By the third year, only about 60% of businesses are still open. Businesses older than ten years are certainly

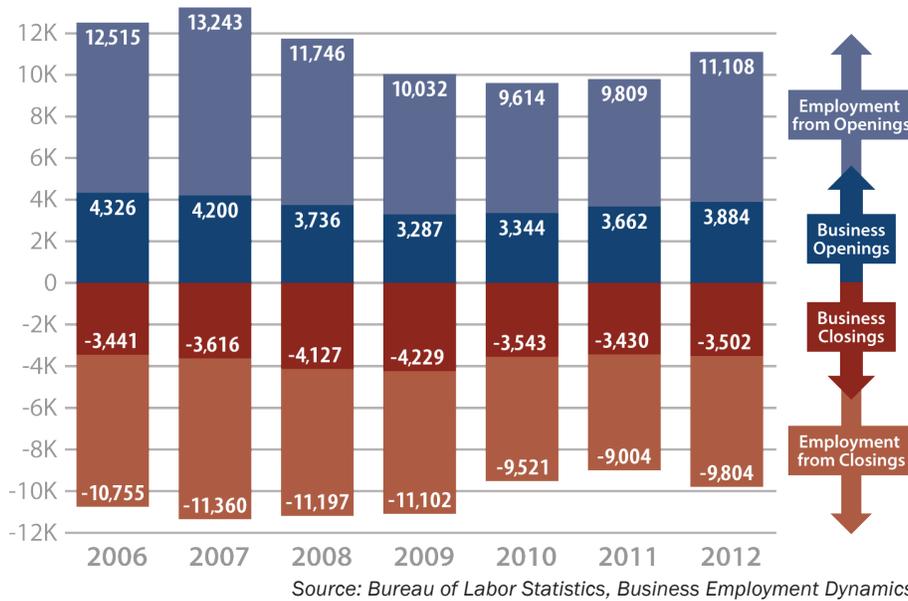
The same type of business churning, and challenges faced by owners in keeping an business open, are faced by Montana firms as well. This article examines startup and survival rates for new businesses in Montana by industry and business size to identify the impacts of the most recent recession on new business outcomes.

Figure One: Survival Rates for Establishments by Birth Year



Source: Bureau of Labor Statistics, Business Employment Dynamics

Figure 2: Business Openings and Closings, 2006-2012.



Recent Startup Rates in Montana

The most recent recession was felt across all aspects of Montana’s economy, including the number of businesses opening and closing. The number of businesses opening is typically higher than the number of business closing during times of economic expansion, while the rate of closures typically surpasses that of openings under slowing economic conditions. The number of new business openings and employment were both trending upwards in 2006 and peaked in 2007 with 4,200 businesses opening and over 13,000 jobs added. However, from 2008 forward, the impact of the recession is evident, with declining business openings and greater closures. 2010 marked the trough of the recession, while 2011 and 2012 brought improvements in the business openings rate.

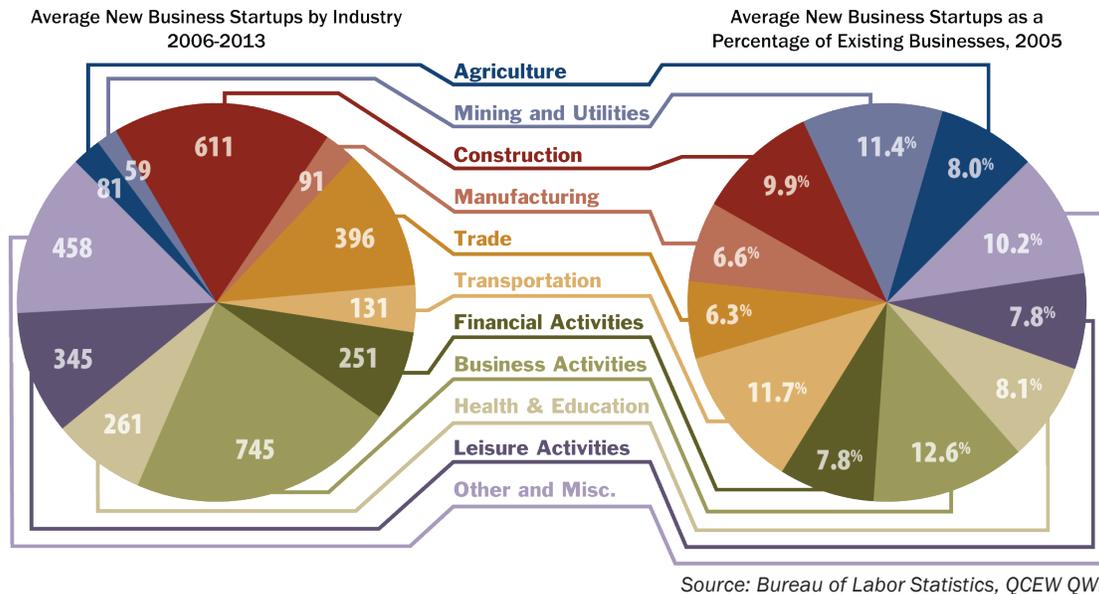
One reason that overall business startups were sensitive to the economic recession is because a sizeable portion of new startups are within the construction industry. The housing and construction bubble in 2006 and 2007 drove up business startups in this industry and contributed to the overall total number of startups being higher. Figure 3 displays the average number of new business startups per year by industry from 2006 through 2013. To be included in this industry analysis, businesses had to have at least one reported payroll employee within the first year of existence and be new startup businesses, not additional branches or locations of an existing company. Roughly 27,414 businesses met these requirements from 2006 to 2013. Startups in the Construction and Business activities industries comprise the largest portion of new startups, with Trade, Leisure activities, and Financial activities also having over 250 business startups per year.

The large differences in the number of startups by industry are due in part to the relative sizes of the industries within Montana’s economy. Figure 3 also contains the average number of births per year as a percent of businesses in

Data

The data used in this article come from three different data sources: the Quarterly Census of Employment and Wages (QCEW) and Business Employment Dynamics (BED) data produced by the Bureau of Labor Statistics, and the Quarterly Workforce Indicators (QWI) dataset from the US Census Bureau. The QCEW data includes all employment and wages for businesses covered by the Unemployment Insurance program, with the most notable omissions being portions of the agriculture industry and the self-employed. The QWI data contains information regarding the acquisition or transfer of businesses within the QCEW data. The BED data tracks business openings and closings, including employment, but at the industry level instead of the firm level needed to determine survival rates. However, combining QWI and QCEW data allows for the creation of startup rates and survival rates for actual Montana businesses starting in 2006 and later. One difference between the datasets is that the BED data tracks new businesses at the establishment level, meaning that a new location of an existing business is treated as a new business, while the QCEW/QWI data does not count new locations or expansions as new businesses. This article uses BED data to measure total business openings and closings and the QCEW/QWI data to calculate actual new business startups by industry, as well as business startup survival rates by industry and size class.

Figure 3: New Business Startups by Industry



existence during 2005, allowing for comparison of startup rates across industries. When viewed as startup rates as a percent of existing businesses, Business activities, Transportation, and Mining and utilities have the highest level of entrepreneurial activity. The high startup rates for Mining and Transportation may reflect the expansion of oil development in Eastern Montana, while the high rates of business activities may also be new businesses starting to help serve oil field businesses. However, it is also possible that these industries always have high rates of business startups, and the rates shown for the 2006-2013 timeframe merely reflect long-standing dynamism in these industries.

Although Figure 3 is helpful to evaluate the rate of business startups across industries, the aggregation of all the years into one category hides the underlying variation in the startup rates across years. This variation is revealed by looking at the growth rates by industry for individual years within the time period, shown in Figure 4. Again, Figure 4 illustrates that Construction and Business activities have the highest number of startups. Further, Figure 4 also reinforces that all industries experienced a decline in the number of startups during the recession, with each bar showing a dip in the startup rate in the middle of the years shown, corresponding to the recession years in each industry.

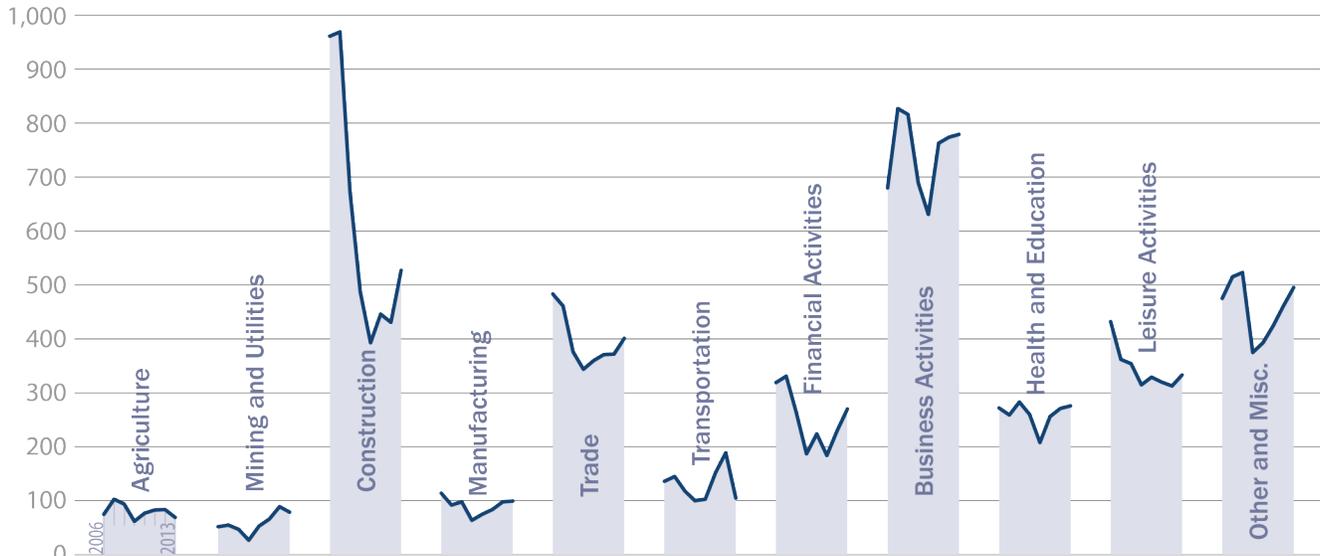
Of particular interest is the sharp, large drop in the number of startups in the Construction industry over the 2006 to 2013 timeframe. There were 961 startups in Construction in 2006 during the height of the housing and construction boom. The number of startups dropped to less than 400 per year during the recession, but has started to recover with 527 startups in 2013. Certainly, the recession has had a long-lasting impact on the Construction industry, but one that is improving in recent years.

The Mining and utilities sector experienced the largest percentage increase in the number of new business startups since 2006, peaking at 89 in 2012 compared to 52 during 2006. Mining and utilities is a relatively small sector in Montana based on employment or the number of businesses, but has been one of the fastest growing industries in Montana since the recession due in large part to increased oilfield development.

Survival Rates of Businesses

While new businesses started in the state can be a sign of economic prosperity, long-run stable economic improvement relies on businesses that remain in operation for a long period of time, adding jobs and economic value to our economy. The survival rate of businesses measures the percentage of new business startups that continue to

Figure 4: New Business Startups by Industry and Year



Source: Bureau of Labor Statistics, QCEW QWI

exist and hire employees for a selected period of time. For example, the five-year survival rate for 2006 is the percentage of businesses started in 2006 that continue to employ workers five years later in 2011.

Figure 5 illustrates the survival rates by birth year for all new business startups in Montana from 2006 through 2012 with each year shown, along with the average from all years. On average, 83% of businesses starting sometime during 2006 to 2012 remain in operation after one year. Only 45% remain in operation after five years, with only half of the startups lasting four years. Although these survival rates may seem low, Montana’s survival rates are higher than the U.S. survival rates shown in Figure 1 by a few percentage points.

Figure 6 illustrates the survival rates for each industry, with the one-year survival rates represented by the top bar and the five-year survival rate being the bottom bar for each industry. The differences in survival rates across industries can be explained by two general influences: first, characteristics specific to each industry, which will continue to influence survival rates in the future, and second, the impact of the recession, which impacted some industries more than others. The influence of the recession has persisted several years, but will eventually fade.

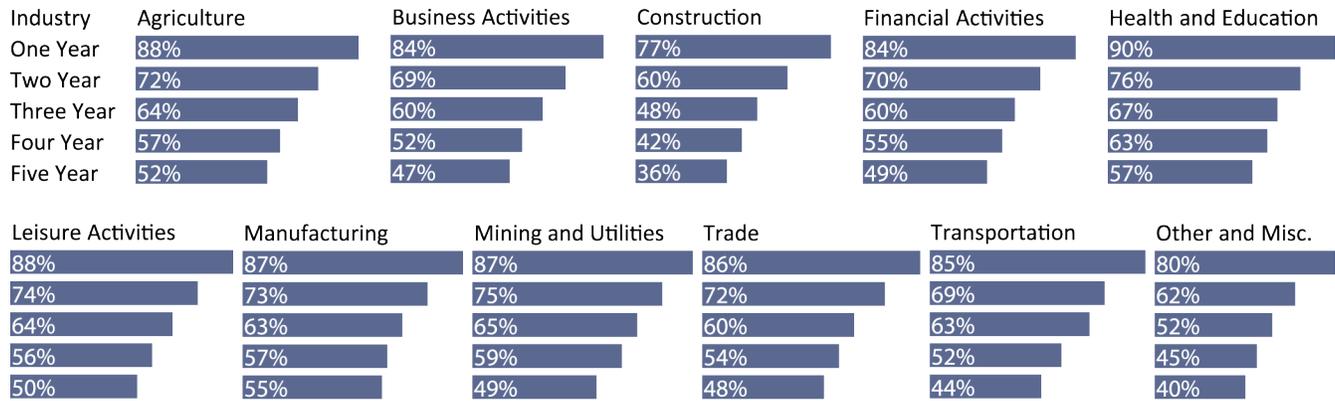
Differences between survival outcomes of businesses are partially due to characteristics inherent in the industry. In particular, the initial costs involved in starting businesses are much higher in some industries than others. The

Figure 5: New Business Startup Survival Rates by Year

Birth Year	1 Year	2 Year	3 Year	4 Year	5 Year
2006	86%	71%	59%	52%	47%
2007	85%	67%	57%	50%	44%
2008	82%	68%	60%	52%	45%
2009	83%	70%	59%	50%	
2010	84%	68%	57%		
2011	81%	65%			
2012	82%				
Average	83%	68%	58%	51%	45%

Source: Bureau of Labor Statistics, QCEW QWI

Figure 6: New Business Startup Survival Rates by Industry



Source: Bureau of Labor Statistics, QCEW QWI

Construction industry has a high rate of business startups, as described earlier, but their survival rates are lower than other industries, with a survival rate of only 77% in the first year, and only 36% of businesses making it to the fifth year. The Construction industry is relatively easy to enter, with tools and a contractor’s license among the few and relatively inexpensive necessities to operate. The low startup costs in the industry also result in lower risk and lower losses when the business fails, making it easier to leave the industry during hard times. Low startup costs make it both easy to start a business, and easy to leave a failing one behind.

In contrast, businesses in the Healthcare and education sector often require much more physical capital, education, and certification to start up. Large buildings are needed to educate students or to serve patients. Workers must be certified to serve critical roles. The large costs incurred when starting up a business in the Healthcare and education industry act as a barrier to new business formation. However, given the larger amount of capital at stake, businesses in this sector are also likely to have well-developed business plans. Further, competition is lower in these industries due to fewer startups and fewer businesses overall. The survival rates of businesses in the Healthcare and education sector are the highest of all industries, with 90% of businesses lasting one year, and 57% lasting five years.

Manufacturing is another example of a business with high startup costs, needing fairly expensive machines and equipment to start production, and significant

job-specific training for a manufacturing worker to consistently produce parts in the exact manner needed. Few manufacturing businesses are started, with one of the lowest startup rates of all industries, and less than 100 new businesses formed each year. Yet, Manufacturing also has fairly high survival rates, with a 55% likelihood of making it to five years.

The recession has also influenced the survival rates among certain industries, but not others, as some industries were more impacted by the recession than others. For example, the Construction industry was hard-hit by the recession, losing over 30% of their industry employment from 2007 to 2010. Yet the Healthcare industry continued to post job growth throughout the recession, and was the top performing private industry during the 2006 through 2013 timeframe. The demand for healthcare is generally stable and immune to factors in the greater economy. During the recession, as the economy slowed, demand for new homes and other construction activities plummeted, but demand for healthcare was unfazed. Differences in the stability of demand for each sector led to a further widening in the gap between survival rates for Construction businesses and Healthcare and education firms.

Although all startups in the dataset are new businesses at birth, they are not all created with the same intent or expectations for the future. At the extremes, some of the startups are individuals with an idea that they hope to turn into a part-time venture. Others are Montana subsidiaries of large, national or multinational companies

Figure 7: New Business Startup Survival Rate by Size Class

	1 Year		2 Year		3 Year		4 Year		5 Year	
	Survival Rate	Frequency								
Fewer than 5	80%	6,480	61%	4,975	50%	4,081	43%	3,493	37%	2,999
5 to 9	94%	2,113	84%	1,874	74%	1,655	67%	1,498	61%	1,361
10 to 19	96%	902	88%	826	81%	763	75%	699	68%	640
20 or Larger	97%	430	92%	406	86%	382	81%	357	75%	334
Total	84%	9,925	69%	8,081	58%	6,881	51%	6,047	45%	5,334

Source: Bureau of Labor Statistics, QCEW QWI

with proven business models or products, and which employ numerous people from the day that the business opens. Figure 7 illustrates the survival rates of Montana businesses by size class, with the size determined by their peak employment level during the 2006 to 2013 timeframe. Larger businesses have higher survival rates than small businesses across all timeframes shown.

While larger businesses have higher survival rates, most business startups are small. Only 80% of business startups with less than five employees survive at least one year, yet this size class accounts for 65% of all business startups after one year. Roughly half of businesses with less than five employees survive at least three years, while 81-87% of businesses with at least 10 employees are still in operation after three years. By the fifth year, only 37% of businesses with less than five employees remain in operation while 61-76% of larger businesses remain.

The size of a business certainly influences its chance of survival. It may be possible that smaller businesses are more likely to be inexperienced entrepreneurs, or simply smaller businesses with less invested into the company. Large businesses may benefit from proven business models or established reputations, especially if the business is a new branch of a national business opening in Montana. However, the better survival rates of larger businesses may also be a function of how the size classes were determined in this study – by using the maximum size during the five years examined. The startups that started small that were wildly successful and grew to large businesses likely contributed to the high survival rates of the larger size class, while leaving only

the less-successful businesses behind in the fewer than five category. Further research to explore the dynamics of employment growth (rather than stable employment) and survival rates would be needed to clarify these differences.

New business startups represent new growth and dynamism, and are a crucial and healthy component of Montana’s economy. Although the recession impacted the business startup rate, the level of startups is now approaching pre-recession levels, with some industries at full recovery. And while the impacts of the recession are evident in the survival rates in some industries, survival rates are also surprisingly persistent over time, with the recession only impacting the likelihood of survival by a few percentage points. Knowledge about Montana’s startup rates and survival rates for startups can help economic developers and policy makers know what to expect from businesses in certain industries and size classes. For example, knowing that most startups are small businesses, but large startups are more likely to be successful, can help target incentive programs towards businesses that will provide long-term stable jobs in the economy. What can be concluded is that business startups are an important source of economic and employment growth in our economy, and Montana remains an attractive place to start a business. Encouraging new businesses to open, and fostering their survival, will continue to strengthen our economy in the future.

Sources:

¹ Kauffman Foundation. <http://www.kauffman.org/multimedia/infographics/2014/infographic-kauffman-index-of-entrepreneurial-activity-1996-2013>