



SMALL BUSINESS & ENTREPRENEURSHIP IN ARIZONA

A Sector Profile



Prepared by The Council For Community And Economic Research

May 2011



Small Business and Entrepreneurship in Arizona

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Small Business & Entrepreneurship in Arizona

A Sector Profile

Introduction

Small businesses are key drivers of sustainable economic development, are at the forefront of high-tech innovation, and represent America's future corporate leadership. The importance of these firms also extends into the functioning of their larger peers. Small businesses often play a critical role in the functioning of other, larger firms, serving them as key suppliers, support providers, and independent consultants, as part of developing or developed industry clusters.

Since its inception, Arizona has been home to countless entrepreneurs, people coming to the state from across the nation to make a new start. Statistics from the past ten years reinforce this assertion.

- The Kauffman Index of Entrepreneurial Activity ranked Arizona the third most entrepreneurial state in the country
- Arizona was home to 412,000 "resident" (or headquartered) firms, of which 99.6% had fewer than 100 employees according to the National Establishment Time Series (NETS) database
- "Small businesses" in Arizona (those with fewer than 100 employees) employ over 78 percent of the resident firm workforce, but they accounted for nearly 92 percent of all job growth (from 1998 to 2008)

However, Arizona's small businesses, like those throughout the nation, faced challenging times through the "Great Recession" as the 2008-09 recession is often called. For many, sales plummeted and available capital, the lifeblood of young establishments, dried up. In 2009, while 552,000 new employer firms opened in the US, 661,000 closed; including 61,000 in bankruptcy. Arizona witnessed 1,615 such bankruptcies, a 51 percent increase from 2008, and a 111 percent increase from 2000.

Recognizing the importance of entrepreneurship and small business development is critical to developing sustainable economic development; not only for fostering the growth of tomorrow's future corporate leaders, but also to ensure that today's large, and thriving firms, have the supply chain and privately-led support they need to compete in a global marketplace.

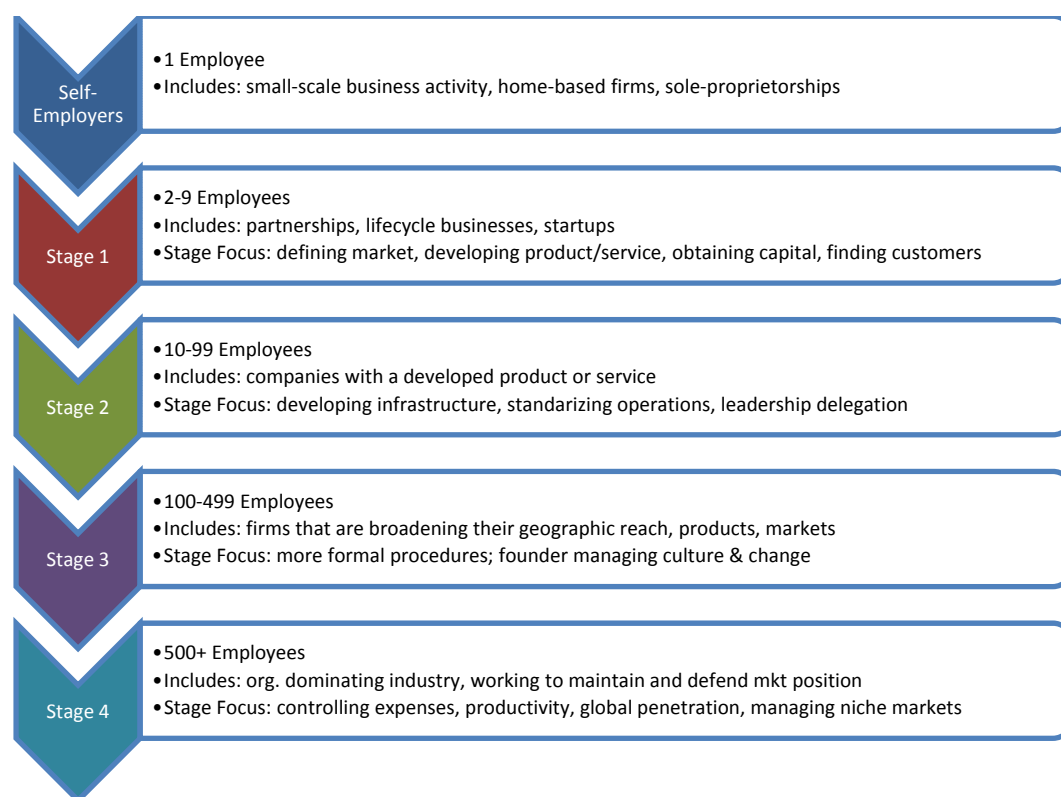
To address the challenges facing small business and entrepreneurs, the federal government, the State of Arizona, universities, and various private sector partners have taken significant steps to alleviate some of the obstacles these firms continue to face. Programs and initiatives have included: developing and continuing various grant, loan, and tax incentive programs; supporting business incubators/accelerators; and promoting various educational and training programs to ensure potential and current entrepreneurs have the information and skills they need to be successful.

Small Business and Entrepreneurship

Defining the Stages of Small Business Development

Many firms that strive to expand pass through common and distinct phases of growth, sharing similar issues and challenges. Understanding the unique needs of firms at various stages can provide a framework for policy-makers and community leaders to support future growth. The Edward Lowe Foundation, an entrepreneurial resource leader, defines these long-recognized stages of business development as shown in Figure 1.

Figure 1: Stages of Business Maturity and Development




To supplement its definition of companies by development stage, the Edward Lowe Foundation also has made available an analytic dataset that tracks firms over time. The dataset uses the National Establishment Time-Series (NETS) created by Walls & Associates derived from Dun and Bradstreet (D&B) company credit records. The dataset, maintained at www.YourEconomy.org, identifies how firms across the nation have fared over time – whether they have experienced growth or contraction, by their starting size, their NAICS-identified industry, and their chosen “resident” locale.¹ *YourEconomy.org*

¹ Resident firms, defined by the Edward Lowe Foundation, are either “standalone” firms or businesses with headquarters in a particular area. Resident firms, generally, are considered to have more influence on localized job creation than nonresident firms. We examine “resident” firms in the US and Arizona within this Profile.

currently tracks 24 million active U.S. establishments, including 450,000 in Arizona. That data is used extensively as part of this report because it is the only information source that tracks individual companies over time. This allows us to examine the same cohort of small firms over a period of time as they pass through the stages of growth.

Who Are Entrepreneurs

In 2009, the Kauffman Foundation released results of its nationwide survey of 549 company founders working in various “high-growth” industries, including aerospace, defense, computers and electronics, health care, and general services.² The survey inquired after the founders’ motivations, background, and experiences for and since launching their firms, and held the goal of illustrating “entrepreneurs in industries that [were] expected to hold higher [levels of] growth.” These surveys, and their succeeding reports, have provided a snapshot of what entrepreneurs in high-growth industries look like in the current US economy.



Characteristics of High-Growth Industry Entrepreneurs

- Middle-aged (40), married (69.9 percent) and had at least one child (59.7 percent)
- Well-educated (95.1 percent w/ Bachelor’s) and experienced (75.4 percent worked at other companies for more than six years before launching their own)
- From middle-class or upper-lower-class backgrounds
- Motivated by their desire to: build wealth (74.8 percent), capitalize on a business idea (68.1 percent), own a company (64.2 percent), not work for others (60.3 percent), and/or participate in the startup “culture” (66.2 percent)
- Not motivated by “inability to find work” (80.3 percent not a factor “at all”)
- In college, only 52 percent had some interest in being an entrepreneur, 34.7 percent didn’t think about it, and 13.3 percent had little or no interest
- For first startup, rarely received venture capital (11 percent) or angel financing (9 percent)
- Used personal savings as main source of funding (70 percent), some with supplemental funds from friends and family (16 percent)

Source: Kauffman Foundation, 2009

² Full survey and results can be found at www.kauffman.com/research

Small Business and the US Economy

The Small Business Administration’s (SBA) Office of Advocacy qualifies small businesses as those with 500 employees or less. According to the SBA, America’s small businesses:³

- Represent 99.7 percent of all employer firms
- Employ about half of all private sector employees
- Pay 43 percent of total US private payroll
- Generated 65 percent of net new jobs (9.8 million) from 1993 to 2009
- Hire 43 percent of high tech workers (scientists, engineers, computer programmers, etc)
- Made up 97.5 percent of all identified exporters
- Produced 31 percent of export value in FY 2008
- Produce 16.5 times more patents per employee than large patenting firms

The SBA also notes that...

Promoting small business development has higher potential for generating growth than any other economic development policy option.

The Administration found that by increasing small business births by 5 percent, it would result, on average, in a 0.465 percent increase in Gross State Product (GSP). On average, these business “births” have a larger impact than any other factor on GSP and total state employment.

Women and Minority-Owned Businesses

Of the 27.1 million nonfarm businesses nationwide in 2007, according to the SBA:⁴

Identified Entrepreneurial Assets and Liabilities

Key to their success:	Less than important:	Greatest obstacles:
Willingness to take risks (98%)	Location (50%) – though 58% in the US SW, a high for the nation’s five regions	Family/financial pressures to maintain a traditional job (73%)
Professional experience (96%)		Finding time (61%)
Willingness to work hard (93%)	Investor Advice (36%)	Lack of available financing (52%)
Management team (82%)	Assistance by state or region (86% ranked as “not at all” or only “slightly” important)	Lack of business experience (52%)
Professional networks (73%)		Protecting intellectual property (41%)
University education (70%)		

³ SBA Office of Advocacy, Frequently Asked Questions, <http://www.sba.gov/sites/default/files/files/sbfaq.pdf>

⁴ SBA Office of Advocacy, Frequently Asked Questions, <http://www.sba.gov/sites/default/files/files/sbfaq.pdf>

- Women owned approximately 7.8 million non-farm businesses (29 percent of total)
 - Generated \$1.2 trillion in revenues
 - Employed 15.4 million workers with a cumulative payroll of \$218 billion
- Hispanic Americans owned 2.2 million businesses (8.3 percent)
- African Americans owned 1.9 million businesses (7.1 percent)

The importance of minority-owned businesses has been further illustrated in The Kauffman Foundation's 2009 Index of Entrepreneurial Activity:

- Latinos have the highest entrepreneurship rate of any ethnicity (White, Black, Asian) at 0.46 percent, and have consistently held this position each year for the past decade
 - This rate represents an average of 460 out of 100,000 Latino adults creating a new business each month
 - Whites have the next highest at 330 of 100,000 adults creating new firms each month
- Immigrants also have a significantly higher rate of entrepreneurship than native-born Americans at 0.51 percent (or 510 out of 100,000 adult immigrants, per month)
 - As compared to the 300 out of 100,000 businesses per month for native born Americans

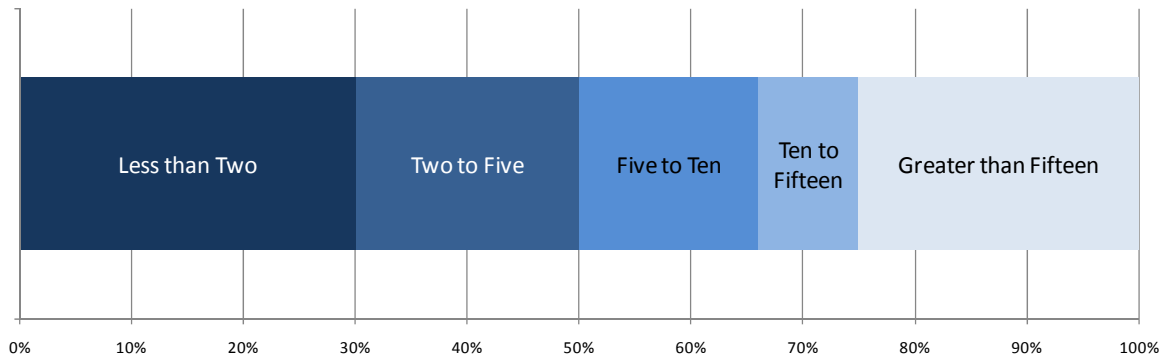
Trends in Small Business and Entrepreneurship

Challenges Facing America's Small Businesses

In the best of years, it is not an easy task to successfully launch a small business in America. As shown in Figure 2, 30 percent of new employer firms (those that have paid employees beyond the owner) do not make it more than two years. An additional 20 percent will not make it past the five year mark. Only about one of every four employer firms will sustain themselves for over fifteen years. And for nonemployer firms, those with only a single owner/ employee, turnover rates are three times as high, on average.

Figure 2

Survival Rate of New Employer Firms (in Years)



Source: SBA Office of Advocacy

Small businesses are also often, disproportionately, impacted by costs of complying with regulations. The SBA Office of Advocacy notes that firms with fewer than 20 employees spend:

- 36 percent more per employee than larger firms to comply with federal regulations
- 4.5 times as much per employee to comply with environmental regulations
- 3 times more per employee on tax compliance

Additionally, the Office highlights a Kaiser Family Foundation study that found, overall in 2009, small firm employees were almost twice as likely as large firm employees to be uninsured (27.2 percent vs. 14.7 percent, respectively), largely due to the prohibitive costs of health insurance for small companies.

Throughout the Great Recession, however, the challenge to start and grow small businesses in America has only grown more daunting.

- By SBA's estimate, in 2009, approximately 552,600 new *employer* firms opened for business, while 660,900 closed; only 60,837 shuttered while in bankruptcy⁵

⁵ SBA Office of Advocacy, Frequently Asked Questions, <http://www.sba.gov/sites/default/files/files/sbfaq.pdf>

- 2008 and 2009, prime recessionary years, had more firm closures than births in the United States, by an estimated net 37,000 and 48,000, respectively
 - Bankruptcies also increased substantially, from 28,322 in 2007, to 42,546 in 2008, to 60,837 in 2009

With small businesses also relying more heavily on owner investment and bank credit than their larger counterparts, the nation’s widespread capital challenges have been a primary worry for America’s entrepreneurs. In the National Small Business Association’s year-end report for 2009, it found that⁶:

- 78 percent of small business owners reported being negatively affected by their access to capital (though this number had eased since July of that year)
- 35 percent of owners had been subject to a decrease in the lines of credit

Thankfully, however, the SBA has noted that due to various government programs and initiatives, and the easing of financial markets, both commercial credit and venture capital investment dollars started rebounding in mid-2010.

How Arizona’s Small Businesses Fared During the “Great Recession”

➤ Overall

- Arizona’s economy fared slightly worse than that of the nation during 2009, with real gross state product decreasing by 0.6 percent, versus the 0.7 percent growth for the US
- Private-sector employment in the state decreased by 8.3 percent, while in the US it decreased by only 5.5 percent
- Unemployment in Arizona in 2009 was 9.1 percent, a 3.2 percentage point increase over 2008 levels

➤ Business Bankruptcies

- In 2009, Arizona bankruptcies totaled 1,615, a 51.1 percent increase from 2008, and a 111 percent increase from 2000

➤ Small Business Financing

- While there were 245,083 business loans in Arizona under \$100,000 in 2008, this number nearly halved in 2009 to 126,677
 - The value of these loans under \$100,000 was about \$3 billion in 2008, and only \$1.69 billion in 2009
-

⁶ Cited from the SBA’s “The Small Business Economy,” 2010 Report

National Trends in Entrepreneurial Development

According to the Small Business Association’s 2010 Global Entrepreneurship and Development Index, **the United States ranks 3rd overall in entrepreneurial performance among 71 countries.** The Kauffman Foundation’s 2009 Index of Entrepreneurial Activity, released in May 2010, echoes this, noting that:

- In 2009, 0.34 percent of the U.S. adult population (340 out of 100,000 adults) created a new business per month
 - This sums to an estimated 558,000 new businesses created monthly
 - Represents an increase over the 2008 rate of 0.32 percent, and is the highest recorded rate in the past 15 years
- Among the five aggregated industries it tracks, “construction” had the highest rate of entrepreneurial activity in 2009 at 1.55 percent
 - These levels represent a high for the industry since the survey’s inception in 1996, jumping from the previous high of 1.38 percent in 2008

According to the NETS database, the Edward Lowe Foundation reports that much of America’s employment growth over the past decade has originated with those firms starting as “self-employed” or in the “Stage 1” category. As seen in Figure 3, small firms drove employment growth.

- Between 1998 and 2008, the number of resident (headquartered) establishments in the United States increased by over 83 percent to 21.6 million (5.6 percent annually)
 - The greatest percentage increase was found in the number of self-employer firms (annualized 8.2 percent increases), while the greatest absolute increase was within Stage 1 firms (over 5.2 million)

Figure 3

	Growth in US Firms (1998-2008)					
	Establishments			Employment		
	1998	2008	Annual Pct Change	1998	2008	Annual Chang
Total Resident Firms	11,791,475	21,663,917	5.6%	97,205,796	111,198,537	1.2%
Self employed (1)	3,273,805	7,831,305	8.2%	3,273,805	7,831,305	8.2%
Stage 1 (2-9)	6,826,517	12,068,003	5.3%	24,745,353	35,880,443	3.4%
Stage 2 (10-99)	1,585,873	1,662,519	0.4%	36,825,377	38,808,245	0.5%
Stage 3 (100-499)	92,315	91,382	-0.1%	16,297,078	15,790,208	-0.3%
Stage 4 (500+)	12,965	10,708	-1.7%	16,064,183	12,888,336	-2.0%

Source: YourEconomy.org

- Interestingly, between 1998 and 2008, the number of Stage 3 and Stage 4 firms actually *decreased* within the United States, falling by about a thousand and two thousand establishments, respectively

Trends shown by establishment counts are reinforced when examining employment changes:

- During the period, those firms starting as “Self-Employing” firms increased their employment by over 4.5 million persons, to 7.8 million, a 139 percent increase (8.2 percent annually)
- Those firms starting the period as “Stage 1” firms also increased their employment by over 11 million employees, or 45 percent (3.4 percent annually)
- Meanwhile, over the same period, Stage 3 and Stage 4 firms shed close to 700,000 jobs

Entrepreneurship Trends in Arizona

As within the United States, small businesses play a critical role within Arizona. Not only have entrepreneurs and small businesses served as an economic growth engine for the state, their participation in supply chains for the state’s larger businesses and industries have kept money and expertise local, further strengthening the state’s economic core.

This section examines first, how Arizona, broadly, stacks up against the United States, as well as many of its geographically proximate neighbors, before moving into a more in-depth examination of the state of entrepreneurship and small business within the state’s borders.

National Comparisons

Figure 4 displays how Arizona compares to the nation and neighboring states.

Figure 4

Percent of Resident Establishments by Firm Size (2008)						
	US	CA	NM	NV	AZ	Phoenix MSA
Self employed (1)	36.1%	33.7%	38.2%	33.0%	36.3%	37.2%
Stage 1 (2-9)	55.7%	57.9%	53.0%	59.3%	56.1%	55.4%
Stage 2 (10-99)	7.7%	7.9%	8.5%	7.3%	7.2%	6.9%
Stage 3 (100-499)	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%
Stage 4 (500+)	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%

Percent of Employment by Firm Size (2008)						
	US	CA	NM	NV	AZ	Phoenix MSA
Self employed (1)	7.0%	6.6%	8.0%	6.2%	7.8%	8.1%
Stage 1 (2-9)	32.3%	33.2%	34.2%	32.5%	35.0%	34.5%
Stage 2 (10-99)	34.9%	36.2%	41.0%	31.6%	35.6%	35.6%
Stage 3 (100-499)	14.2%	14.2%	11.2%	12.4%	13.5%	14.5%
Stage 4 (500+)	11.6%	9.7%	5.5%	17.4%	8.1%	7.3%

Source: YourEconomy.org

Of the 21,663,917 resident firms in the United States in 2008:

- 91.8 percent of them employ less than ten employees, 7.7 percent employ between 10 and 99 employees, while a mere 0.4 percent employ 100 employees or more
 - Arizona, with 92.4 percent of its firms employing fewer than ten people, does not differ substantially from this distribution
 - Arizona’s neighbors of California (the US state with the greatest number of establishments⁷), Nevada, and New Mexico, all had comparable statistics, of 91.6 percent, 92.3 percent, and 91.2 percent, respectively.

⁷ According to data from YourEconomy.org, California, in 2008, had over 2.7 million establishments, including self-employers

While a significant proportion of U.S. firms employ fewer than 10 people, the vast majority of the actual employment in our country takes place within firms that employ more than that amount. In 2008, for instance, an estimated 60.7 percent of workers were employed in firms with more than 10 employees. More tellingly, 11,000 U.S. firms employ more than 500 people. This is less than 1 percent of all establishments but these firms employ nearly 12 percent of all workers.

Arizona, however, has a greater share of workers employed in small companies:

- In 2008, only 57.2 percent of Arizona's workforce was employed by those firms with 10 or more employees (compared to 60.7 percent nationally)
- While 11.6 percent of the nation's workforce was employed in firms with more than 500 employees, only 8.1 percent of Arizona workers were employed at firms with more than 500 employees.

Overall, Arizona has a slightly greater share of its establishments and workers employed by Self-Employed and Stage 1 firms than the nation or its peer states of California, New Mexico, and Nevada.

How ARIZONA Ranks Nationally

6th in Total Growth in Number of Firms Established from 1999-2008 (117.8 percent)

2nd in Total Growth of Employment from 1999-2008 (22.3 percent)

1st for the number of jobs created from expanding firms in 2008 (2.2 percent: 64,000 jobs on a base of 2.88 million)

2nd in Overall Job Growth from Businesses Opened, Relocated to, or Expanded in the State from 1999-2008 (25.6 percent: 622,000 jobs on a base of 2.4 million)

Source: YourEconomy.org, 2008

Arizona's Small Businesses

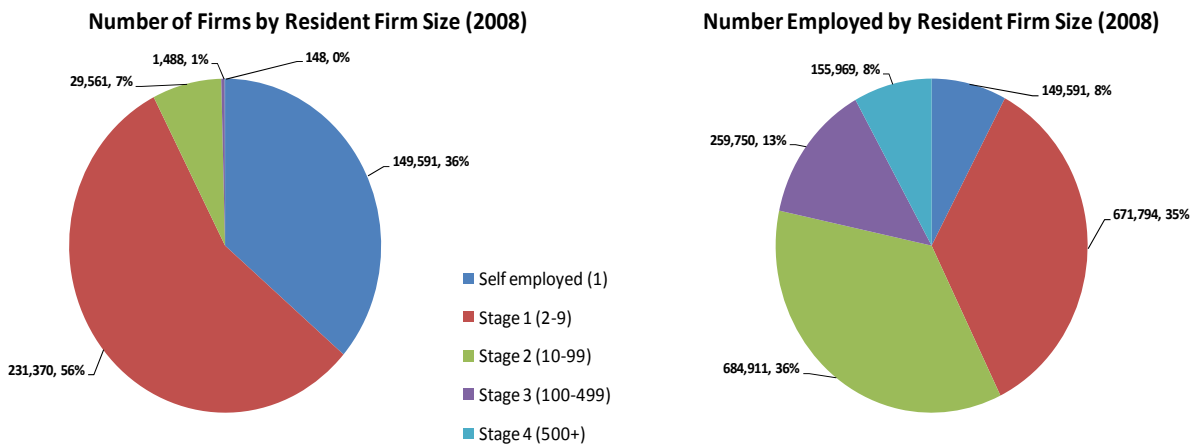
Since its inception, Arizona has been home to countless entrepreneurs, people coming to the state from across the nation to make a new start. This self-start culture is still pervasive. According to the Kauffman Index of Entrepreneurial Activity:

- In its ranking of all 50 states, **Arizona was ranked as the third most entrepreneurial state in the country** (460 entrepreneurs per 100,000 adults)
- It also experienced the largest increase in entrepreneurial activity over the past decade of all states (behind only Georgia) with a 0.14 percentage point increase

According to the NETS database used by YourEconomy.org, there were 450,000 firms in Arizona, of which 412,000 were “resident” (or headquartered) in Arizona in 2008. These firms, as pictured within Figure 5, were:

- Largely smaller firms, with 69% of Arizona’s businesses being categorized as “self-employed” (one person) or at “Stage 1” (employing between 2 and 9)
- While only 148 firms in the State employed more than 500 people, these firms accounted for nearly 156,000 jobs, a full eight percent of total employment (by resident firms)

Figure 5



Source: YourEconomy.org

Almost across the board though, over the past decade, firms of all sizes in Arizona have posted average gains. As seen in Figure 6:

- In terms of number of establishments, over the decade the number of firms in the state skyrocketed 136.6 percent (8.1 percent annually)
 - This was driven by an increase of 237.5 percent (11.6 percent annually) in the number of self-employers, and a 123.6 percent increase (7.5 percent annually) in Stage 1 firms

Figure 6

	Growth in Arizona Firms (1998-2008)					
	Establishments			Employment		
	1998	2008	Annual Pct Change	1998	2008	Annual Pct Change
Total Resident Firms	174,221	412,158	8.1%	1,364,679	1,922,015	3.1%
Self employed (1)	44,317	149,591	11.6%	44,317	149,591	11.6%
Stage 1 (2-9)	103,463	231,370	7.5%	378,242	671,794	5.3%
Stage 2 (10-99)	25,037	29,561	1.5%	571,657	684,911	1.6%
Stage 3 (100-499)	1,261	1,488	1.5%	216,692	259,750	1.6%
Stage 4 (500+)	143	148	0.3%	153,771	155,969	0.1%

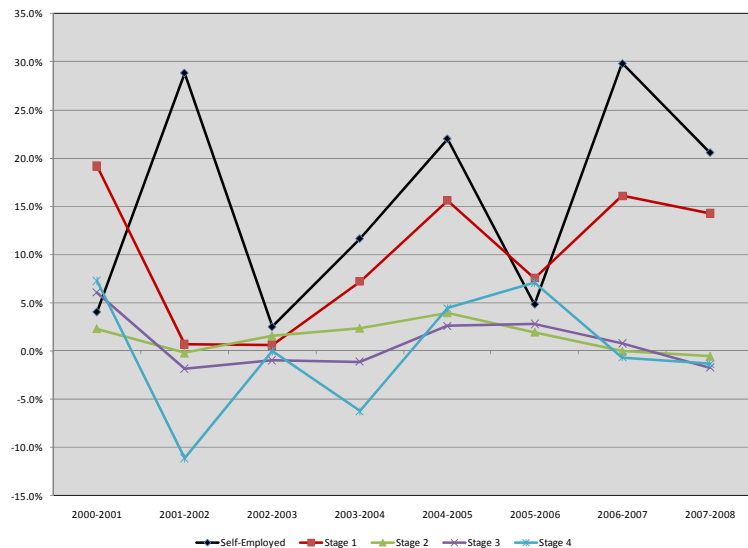
Source: YourEconomy.org

- Employment from these firms also grew strongly, adding over 557,000 new jobs, a 40.8 percent increase over the time period (3.1 percent annually)
 - Employment gains, also, were seen most significantly, percentage-wise, within “Self-employed” firms (11.6 percent annually) and in Stage 1 firms (5.3 percent annually)
 - However, while smaller firms in Arizona showed the greatest percentage gains in employment, the greatest absolute gains were found in “Stage 2” firms, with over 110,000 new jobs created by these firms over the 11 years
 - More information on fostering growth within these Stage 2 firms can be found later within this profile within “Economic Gardening.”

Growth, however, has not always been consistent – neither over time nor within firm size-distribution. As seen within Figure 7:

- Growth in self-employment is typically higher each year than growth in any other firm type.
 - The number of new self-employed firms vary considerably during years with significant spikes occurring during the economic downturn of 2001-2002 period and the start of the residential construction downturn during 2006-2007.

Figure 7: Establishment Growth in Arizona by Firm Size



Source: YourEconomy.org

- The number of Stage 1 firms has grown every year in Arizona since 2000, with the biggest spikes occurring during 2000-2001, 2004-2005, and 2006-2007.

- Growth for Stage 3 and Stage 4 firms has been muted throughout the time period pictured, with the significant declines, particularly in Stage 4 firms, taking place during the 2001-2002 period.
 - These Stage 4 firm losses, it is interesting to note, did not recover during succeeding years as large firms outsourced a larger proportion of their employment.

Census Data on Establishments by Business Size

To further examine in which industries Arizona’s smaller firms tend to exist, the data services of the Census Bureau’s County Business Patterns (CBP) provides another data source that can provide a critical perspective on business growth by size of establishment. CBP provides insight into firm distribution by industry, providing such data over time, and breaking it down by firm size cohorts (by employment count). While CBP counts do not track individual firms over time, like the NETS data (as accessed through YourEconomy.org), it does allow for industry-by-industry comparisons.

According to the CBP, the Arizona industries with greatest concentrations of Stage 1 and Stage 2 establishments (less than 100 employees) are shown in Figure 8. As seen there:

- The “Real Estate and Rental and Leasing” industry has the greatest proportion of firms in the “Stage 1” category (1-9 employees) in Arizona at 88.9 percent
- “Professional, Scientific, and Technical Services” also has virtually all of its firms categorized as “Stage 1” and “Stage 2” firms, at 99.1 percent

Figure 8

Top Arizona Industries with Establishment Concentrations of Stage 1 and Stage 2 Firms

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 1 + 2
Arizona	71.7%	25.8%	2.3%	0.3%	97.5%
1 Real Estate and Rental and Leasing	88.9%	10.5%	0.6%	0.0%	99.4%
2 Other Services (except Public Administration)	79.9%	19.3%	0.8%	0.0%	99.2%
3 Professional, Scientific, and Technical Services	84.1%	14.9%	0.9%	0.1%	99.1%
4 Agriculture, Forestry, Fishing and Hunting	85.1%	13.9%	1.0%	0.0%	99.0%
5 Finance and Insurance	80.1%	18.2%	1.3%	0.4%	98.3%

Source: County Business Patterns, 2008

In terms of payroll value, however, other industries come to the fore. As displayed in Figure 9:

- While 97.5 percent of Arizona’s employer firms were within the Stage 1 or Stage 2 categories in 2008, only 47.2 percent of its payroll is released from these categories
 - This is a result of larger firms, by definition, employing greater numbers of people, as well as contributing more to payroll, on average, than smaller firms
- Interestingly, while “Accommodation and Food Services” finds only 8.2 percent of its payroll value within its “Stage 1” firms, it dominates – in terms of concentration – in Stage 2
 - Over 62 percent of payroll within “Accommodation and Food Services” goes to Stage 2 firms (those with 10 to 99 employees), higher than every other classified industry by at least 12 percentage points.
- Other key Arizona industries in 2008 concentrate much of their activity in firms that employ 100 or more workers. Those industries include:

Figure 9

Top Arizona Industries with Payroll Value Concentrations of Stage 1 and Stage 2 Firms

Arizona	Stage 1	Stage 2	Stage 3	Stage 4	Stage 1 + 2
1 Agriculture, Forestry, Fishing and Hunting	37.6%	44.4%	N/A	N/A	82.0%
2 Other Services (except Public Administration)	30.9%	49.7%	16.9%	2.4%	80.6%
3 Real Estate and Rental and Leasing	32.5%	41.4%	17.8%	N/A	73.9%
4 Accommodation and Food Services	8.2%	62.1%	16.3%	13.4%	70.3%
5 Professional, Scientific, and Technical Services	21.5%	44.0%	24.6%	3.7%	65.5%

Source: County Business Patterns, 2008

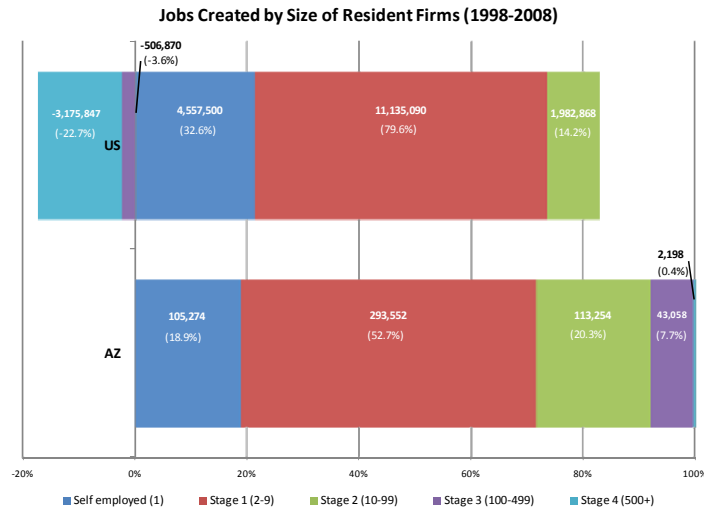
- Mining, Quarrying, and Oil and Gas Extraction (77 percent of establishments with more than 100 employees)
- Management of Companies and Enterprises (74.3 percent)
- Administrative and Support and Waste Management and Remediation Services (72.3 percent)
- Arts, Entertainment and Recreation (71.9 percent)
- Manufacturing (70 percent)

The link between larger firms and smaller ones is undeniable. Within Arizona, for instance, many of the listed smaller firm-industries, such as agriculture, or “Professional, Scientific and Technical Services” either contribute to larger industry supply chains, or provide invaluable professional, specialized support to these firms. The growth of smaller firms rely on demand from larger firms such that small business development also must account for revenue growth in the firms that drive key supply chains.

Arizona has been luckier than the nation as a whole in that the state experienced employment growth by firms from all stages over the period of 1998 through 2008. As shown in Figure 10:

- In the United States, Stage 3 and Stage 4 firms shed over 3.6 million jobs during the period, reducing total employment growth by approximately 26 percent

Figure 10



Source: YourEconomy.org

- Of these remaining firms, those that began the period employing between 10 and 99 employees (Stage 2), grew the most, contributing 11.1 million new jobs to the US economy
- Self-employers and Stage 2 firms also grew, contributing approximately 4.5 million and 2 million new jobs each, respectively
- In Arizona, firms at all Stages (self-employed and stages 1-4) grew, on net, between 1998 and 2008
 - Those that started out the period as Stage 2 firms added the most jobs, close to 294,000; while, similar to national trends, those that started out as Stage 4 companies, added the fewest

While Stage 1 firms contributed most to employment growth across the state, *within* the state, that growth was not consistent in each of the counties. Figure 11 shows just how disparate growth has been throughout Arizona from 1998 through 2008. While counties such as Apache and Greenlee have lost employment from resident (locally headquartered) firms, others, like Maricopa, Pima, Pinal, Gila, and Yavapai have seen tremendous growth. Maricopa County's growth alone, of nearly 400,000 jobs, represents about two-thirds of the state's overall growth.

Figure 11: Employment In Firms Headquartered Locally by Arizona County

County	Employment (By Resident Firms)			
	1998	2008	Abs Change	Ann Change
Apache	8,416	7,425	-991	-1.1%
Conchise	23,038	28,521	5,483	1.9%
Coconino	36,317	43,781	7,464	1.7%
Gila	9,624	15,148	5,524	4.2%
Graham	5,391	6,297	906	1.4%
Greenlee	3,794	917	-2,877	-12.0%
La Paz	4,360	5,505	1,145	2.1%
Maricopa	886,906	1,284,829	397,923	3.4%
Mohave	31,889	48,869	16,980	3.9%
Navajo	16,249	22,325	6,076	2.9%
Pima	216,988	294,986	77,998	2.8%
Pinal	24,671	38,556	13,885	4.1%
Santa Cruz	13,640	18,856	5,216	3.0%
Yavapai	47,577	74,837	27,260	4.2%
Yuma	28,466	40,641	12,175	3.3%

Source: YourEconomy.org

Figure 12: Change of Employment by Size for Headquarter Establishments

County	Employment Changes (By Resident Firms, 1998-2008)					
	Total	Self employed	Stage 1 (2-9)	Stage 2 (10-99)	Stage 3 (100-499)	Stage 4 (500+)
Apache	-991	335	445	-335	-1,276	-160
Conchise	5,483	1,413	3,543	1,304	-1,517	740
Coconino	7,464	1,736	4,604	1,425	-1,799	1,498
Gila	5,524	512	1,605	485	652	2,270
Graham	906	280	440	460	-274	0
Greenlee	-2,877	38	56	-236	-135	-2,600
La Paz	1,145	140	701	-114	418	0
Maricopa	397,923	76,702	207,936	82,284	40,523	-9,522
Mohave	16,980	3,743	9,219	4,100	624	-706
Navajo	6,076	1,061	2,827	1,875	-387	700
Pima	77,998	10,624	36,580	11,151	2,221	17,422
Pinal	13,885	2,990	7,716	3,670	84	-575
Santa Cruz	5,216	555	1,833	421	507	1,900
Yavapai	27,260	4,108	13,279	6,170	1,490	2,213
Yuma	12,175	1,460	5,131	3,307	3,018	-741

Source: YourEconomy.org

Greenlee, what was already the mostly sparsely populated county in the state, only continued to shed jobs, losing nearly 3,000 jobs over the period from locally headquartered firms. Apache, in northeastern Arizona, continues to see losses as well, shedding nearly a thousand jobs from 1998 through 2008. Both Apache and Greenlee counties, as seen in Figure 12, suffered from the loss of Stage 3 and Stage 4 firms, without having enough growth within their smaller firms to make up for it.

Maricopa County, while experiencing similar employment losses among its largest firms, was able to foster growth among its early stage firms. In fact, a majority of the growth actually came from Stage 1

Figure 13: Share of Employment in Establishments with Less than 100 workers

Employment	Percent of all Employment (Self-Employed, Stage 1 & Stage 2)	
	1998	2008
Apache	58.5%	72.3%
Conchise	79.6%	86.2%
Coconino	75.1%	80.0%
Gila	89.4%	74.0%
Graham	80.5%	87.6%
Greenlee	27.9%	100.0%
La Paz	75.7%	73.2%
Maricopa	71.1%	77.7%
Mohave	88.5%	92.7%
Navajo	84.6%	87.4%
Pima	73.0%	73.4%
Pinal	76.1%	86.0%
Santa Cruz	63.6%	60.9%
Yavapai	86.1%	86.2%
Yuma	74.8%	76.7%

firms (207,936). In fact, with the only exceptions of Graham and Gila Counties, Stage 1 firms were the biggest contributors to job growth in every county in Arizona between 1998 and 2008.

Conconino, Mohave, and Yavapai Counties also saw significant growth as a result of jobs added by Stage 1 firms. Pima County, on the other hand, continued to reap a considerable percentage of its job growth from its Stage 4 companies (which would include several large defense and aerospace companies). This is further exemplified in Figure 13, where ten of Arizona’s fifteen counties, over the period 1998 to 2008, saw more of their employment come from Self-Employed, Stage 1 and Stage 2 firms. Pima ranks eleven on the list, with its proportion remaining largely constant.

Other counties, such as previously discussed Greenlee and Apache, have become more dependent upon these new, growing firms (in Greenlee’s case, entirely dependent). Maricopa and Pinal too have grown increasingly dependent upon these younger, originally smaller firms for their employment generation.

Arizona continues to post strong employment growth, with a significant portion of this growth originating with firms who started the decade significantly smaller than they ended it. Understanding where this growth is occurring, why it is occurring, and how it can be supported is critical to further developing this key piece of Arizona’s economic engine.

Fast-Growing Small Businesses in Arizona

Fast-growing small businesses were first called “**gazelle companies**” by economist David Birch. They refer to firms that had more than \$100,000 in revenue and grew 20 percent annually for four years. Since his early 1980s study, the definition has been refined to focus largely on growth. Effectively, the term typically refers to **firms that double in size over that four year period**.

SBA notes in its own report, “High-Impact Firms: Gazelles Revisited”⁸ noted:

- Gazelles tend to be relatively old (25 years+), rare (make up only 2-3 percent of all firms), and yet contribute to the majority of overall economic growth.
- From 2002 to 2006, there were 376,605 firms in the United States (an increase over the 300,000 such firms during the 1998-2002 period).
- From 1994 to 2006, 93.8 percent of these high-impact firms were made up of those with fewer than 20 employees.
- Large “gazelles,” such as Cisco Systems, which grew at a compound annual rate of 57 percent during the 1990s, do make up a significant portion of the gazelle-produced job growth.
- Close to 30 percent of all gazelles are in wholesale and retail trade,⁹ while another 30 percent are in services (in other words, not all of them are in high tech industries).
- Only about 3 percent closed their doors within a short period after their high growth period ended.

A September 2009 National Federation of Independent Businesses (NFIB) survey found that only 4 percent of surveyed firms cited financings as their chief concern.¹⁰

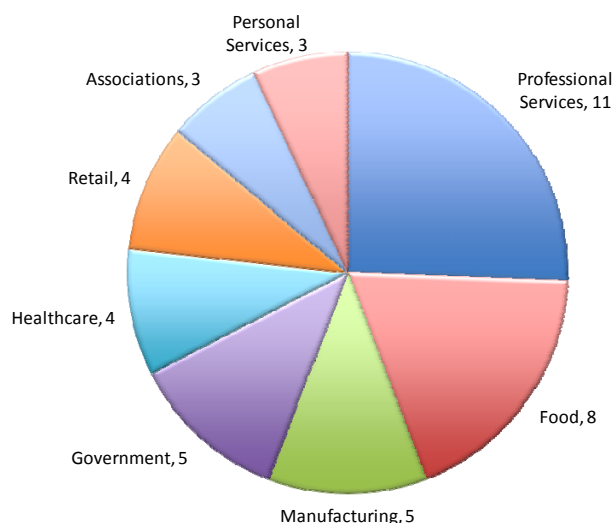
Arizona’s Gazelle Firms

Between 2006 and 2009, Arizona had 43 gazelle firms (according to data provided by YourEconomy.org). These firms meet the Birch definition of a gazelle company.

When placed into broadly defined industry categories, these 43 firms fall as seen in Figure 14.

Professional services – including Ace Parking Management and Jigsaw Technologies – made up 11 of these 43 firms; followed by eight food and food-service based firms – such as

Figure 14: Number of Arizona Gazelle Companies by Industry, 2006-2009



⁸ <http://archive.sba.gov/advo/research/rs328>

⁹ <http://www.inc.com/magazine/20010515/2>

¹⁰ “Hunting for Gazelles,” Forbes.com, 11/16/

grocer, Bashas— and five in manufacturing— including Orco Construction Supply. Due to the state's fast growth, five government entities also showed up on the list (e.g. the County of Gila).

The 38 private sector **gazelle firms created over 550 new jobs during the past four years in the State of Arizona, more than doubling their employment base** (employing 443 in 2006, 1096 in 2009), demonstrating that these firms might be small, but combined they made a significant contribution to the economy, even during the recession.

Figure 15 illustrates Arizona’s largest private sector gazelles.

Figure 15: Arizona’s Gazelle firms (2006-2009)

Business Name	City	# Employees	Line of Business
Ace Parking Management Inc	Phoenix	200	Automobile Parking
Danville Services Arizona LLC	Tucson	130	Social Svcs Nec
Knights of Columbus	Bullhead City	125	Civic Social Assns
World Marketing LLC	Phoenix	66	Mngmnt Cnsltng Svcs
Bashas Inc	Tucson	52	Grocery Stores
Bashas Inc	Phoenix	52	Grocery Stores
Bashas Inc	Tempe	50	Grocery Stores
Southwest Stage Funding LLC	Mesa	42	Mtg Bkrs Corrspndn
Cook Restaurants Inc	Globe	38	Eating Places
Jigsaw Technologies Inc	Tucson	26	Comptr Softwre Str
Lilo Enterprises Inc	Seligman	25	Eating Places
Walgreen Arizona Drug Co	Bullhead City	24	Drug Proprietry St
Apple Inc	Chandler	21	Comptr Softwre Str
Paradise Bakery & Cafe Inc	Scottsdale	19	Retail Bakeries
Mercury Pool Plastering LLC	Phoenix	17	Spcl Trd Cntrs Nec
Orco Construction Supply Inc	Mesa	17	Hardware
Prescott Kitchen & Bath Inc	Prescott	15	Lumber and other bu
Frost Structural Engrg Inc	Prescott	15	Engineering Svcs
Chukut Kuk District	Sells	11	Bus Services Nec
Starbucks Corporation	Phoenix	11	Eating places
JEm Designs & Cnstr LLC	Scottsdale	10	Sngl-Fam Hsng Cnstr
Logan Enterprises LLC	Scottsdale	10	Title Insurance
Z Gallerie	Tucson	10	Furniture Stores
Advance Management & Inv LLC	Kingman	10	Investors Nec

Source: YourEconomy.org & Dunn & Bradstreet

Federal and State Policy: Implications for Small Businesses

The federal government has taken steps to support small businesses and entrepreneurs, especially through the latest recession. A few initiatives that are impacting small businesses include:

The Small Business Jobs Act of 2010 (SBJA)

- Established a \$30 billion Small Business Lending Fund, which provides low cost capital to community banks for expansion of small business lending
- Permanently increases the maximum loan amount available through SBA's 7(a), 504, and Microloans while reducing small business eligibility requirements
- Established the State Small Businesses Credit Initiative, making \$1.5 billion in grants available to state small business lending programs
- Supplements and enhances existing tax breaks, such as a doubling of the deduction of start up expenses (to \$10,000 annually)¹¹

Startup America Partnership

- A private sector initiative to spur new ventures by providing resource and information support for entrepreneurs. Numerous corporations and institutions, including ones with a presence in Arizona (including Intel, TechStars Network, and IBM), have committed significant resources towards this effort. Intel has committed \$200 million to new investments in U.S. companies.

Other federal financing and business support resources include:

US Small Business Administration Loan, Venture and Grant Programs

(For full program list see: www.sba.gov/loans-and-grants)

Basic 7(a) Loan Program	For starting, acquiring and expanding a small business, 7(a) loans are the most basic and most used type loan of SBA's business loan programs
CAPLines	An umbrella program under which the SBA helps small businesses meet their short-term and cyclical working-capital needs
Community Express	An SBA loan program for small businesses in low and moderate income areas; Lenders not required to take collateral for loans up to \$25,000.
Microloan Program	Provides very small loans to start-up, newly established, or growing small business concerns
New Markets Venture Capital	Venture capital program designed to promote economic development in low-income geographic areas and among individuals living in such areas
Small Business Innovation Research (SBIR) Program & Small Business Technology Transfer (STTR)	These programs award a specific percentage of Federal R&D funds to qualified small businesses. SBIR/STTR programs encourage small firms to undertake scientific research that helps meet Federal R&D objectives, and have high potential for commercialization, if successful.
Small Business Investment Company (SBIC) Financing	SBICs use their own capital plus funds borrowed with an SBA guarantee to make equity and debt investments in qualifying small businesses

¹¹ Dunn and Bradstreet, 2010; <http://www.sba.gov/content/small-business-jobs-act-2010>

State Support and Financial Incentives for Arizona's Small Firms

Business incubators and accelerators provide low-cost space, shared office services, and networking opportunities for early stage businesses, while also often offering counseling, training, and capitalization connections. Studies show that time spent in an incubator is positively related to future sales and employment size of a start-up.¹² Incubators are a common entrepreneurial development tool used throughout the United States. As of 2006, over 1,100 were operating across the country.

Some major incubators in Arizona include:

- University- or College-based:
 - **Arizona State University**, Scottsdale: SkySong, skysong.asu.edu
 - **University of Arizona**, Tucson: Arizona Center for Innovation (within UA Tech Park), www.azinnovation.com
 - **Northern Arizona University**, Flagstaff: Northern Arizona Center for Entrepreneurship and Technology, www.nacet.org
 - **Central Arizona College**, Casa Grande: Small Business Development Center (with incubation space), (520) 494-6610
 - **Thunderbird School of Global Management**, Glendale: Thunderbird Global Entrepreneurship Incubator, www.thunderbird.edu
- City-based:
 - **City of Chandler**: INNOVATIONS, innovationsincubator.com
 - **City of Surprise**: AZ TechCelerator, www.surpriseaz.gov/files/ED/AZTechcelerator
- Tribal-based:
 - **Apache**, Bylas: Bylas District Economic Enterprise Incubator Project, www.bylasdistrictenterprise.com
 - **Navajo Nation**, Window Rock: Navajo Nation Shopping Centers Business Incubator, www.nnscinc.com
- Private/ Non-profit/ Other:
 - **Northern Arizona Center for Entrepreneurship and Technology**, Flagstaff: NACET Business Incubator; also includes student incubator and Tribal assistance
- Virtual or Assistance-based Resources:
 - **Stealthmode Partners**, Greater Phoenix (several), www.stealthmode.com
 - **BioAccel Commercialization**, Phoenix, www.bioaccel.org
 - **Science Foundation Arizona**, Phoenix, www.sfaz.org
 - **Microbusiness Advancement Center**, Tucson, mac-sa.org
 - **Rio Salado College Virtual Incubator** (upcoming), virtual, www.riosalado.edu

¹² Chrisman, McMullan, & Hall, 2005

Finding Guidance for Business Development

Start-ups can also get formal counseling and advice on a range of business development issues through channels other than incubators—often at a low or no cost. Such guidance can be found in Arizona at:

Small Business Development Centers (SBDCs) – 23 Arizona Centers (as shown in Figure 16); funded by the U.S. Small Business Administration (SBA) to support small business development - www.azsbdc.net

SCORE – SBA-funded nationwide non-profit provides free business counseling, operating three regional offices in [Phoenix](#), [Tucson](#), and [Prescott](#)

Arizona Small Business Association – Arizona’s second largest trade association provides members with business coaching - www.asba.com

PPEP Microbusiness & Housing Development Corporation - provides business counseling for banking clients in Southern Arizona - www.ppep.org

Prestamos - Phoenix-based community development firm, provides technical assistance and counseling to its small business borrowers, targeting women and minorities - www.prestamosloanfund.org

Other resources can be found at individual cities’ Economic Development offices, through various industry-related support systems (i.e. The Technology Commercialization Resource Directory at the University of Arizona, tcrd.arizona.edu, local Chambers), through use of the Arizona Commerce Authority’s comprehensive resource guide, “Arizona Entrepreneur’s Edge” (available for download at www.azcommerce.com/BusAsst/SmallBiz/Edge.htm), via national and local women- and minority-based resources (such as the APS Academy for the Advancement of Small, Minority and Women-Owned Enterprises), and by way of resources and support found at local community colleges.

Acquiring Necessary Business Skills

A 2000 Kauffman study concluded that graduates of programs such as the University of Arizona’s entrepreneurship degree programs, typically started more companies, were more likely to be employed, and had higher income and wealth than their other business school peers.¹³ A sample of similar

Figure 16: SBDC Locations in Arizona



¹³ Alberta Charney and Gary D. Libecap, “Impact of Entrepreneurship Education,” University of Arizona, 2000

offerings that can provide prospective entrepreneurs with the information and tools they need to succeed in Arizona include:

- The **Arizona Innovation Institute** in Scottsdale and the **Microbusiness Advancement Center** in Tucson offer for-pay training classes on innovation and small business development
- **Arizona Small Business Association** - over 300 online courses available to members
- **Arizona State University** - entrepreneurship spread among degree programs and “mini-centers”
- **Grand Canyon University** - Bachelor of Science in Entrepreneurial Studies offered through its College of Entrepreneurship
- **Rio Salado College** - offers Department of Labor-funded courses in innovation
- **University of Arizona** - nationally-ranked undergraduate and MBA¹⁴ programs in entrepreneurship

Financing for such additional training is made possible through, among other sources, Arizona’s Job Training Grants. These grants provide rebates for the costs of training new and incumbent employees, at rates of 75 and 50 percent, respectively. More information on the Job Training Grants can be found at: www.AZCommerce.com/Workforce/Job Training.

Available Incentives for Small Businesses Owners and Entrepreneurs

There are many federal incentives and business assistance programs available to firms across states, including those in Arizona.

There are a diverse set of state-level programs also available to increase the supply of capital for new businesses both before and after they launch, including those recently included in the approved “Arizona Competiveness Package.” A selection of Arizona’s business development programs that are most relevant to small businesses or entrepreneurs include:

- **Corporate Income Tax** in Arizona was reduced from a rate of 6.97% to about 4.9% between FY 2014 and FY 2017.
- **Arizona’s Angel Tax Credit/ Capital Gains Program** provides a 30% tax credit for individual’s investments in certified small businesses, expanding eligibility criteria and eliminating capital gains from those certified companies.
 - Competing states have provided similar incentives: New Mexico (25 percent), Oklahoma (20 percent), Colorado (expired), and Louisiana (expired)
- **Small Business Catalytic Investment Program** - operated by Science Foundation Arizona - provides grants as seed money to promising university-based spin-off companies
 - Competing states like California, Colorado, and Texas each have similar grant programs aimed at growing new businesses in target science and technology industries
- **Expansion Assistance and Development Program (EXPAND)** - run by City of Phoenix - assists small businesses obtain loans by providing up to 50 percent of additional collateral needed.

¹⁴ Princeton Review ranks them #12 and #5 in the nation, respectively

- **Quality Jobs Tax Credit** replaces the state's enterprise zone program to provide performance-based on net new job creation with differing benefits to businesses located in rural and metro areas.

Arizona also has a number of tax incentives available for small businesses, many related to specific industries (i.e. solar). For a complete list of these incentives, refer to the State's website at: www.azcommerce.com/BusAsst/Incentives/.

The state also has two federally designated "empowerment zones." These zones provide Federal incentives designed to encourage businesses to open, expand, and hire local residents. They include employment credits, a 0 percent tax on capital gains, increased deductions on equipment, and other incentives. The two zones are the [Four Corners Empowerment Zone](#) (Northeastern Arizona, including portion of Navajo Nation) and the [Tucson Empowerment Zone](#).

For more information on Empowerment Zones in Arizona and throughout the country, visit the official HUD site at: <http://egis.hud.gov/ezrclocator/>.

The Future of Small Business Development

Economic Gardening

Economic Gardening is an alternative to attraction-based development strategies, pursuing job creation over the long-term by focusing efforts inwardly towards local entrepreneurs. It assumes that:

- Communities are better served by supporting their fast growing second-stage (10-99 employees) companies, as these firms contribute to the majority of new jobs
- Few communities are suited to attract large industries using traditional incentive programs
- Locally grown firms are more likely to offer higher wages and a more stable job environment

According to the Edward Lowe Foundation, there are three key elements to pursuing an “Economic Gardening” strategy:

1. Providing critical information to businesses, which is traditionally only afforded by large companies
2. Fostering an environment/infrastructure of high quality of life, a change community, and availability of intellectual and human capital
3. Fostering a business supportive community and community supportive businesses

The concept of economic gardening has been discussed within Arizona, starting with the Governor’s Rural Development Conference in 2010. When looking at Arizona as a whole, the Edward Lowe Foundation noted that from 1993-2008 only 4.5 percent of created jobs came from relocation, indicating that economic growth largely occurs through companies or entrepreneurs that already exist in the community.

Since 2006, the Arizona Small Business Association has also hosted the Lowe Foundation’s “Companies to Watch” program which highlights such high-performing second-stage companies in the state.

Kauffman Foundation’s Summary of Key Challenges

The Kauffman Foundation notes that entrepreneurs and small businesses would benefit both nationally and locally from:

- The adoption of speedy and simplified regulatory approval processes
- Limits on progressive taxation at the state and local levels
- Local entrepreneurship encouragement
- Mentoring programs
- Emphasizes infusing entrepreneurship into curricula from kindergarten through college
- Improving schools, local amenities, and transportation infrastructure in communities
- Avoiding state-policies that “pick winners” (firms, industries) or sponsor corporate research