

Race/Ethnicity and Establishment Dynamics, 2002-2006

by

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Executive Summary

This report examines the dynamics—business expansions, contractions, and closings—between 2002 and 2006 for all establishments in operation in 2002, with tabulations by the race and ethnicity of the owner. The U.S. Census Bureau provides the U.S. Small Business Administration’s Office of Advocacy the matching data from the 2002 Survey of Business Owners (SBO) and 1989-2006 Business Information Tracking Series (BITS) for this analysis. This unique data set provides the most up-to-date and comprehensive glimpse of business dynamics related to establishments that existed in 2002, reflecting trends in racial and ethnic business ownership. BITS is a rich database of information about establishment dynamics, including establishment deaths, expansions, contractions, and the resulting changes in employment. Note that establishment births are not included, as the data tracked here are for the cohort already in existence in 2002.¹ The SBO database offers information on the owners of the enterprises that control/own the establishments.

This paper is the second in a series of Advocacy publications to report on the dataset.² The series focuses on establishment dynamics by gender and race/ethnicity of the owner as well as by business type, i.e., publicly held and non-publicly held businesses. The owner’s gender and racial or ethnic background can be identified only for non-publicly held businesses.

As defined in these datasets, business activities are recorded by the U.S. government at three levels: establishment, firm, and enterprise. The establishment-level data used here are from the 1989-2006 BITS; the firm- and enterprise-level data here are from the 2002 SBO. The definitions can be summarized as follows:

- An **establishment** is a single physical location where business is conducted. It may be a single establishment or one of several under common ownership. This construct is used here in the discussions of dynamics: expansions, contractions, and deaths.

¹ Note that as this cohort includes businesses of all ages and sizes, discussions of their “survival” rates should not be confused with the survival rates of new business startups.

² The first, *Gender and Establishment Dynamics*, is on the web at <http://www.sba.gov/advo/research/rs368tot.pdf>.

- A **firm** is a business organization consisting of one or more domestic establishments in the *same state and industry* that were specified under common ownership or control. This construct is used here in the discussion of business density.
- An **enterprise** is a business organization consisting of one or more domestic establishments under common ownership or control (regardless of establishment location or industry). The enterprise's employment or receipts size and owner demographics (gender and race or ethnicity) are determined at this level.

Three measures—employees per establishment, payroll per employee (dollars), and receipts per establishment (dollars)—are used to examine factors related to establishment closures. Lower early performance measures—such as lower receipts and fewer employees per establishment—characterize the establishments that were in operation in 2002 but had closed by 2006. Minority-owned establishments were more likely to close than those owned by their White counterparts; at the same time, the rates of job creation due to the expansion of minority-owned establishments were consistently higher than for those owned by Whites. Other key findings are:

- Business startups are crucial for job creation. The number of jobs created through the expansion of existing establishments was generally insufficient to counteract the job destruction due to business deaths and contractions.
- Median household incomes were \$46,119 for Whites, \$53,832 for Asians, \$33,961 for Hispanics, and \$29,691 for Blacks in 2002. In the same year, the business density, measured by the number of firms per thousand persons in a group, was 94 for Whites, 98 for Asians, 42 for Hispanics, and 36 for Blacks.
- Death rates of establishments and net employment losses increase with years of operation. The net loss of employment surged over the 2002-2006 period for the overall cohort of 2002 non-publicly held establishments. In contrast to establishments owned by Whites, all three groups of minority-owned establishments had net gains in employment for the first (2002-2003) period.
- The death rate for White-owned establishments was 29.2 percent. It was more than 10 percent higher for Black-owned businesses, 4.7 percent higher for businesses owned by Hispanics, and 3.7 percent higher for Asian-owned establishments.
- Establishment dynamics varied by sector and minority ownership group. For example, half of all 2002 Asian-owned establishments in mining (code 21) had closed by 2006,

compared with one-third of those owned by Hispanics, 26.8 percent of those owned by Blacks, and 24.3 percent of those owned by Whites. Almost 45 percent of Hispanic-owned establishments in mining expanded; the comparable numbers were 37.5 percent of those owned by Asians, 35.3 percent of those owned by Whites, and 14.6 percent of those owned by Blacks.

- Nearly three of five Black-owned establishments (59.0 percent) in the utilities sector (NAICS code 22) had gone out of business by 2006. Asian-owned establishments were struggling in the utilities industry as well: 7.1 percent of establishments in utilities were out of business and more than one-half (51.8 percent) had contracted by 2006.
- The White population was 6.3 times that of African Americans, 19.0 times that of Asians, and 5.6 times that of Hispanics in 2002.
- The number of White-owned establishments was 53 times that of Blacks, 16 times that of Asians, and 25 times that of Hispanics. The gap increases with the employment size of the owning enterprise.
- The number of White-owned establishments in enterprises with 500 or more employees was 156 times the number of those of comparable size owned by African Americans, 64 times the number for Asians, 171 times that for Hispanics, and 446 times that for a category named “Other.”
- Enterprises with both small and large numbers of employees had higher rates of establishment deaths and employment destruction than did the larger small enterprises with 50-99 employees (based on an order 2 polynomial trendline).
- The four-year rate of employment expansion drops drastically as enterprises’ receipts size increases. Smaller enterprises (by definition, those with less than \$50,000 in receipts in 2002) had higher rates of job creation because of expansion in 2002-2006. This was especially true for minority-owned enterprises.
- The four-year rate of net change in employment was negative for all racial/ethnic ownership categories of enterprises with \$50,000 or more in receipts; the rate was not always negative for enterprises with receipts of less than \$50,000. Large enterprises with \$1,000,000 or more in annual receipts were responsible for more than 50 percent of the total job destruction in each racial/ethnic group except the Asian group between 2002 and 2006.

- Hawaii was among the top ten states for expansions and net employment gains in each of the four racial/ethnic ownership groups over the 2002-2006 period.
- Over the four-year period, Hispanic-owned establishments had strong job creation through business expansion in 19 states. Again, with job creation from business startups excluded, other groups lost jobs in almost all states.
- Two time periods (1997-2001 and 2002-2006) of business dynamics and employment data in this series are available to the public. Job creation as a result of business expansion in the two cohorts of 1997 and 2002 establishments was strong; more than 21 million jobs were created in each four-year period. Nevertheless, the number of jobs created by existing establishment expansions was not enough to completely offset the loss of jobs as a result of establishment deaths and contractions. Clearly, the picture would be more positive with the addition of jobs created by new establishments, which are not included for years after 2002 in these data covering the 2002 cohort only.
- The study could be extended to an investigation of the differences in business dynamics by business type, i.e., publicly held vs. non-publicly held.

Contents

I.	Introduction.....	11
II.	General Information.....	13
III.	Business Dynamics by Industry (NAICS).....	19
IV.	Dynamics by Business Size.....	23
V.	Business Dynamics by State.....	32
VI.	Conclusion: Business Dynamics and Employment.....	35
	Appendix A Explanation of the Data.....	38
	Appendix B Tables.....	44

Tables and Charts

Table 1 General Information by Race/Ethnicity, 2002	14
Table 2 Comparison: Employment, Annual Payroll, and Receipts of All 2002 Establishments with those of 2002 Establishments that had Closed by 2006, by Race/Ethnicity of Enterprise Owner	16
Chart 1 Average Number of Employees per Establishment for All Establishments in 2002 vs. 2002 Establishments that were Closed by 2006	16
Chart 2 Average Annual Payroll per Employee for All Establishments in 2002 vs. 2002 Establishments that were Closed by 2006	17
Chart 3 Average Receipts per Establishment for All Establishments in 2002 vs. 2002 Establishments that were Closed by 2006	17
Table 3 Net Job Change and Percentage Changes in Establishments and Employment by Owner's Race/Ethnicity, 2002-2006	17
Table 4 Employer Establishment Dynamics: Changes in Establishment Deaths, Expansions, and Contractions, and Net Change in Employment, by Race/Ethnicity and Time Period: 2002-2003, 2002-2004, 2002-2005, and 2002-2006	18
Table 5 Net Change in Employment, by Race/Ethnicity and Time Period	19
Table 6 Deaths, Expansions, and Contractions, and Net Job Change in 2002 Establishments by Industry: 2002-2006	20
Table 7 Death Rates of 2002 Establishments by Industry and Race/ Ethnicity: 2002-2006	22
Table 8 Expansion Rates of 2002 Establishments by Industry and Race/Ethnicity: 2002- 2006	23
Table 9 Contraction Rates of 2002 Establishments by Industry and Race/Ethnicity: 2002- 2006	24
Table 10 Total Establishments with Corresponding Total Employment, Establishment Deaths and Employment Destruction, 2002-2006, by Enterprise Employment Size	24
Chart 4 Average Death Rate of 2002 Establishments and Average Destruction Rate of Employment by Enterprise Employment Size: 2002-2006	25
Table 11 Establishments and Establishment Deaths, by Enterprise Employment Size, Time Period, and Race/Ethnicity, 2002-2006	26
Chart 5 Average Four-year Death Rates of 2002 Establishments by Enterprise Employment Size and Race/Ethnicity, 2002-2006	27
Table 12 Average Number of Employees per Establishment, Annual Payroll per Worker, and Receipts per Establishment, by Enterprise Employment Size and Owner's Race/Ethnicity, 2002	28
Table 13 Four-year Percent Changes in Employment: Job Creation and Destruction, by Receipts Size and Race/Ethnicity of Enterprise Owner, 2002-2006	29
Table 14 Change in Establishment Deaths, Expansions, and Contractions, and Net Change in Employment of 2002 Establishments, by Receipts Size and Race/Ethnicity of Enterprise Owner, 2002-2006	29
Chart 6 Average Rate of Employment Expansion of 2002 Establishments by Enterprise Receipts Size and Race/Ethnicity of Owner, 2002-2006	30

Chart 7 Average Four-Year Rate of Job Destruction Due to Establishment Deaths and Contractions by Enterprise Receipts Size and Race/Ethnicity of Owner, 2002-2006	30
Chart 8 Four-Year Rate of Net Change in Employment by Race/Ethnicity and Enterprise Receipts Size, 2002-2006	30
Table 15 Top 10 States: Establishment Change Due to Deaths, Expansions, and Contractions, and Net Change in Employment by State, 2002-2006	32
Table 16 Top 10 States: Percent of Establishment Change due to Business Deaths, Expansions, and Contractions, by State and Owner's Race/Ethnicity, 2002-2006 ..	33
Table 17 Four-year Change in Net Employment, by Enterprise State and Owner's Race/Ethnicity, 2002-2006	34
Table 18 Change in Employment Due to Enterprise Deaths, Expansions, and Contractions, 1997-2001 and 2002-2006	36
Chart 9 Rates of Job Creation and Destruction of 2002 Establishments, 2002-2006	36
Table 19 Business Dynamics of All Enterprises by Type of Business, 2002-2006	37
Table A1 Number of 2002 Establishments, Deaths, Expansions, and Contractions with Corresponding Change in Employment by Enterprise Owners' Race/Ethnicity, 2002-2003, 2002-2004, 2002-2005, and 2002-2006	44
Table A2 Number of 2002 Establishments that Closed by 2006 with Corresponding Employment, Annual Payroll, and Receipts by Industry	45
Table A3 Rates of Business Death, Expansion, Contraction and Net Change in Employment of 2002 Establishments by Industry and Race/Ethnicity: 2002-2006	46
Table A4 Number of 2002 Establishments with Corresponding Employment, Annual Payroll, and Receipts by Industry, 2002 Enterprise Employment Size, 2002-2006	48
Table A5 Number of 2002 Establishments, Number and Rate of Establishment Deaths, by Enterprise Employment Size, Time Period and Enterprise Owner's Race/Ethnicity: 2002-2006	49
Table A6 Four-year Average Rates of Establishment Death, Expansion and Contraction, by Enterprise State Location and Owner's Race/Ethnicity, 2002-2006	50
Table A7 Business Dynamics by Enterprise Employment Size, 2002-2003, 2002-2004, 2002-2005, and 2002-2006	51
Table A8 Number of 2002 Establishments, Deaths, Expansions, and Contractions with Corresponding Four-year Change in Employment by Industry, Enterprise Receipts size, Type of Business, and Owner's Gender and Race/Ethnicity, 2002-2006	52
Table A9 Number of Initial-year Establishments, Deaths, Expansions, and Contractions with Corresponding Changes in Employment by State, Enterprise Receipts Size, and Type of Business, 2002-2006	55
Table A10 Number of 2002 Establishments, Deaths, Expansions, and Contractions with Corresponding Four-year Change in Employment by Industry, Enterprise Receipts Size, Gender, and Race, 2002-2006	56

I. Introduction

The U.S. Small Business Administration’s Office of Advocacy published a report in 2005, *Dynamics of Minority-Owned Employer Establishments, 1997-2001*, analyzing dynamic business processes.³ In general, the dynamic process includes business expansion, contraction, births and deaths, and their effects on employment.⁴ To update this study, Advocacy recently collaborated with the National Women’s Business Council and the U.S. Census Bureau to produce a new set of 2002-2006 business dynamic data. This dataset includes a series of statistical tabulations tracking establishments by their owners who responded to the 2002 Survey of Business Owners (SBO), and matching them to the 1989-2006 Business Information Tracking Series (BITS). This unique data set provides the most up-to-date and comprehensive glimpse of business dynamics related to establishments that existed in 2002, reflecting trends in racial and ethnic business ownership. The advantage of the approach used here is that businesses and their job changes can be tracked over time. A limitation is that the data here track only the existing businesses in 2002; therefore, businesses newly created over the periods of study—“establishment births”—together with their associated job creation, an important element of business dynamics, are not reflected in this dataset. Because new startups tend to create an important share of new jobs, the net employment change numbers will tend to be more negative than they would be if startups were included.⁵

As defined in this dataset, business activities can be recorded by the U.S. government at three levels: establishment, firm, and enterprise:

- An **establishment** is a single physical location where business is conducted or where services or industrial operations are performed.
- A **firm** is a business organization consisting of one or more domestic establishments in the *same state and industry* that were specified under common ownership or control. The firm and the establishment are the same for single-establishment firms. For each multi-

³ <http://www.sba.gov/advo/research/rs251tot.pdf>.

⁴ For the number of jobs created through business births, see *The Small Business Economy: A Report to the President*, 2009 edition, p. 104, at http://www.sba.gov/advo/research/sb_econ2009.pdf.

⁵ Moreover, the 2002 cohort includes businesses regardless of size or age, so any discussion of “survival rates” should not be confused with the survival rates of new business startups.

establishment firm, establishments in the same industry within a state are counted as one firm; the firm employment and annual payroll are summed from the associated establishments.

- An **enterprise** is a business organization consisting of one or more domestic establishments under common ownership or control. The enterprise and the establishment are the same for single-establishment enterprises. Each multi-establishment company forms one enterprise; the enterprise employment and annual payroll are summed from the associated establishments.

To be consistent with the Census definition, the business dynamics described in this report include establishment deaths, expansions, and contractions.⁶ Deaths are establishments that have positive employment in the first quarter of the initial year and zero employment in the first quarter of the subsequent year. Expansions are establishments that have positive first-quarter employment in both the initial and subsequent years and that increase employment in the period between the first quarter of the initial year and the first quarter of the subsequent year. Contractions are establishments that have positive first-quarter employment in both the initial and subsequent years and that decrease employment in the period between the first quarter of the initial year and the first quarter of the subsequent year.

This is the second report on the matched dataset in an Advocacy publication series analyzing business dynamics by demographic characteristics including gender and race/ethnicity, and business type, i.e., publicly held vs. non-publicly held businesses. As noted, the data provided in this report are primarily at two levels: establishment and enterprise. Business dynamic activities are recorded at the establishment level; characteristics such as the gender, race, and ethnicity of the establishment's owner, and the establishment's size, industry, and state are all sorted at their associated enterprise level. The business owner's gender and racial or ethnic background can be identified only for non-publicly-held enterprises. Unless otherwise noted, all tables and charts in this report are based on the U.S. Census Bureau's tabulations tracking establishment owners that responded to the 2002 Survey of Business Owners, and matching them to the 1989-2006 Business Information Tracking Series. All establishment dynamic data—establishment deaths, expansions, and contractions—are from BITS. The numbers of

⁶ <http://www.census.gov/econ/susb/definitions.html>.

establishments, employment levels, annual payroll, and receipts are solely from the 2002 SBO record.

The U.S. Census Bureau uses seven racial and ethnic categories to classify the ownership of non-publicly held businesses.⁷ Because of sample size limitations, this dataset includes just five race/ethnicity categories: White, Black or African American, Asian, Hispanic, and Other. Business ownership can be tabulated in more than one racial group because the sole owner, majority owner, or majority combination of owners could report more than one race. The detail may not add to the total or subgroup total because a Hispanic or Latino owner may be of any race, and because a firm's owner could be tabulated in more than one racial group. Because of data limitations, the "Other-owned" businesses are omitted in the main part of the discussions in this report.⁸

This report first provides general social-economic-business background by race/ethnicity of the owner. The general information also includes a summary of this dataset's four periods (2002-2003, 2002-2004, 2002-2005, and 2002-2006) of employer establishment dynamics by the owner's race/ethnicity. The report also covers the industry, size, and state location characteristics of employer establishments—establishments with workers—for which the race/ethnicity of the enterprise owner was identified in 2002. It tracks these businesses' subsequent deaths, expansions, or contractions through 2006. Finally, the report concludes by recapping the relationship between the business dynamics and employment change. The report suggests the value of further investigation into business types (publicly held vs. non-publicly held enterprises) and relevant business dynamics.

II. General Information

Table 1 presents general demographic and business information about racial and ethnic groups in the United States, using primarily the summary tables from the U.S. Census Bureau's American Community Survey (2002). The labor participation rate for the White civilian labor force was 57 percent, eight percentage points higher than for the Black civilian labor force and 10 percentage

⁷ <http://www.census.gov/econ/sbo/definitions.html>

⁸ For more information, go to <http://www.census.gov/econ/sbo/methodology.html>.

Table 1 General Information by Race/Ethnicity, 2002

Category	Total	White	Black	Asian	Hispanics*
Population ¹	280,540,330	212,541,793	33,768,036	11,213,133	37,872,475
Civilian labor force 16 years old and older ²	144,863,000	120,150,000	16,565,000	6,604,000	17,943,000
Labor participation rate (percent)	52	57	49	59	47
Employed	136,485,000	114,235,000	14,872,000	6,215,000	16,590,000
Self-employed, 2002 ³	9,927,000	8,886,000	589,000	365,000	867,000
Self-employed as a share of total employed workers (percent)	7.3	7.8	4.0	5.9	5.2
Unemployed	8,378,000	6,137,000	1,693,000	389,000	1,353,000
Unemployment rate (percent)	5.8	5.1	10.2	5.9	7.5
Number of U.S. firms, 2002 ⁴	22,974,655	19,899,839	1,197,567	1,103,587	1,573,464
Business density ⁵	82	94	36	98	42
Population 25 and older ⁶	182,686,266	143,725,219	19,618,660	7,585,335	20,207,253
Bachelor's degree or higher	47,362,587	39,140,325	3,103,124	3,616,811	2,352,447
Percent bachelor's degree or higher	26	27	16	48	12
Number of people below poverty level	34,763,085	20,607,228	8,125,368	1,314,681	8,101,309
Percent of people below poverty level	12	10	24	12	21
Number of American households ⁷	111,278,000	91,645,000	13,465,000	3,917,000	11,339,000
Median household income (dollars)	43,381	46,119	29,691	53,832	33,961

Notes:

* Hispanic or Latino of any race.

1. Unless otherwise specified, all data in this table are from the 2002 American Community Survey summary tables. The survey universe is limited to the household population and excludes the population living in institutions, college dormitories, and other group quarters.
2. The civilian labor force, excluding institutional populations 16 and older, <http://www.bls.gov/cps/wlf-tables1.pdf>.
3. Including both unincorporated and incorporated self-employed persons. Source: 2002 self-employed workers data from <http://data.bls.gov/cgi-bin/srgate>. A proportion of self-employed individuals may not be counted as employed workers for a number of reasons.
4. Includes firms with paid employees and firms with no paid employees. The U.S. totals are based on the 2002 Economic Census, whereas the gender, Hispanic or Latino origin, and race estimates are based on the 2002 Survey of Business Owners. Detail may not add to total because a Hispanic or Latino firm owner may be of any race. Moreover, each owner had the option of selecting more than one race and therefore is included in each race selected. Firms with more than one domestic establishment are counted in each industry and state in which they operate, but only once in the U.S. total.
5. Number of businesses per 1,000 persons in each group.
6. The estimates in the table are based on data collected by the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS) conducted by the U.S. Census Bureau. For detailed information about the source and accuracy, see www.census.gov/hhes/www/p60-226sa.pdf.
7. Household income information from <http://www.census.gov/prod/2005pubs/p60-228.pdf>. Income in 2003 dollars. Household as of March of the following year.

points higher than for Hispanics, and two percentage points lower than for the Asian labor force. Unemployment rates were higher for minorities than for the White labor force in general. In particular, the unemployment rate for the Black labor force was 10.2 percent, double that of the White labor force.

Self-employment rates were generally lower for minorities than for Whites; the White self-employment rate was almost double that of African Americans. According to the 2002

Survey of Business Owners, the number of White-owned firms (including Hispanic White-owned firms) was about 87 percent of all U.S. firms. Business density, measured by the number of firms per thousand persons in a group, was 98 for Asians, 94 for Whites, 42 for Hispanics, and 36 for Blacks.

Table 1 also provides racial/ethnic information about the education, poverty, and earnings of the U.S. population 25 years old and older, using U.S. Census Bureau data. The estimates in the table are based on data collected by the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS) conducted by the Census Bureau.⁹

Nearly one-quarter of the Black population 25 years old or older lived in poverty, compared with more than one-fifth of the Hispanic population, 12 percent of Asians, and 10 percent of Whites. The median household income for Whites was \$46,119; it was \$53,832 for Asians, \$33,961 for Hispanics, and \$29,691 for Blacks.

Table 2 contrasts details from records of the cohort of 2002 establishments—numbers of establishments, employment, values of annual payroll, and total receipts—with the details of those that were in operation in 2002 but had gone out of business by 2006. Of the total 5,485,758 non-publicly held establishments operating in 2002, 1,624,156 had closed by 2006. Three measures were used to examine, on an average basis, factors related to business closure: employees per establishment, and payroll per employee and receipts per establishment (both in dollars).

As can be seen in Table 2, lower early performance measures often characterize the establishments that end up closing. All three measures were lower on average for establishments that were in operation in 2002 but had closed by 2006. For example, establishments owned by Whites had on average 10.0 employees in 2002; those that had closed by 2006 had only 6.2. The average payroll per employee in 2002 was \$30,743; for those out of business by 2006, payroll in 2002 was \$24,911, 81 percent of the overall average. The average receipts per establishment that had closed by 2006 totaled less than half of the average for the whole cohort, \$730,719 and

⁹ As with all surveys, the estimates may differ from the actual values because of sampling variation or other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All statements in this table have undergone statistical testing, and all comparisons are significant at the 90 percent confidence level unless otherwise noted. For further information about the source and accuracy of the estimates, see www.census.gov/hhes/www/p60-226sa.pdf.

Table 2 Comparison: Employment, Annual Payroll, and Receipts of All 2002 Establishments with those of 2002 Establishments that had Closed by 2006, by Race/Ethnicity of Enterprise Owner (Non-publicly Held Businesses Only)

Race/ethnicity	2002 Establishments				2002 Establishments that had closed by 2006			
	Number of establishments	Employment	Annual payroll (thousands of dollars)	Receipts (thousands of dollars)	Number of establishments	Employment	Annual payroll (thousands of dollars)	Receipts (thousands of dollars)
Total	5,485,758	53,449,766	1,626,998,598	7,895,771,490	1,624,156	9,902,718	243,228,114	1,148,186,633
White	5,035,274	50,221,784	1,543,946,884	7,505,788,329	1,469,825	9,124,677	227,301,263	1,074,029,773
Black	95,330	737,023	17,501,924	65,140,085	37,506	196,318	3,748,452	14,420,815
Asian	320,527	2,176,260	56,661,986	289,031,122	105,464	517,130	10,743,571	53,099,259
Other	56,787	453,245	12,686,699	51,643,658	19,195	96,747	2,173,876	9,727,008
Hispanic	197,893	1,436,854	36,417,427	177,024,960	67,048	345,606	7,114,582	33,979,162
Race/Ethnicity	Employees per establish.	Payroll per employee (dollars)	Receipts per establishment (dollars)	Death rate (percent)	Employees per establish.	Payroll per employee (dollars)	Receipts per establishment (dollars)	
Total	9.7	30,440	1,439,322	29.6	6.1	24,562	706,944	
White	10.0	30,743	1,490,641	29.2	6.2	24,911	730,719	
Black	7.7	23,747	683,311	39.3	5.2	19,094	384,494	
Asian	6.8	26,036	901,737	32.9	4.9	20,775	503,482	
Other	8.0	27,991	909,427	33.8	5.0	22,470	506,747	
Hispanic	7.3	25,345	894,549	33.9	5.2	20,586	506,789	

Note: Businesses could be tabulated in more than one racial group. This can result because the sole owner reported more than one race; the majority owner reported more than one race; or a majority combination of owners reported more than one race. The detail may not add to the total or subgroup total because a Hispanic or Latino owner may be of any race, and because a firm could be tabulated in more than one racial group. For more information, go to <http://www.census.gov/econ/sbo/methodology.html>.

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

Chart 1 Average Number of Employees per Establishment for All Establishments in 2002 vs. 2002 Establishments that were Closed by 2006

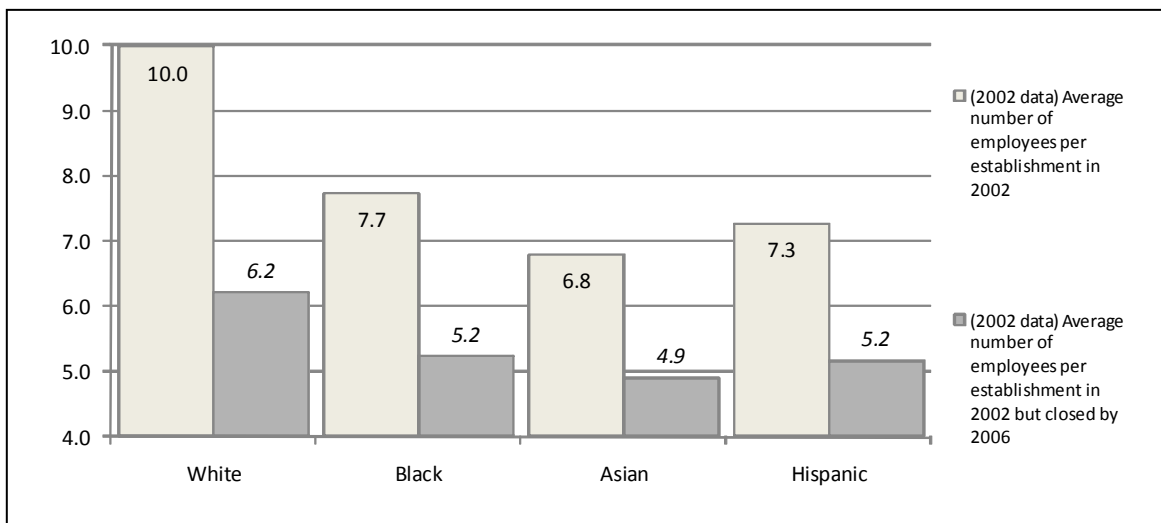


Chart 2 Average Annual Payroll per Employee for All Establishments in 2002 vs. 2002 Establishments that were Closed by 2006

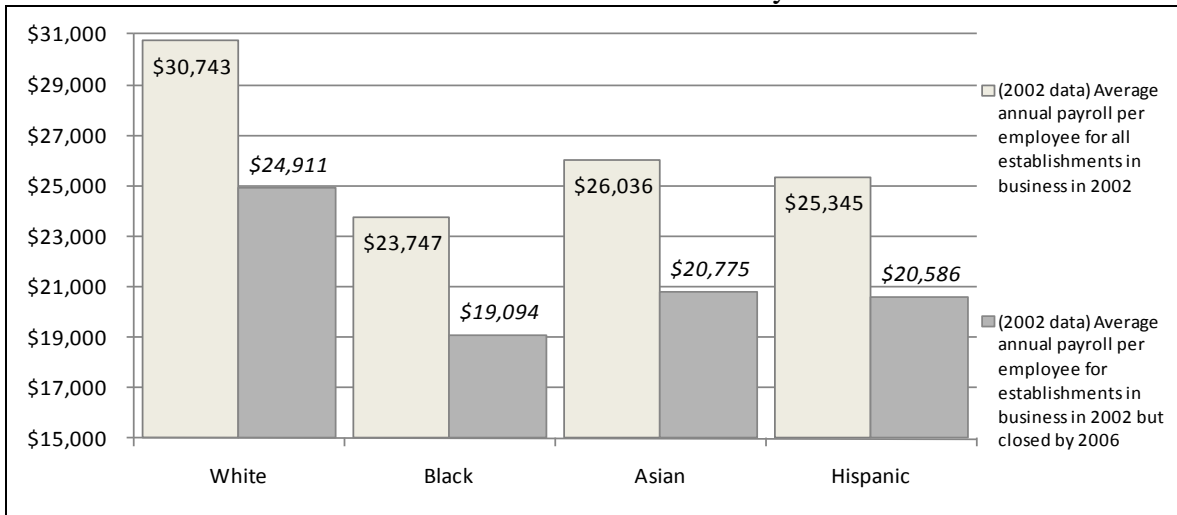
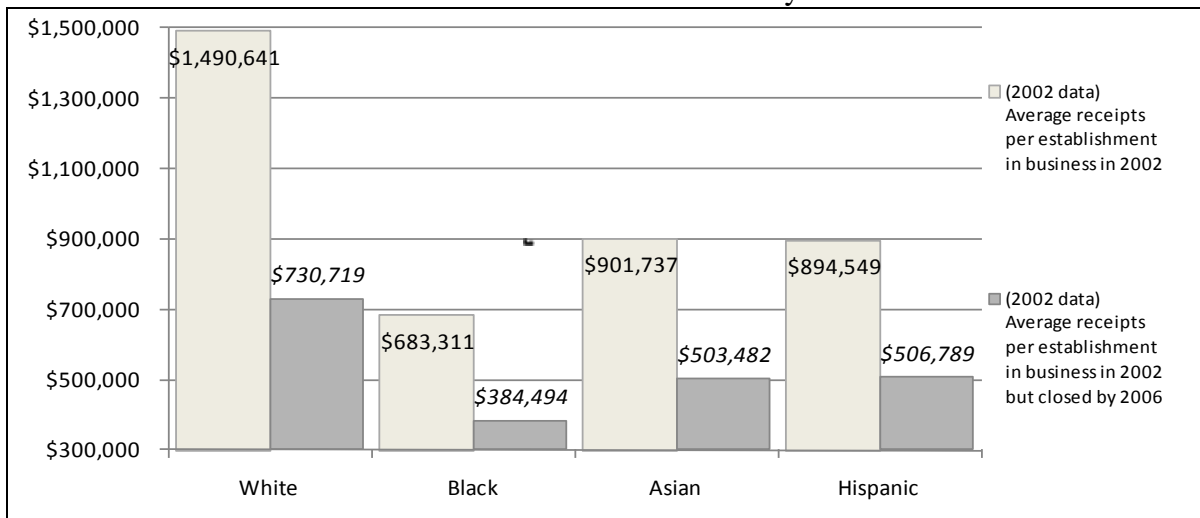


Chart 3 Average Receipts per Establishment for All Establishments in 2002 vs. 2002 Establishments that were Closed by 2006



\$1,490,641, respectively. These differences in the three measures are captured in Charts 1 through 3.

Table 3 highlights four-year percentage changes in establishments and employment as a result of establishment closings or deaths, expansions, and contractions. In comparison with other groups in the 2002 establishment cohort, Black-owned establishments had the highest death rate (39.3 percent), the lowest expansion rate (26.0 percent), and the lowest contraction

Table 3 Net Job Change and Percentage Changes in Establishments and Employment by Owner's Race/Ethnicity, 2002-2006 (Non-publicly Held Establishments Only)

Race/ethnicity	Percentage of establishments experiencing			Net job changes	Percentage change in employment due to:		
	Death	Expansion	Contraction		Death	Expansion	Contraction
Total non-publicly held	29.6	28.5	23.8	-4,988,473	-18.5	23.6	-14.4
White	29.2	28.5	24.0	-4,590,425	-18.2	23.3	-14.3
Black	39.3	26.0	19.8	-85,698	-26.6	31.1	-16.1
Asian	32.9	28.9	21.6	-269,855	-23.8	26.9	-15.5
Other	33.8	29.5	21.5	-54,911	-21.3	26.5	-17.3
Hispanic	33.9	29.6	20.8	-117,455	-24.1	30.0	-14.1

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

rate (19.8 percent). Employment in these Black-owned establishments had both the highest rate of decline because of establishment closure (26.6 percent) and the highest rate of employment creation because of establishment expansion (31.1 percent).

Table 4 details the business dynamics of establishments by the enterprise owner's race or ethnicity over the one-, two, three-, and four-year time periods, 2002-2003, 2002-2004, 2002-2005, and 2002-2006. Expansion and contraction rates tended to drop slightly with years in operation. For example, more than one-third (33.8 percent) of Black-owned establishments expanded, adding a net 16,605 jobs between 2002 and 2003; 31.6 percent expanded between 2002 and 2004, and 26.0 percent expanded in the 2002-2006 period.

In contrast to expansion and contraction rate changes, death rates increased with each year, as a larger cumulative share of the 2002 cohort ceased to exist. Although Black-owned establishments had net job gains from 2002 to 2003, they had a net loss of 85,698 jobs over the four-year 2002-2006 period, largely because a larger share of these businesses had closed.¹⁰

Table 5 illustrates how the net loss of employment surged over time for the overall cohort of 2002 non-publicly held establishments. In contrast to establishments owned by Whites, those owned by all three groups of minorities actually had net gains in employment over the one-year, 2002-2003 period. Hispanic-owned establishments also had net gains over the two-year period, as well as the lowest rates of employment losses for the three- and four-year periods.

¹⁰ Note again that these and other net employment changes are more negative than they would be, especially over the longest period, if establishment births (startups) were included in the data base.

Table 4 Employer Establishment Dynamics: Changes in Establishment Deaths, Expansions, and Contractions, and Net Change in Employment, by Race/Ethnicity and Time Period: 2002-2003, 2002-2004, 2002-2005, and 2002-2006

Race or ethnicity	Time period	Establishments (percent)			Employment
		Death rate	Expansion rate	Contraction rate	Net change in employment
Total	2002-2003	10.3	31.6	24.5	-51,050
	2002-2004	17.6	31.8	24.8	-1,627,214
	2002-2005	24.0	29.7	24.7	-4,061,677
	2002-2006	29.6	28.5	23.8	-4,988,473
White	2002-2003	10.1	31.4	24.7	-80,973
	2002-2004	17.4	31.7	25.0	-1,523,235
	2002-2005	23.6	29.6	24.9	-3,744,741
	2002-2006	29.2	28.5	24.0	-4,590,425
Black	2002-2003	14.2	33.8	22.6	16,605
	2002-2004	24.0	31.6	22.2	-8,654
	2002-2005	32.5	28.7	21.2	-62,001
	2002-2006	39.3	26.0	19.8	-85,698
Asian	2002-2003	11.1	33.6	23.1	16,043
	2002-2004	19.4	33.4	23.1	-72,806
	2002-2005	26.8	30.4	22.9	-222,378
	2002-2006	32.9	28.9	21.6	-269,855
Others	2002-2003	12.1	34.6	23.4	-2,062
	2002-2004	20.8	32.9	23.6	-22,759
	2002-2005	27.7	30.0	23.8	-43,217
	2002-2006	33.8	29.5	21.5	-54,911
Hispanic	2002-2003	11.9	34.3	23.6	63,779
	2002-2004	20.6	33.3	23.3	14,429
	2002-2005	27.9	31.0	22.7	-79,499
	2002-2006	33.9	29.6	20.8	-117,455

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

III. Business Dynamics by Industry (NAICS)

Tables 6 through 9 present business dynamic information by industry. Of all industries over the 2002-2006 period, establishments in health care and social assistance (code 62) had the lowest business death rate at 20.6 percent; the highest was in the “unclassified” industry (code 99), 75.8 percent. With employment from startups excluded, establishments in manufacturing (code 31-33); retail trade (code 44-45); finance and insurance (code 52); administration, support, waste management, and remediation (code 56); and accommodation and food services (code 72) all lost, on net, more than 1 million jobs over the 2002-2006 period. Establishments in information (code

Table 5 Net Change in Employment, by Race/Ethnicity of Owner and Time Period (2002 Non-publicly Held Establishments Only)

Race/ethnicity	Time period	Net change in employment		Graph of net change in employment rate
		Number	Percent	
White	2002-2003	-80,973	-0.16	
	2002-2004	-1,523,235	-3.03	
	2002-2005	-3,744,741	-7.46	
	2002-2006	-4,590,425	-9.14	
Black	2002-2003	16,605	2.25	
	2002-2004	-8,654	-1.17	
	2002-2005	-62,001	-7.41	
	2002-2006	-85,698	-11.63	
Asian	2002-2003	16,043	0.74	
	2002-2004	-72,806	-3.35	
	2002-2005	-222,378	-10.22	
	2002-2006	-269,855	-12.4	
Hispanic	2002-2003	63,779	4.44	
	2002-2004	14,429	1.00	
	2002-2005	-79,499	-5.53	
	2002-2006	-117,455	-8.17	

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

51) lost the largest share of jobs, 28 percent, followed by finance and insurance (code 52), 22.6 percent. Establishments in two sectors, education (code 61) and unclassified (code 99), had net job gains of 3.6 and 22.8 percent, respectively (Table 6). The net job losses were attributable primarily to business closures or deaths. For example, the information (code 51); finance and insurance (code 52); and administration, support, waste management, and remediation (code 56) industries each shed about one-quarter or more of their 2002 employment over the four-year period from 2002 to 2006 as a result of business deaths.

Table 7 details the racial/ethnic ownership differences, if any, in establishment deaths by industry for all of the 2002 non-publicly held establishments. Minority-owned establishments were more susceptible to closure than those owned by their White counterparts. The death rate for White-owned establishments was 29.2 percent; it was 39.3 percent for Black-owned establishments, 33.9 percent for establishments owned by Hispanics, and 32.9 percent for those

Table 6 Deaths, Expansions, and Contractions, and Net Job Change in 2002 Establishments by Industry: 2002-2006 (Non-publicly Held Businesses Only)

Category	Percentage of establishments experiencing			Net job change		Percentage change in employment due to		
	Death	Expns.	Contrc.	Number	Percent	Death	Expns.	Contrc.
Total	29.0	29.2	24.8	-12,879,973	-12.0	-17.4	19.8	-14.4
11: Ag. Support, Forestry, Fishing, and Hunting	32.9	23.6	24.5	-33,120	-19.0	-19.9	18.6	-17.7
21: Mining	26.1	34.3	20.9	-23,104	-5.0	-19.1	28.2	-14.1
22: Utilities	25.3	26.9	28.5	-112,452	-17.9	-12.5	10.2	-15.6
23: Construction	30.5	30.1	23.4	-356,670	-5.6	-17.9	29.3	-17.0
31-33: Manufacturing	25.1	32.5	30.7	-1,914,228	-13.4	-13.3	14.1	-14.2
42: Wholesale Trade	26.7	29.7	25.4	-596,652	-10.3	-17.4	20.7	-13.6
44-45: Retail Trade	27.5	30.3	27.4	-1,535,294	-10.4	-14.6	16.2	-12.0
48-49: Transportation and Warehousing	35.3	28.2	21.2	-559,172	-18.2	-19.0	19.6	-18.8
51: Information	36.3	23.7	26.0	-980,802	-28.0	-25.4	16.7	-19.3
52: Finance and Insurance	30.4	28.1	20.8	-1,426,247	-22.6	-24.9	18.7	-16.3
53: Real Estate and Rental and Leasing	29.2	24.9	21.1	-322,622	-16.0	-21.2	20.6	-15.3
54: Professional, Scientific, and Technical Services	29.8	26.3	21.5	-783,177	-11.3	-20.1	25.4	-16.5
55: Management of Companies and Enterprises	30.3	28.2	27.0	-527,677	-18.1	-18.4	21.3	-21.0
56: Admin., Support, Waste Mngt., and Remediation	34.9	27.9	22.4	-1,162,650	-14.3	-27.7	32.2	-18.9
61: Educational Services	25.9	35.9	24.8	91,414	3.6	-7.4	19.7	-8.7
62: Health Care and Social Assistance	20.6	33.6	26.7	-314,221	-2.3	-10.4	18.1	-10.0
71: Arts, Entertainment, and Recreation	28.2	27.3	23.8	-165,065	-10.0	-14.7	19.8	-15.1
72: Accommodation and Food Services	31.5	31.1	27.8	-1,547,301	-15.5	-19.6	16.4	-12.2
81: Other Services (except Public Administration)	30.1	25.2	25.0	-449,210	-16.7	-20.7	19.1	-15.1
95: Auxiliaries	31.1	28.4	28.9	-168,518	-16.6	-16.8	17.8	-17.7
99: Unclassified	75.8	17.6	2.0	6,795	22.8	-72.7	102.0	-6.5

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

owned by Asians. In nine of the 21 industries, White owners lost 30 percent or more of their establishments to closure over the four-year 2002-2006 period. In eight industries (excluding unclassified), 40 percent or more of Black-owned establishments closed; this was true for Hispanic-owned establishments in five industries, and for Asian-owned establishments in three industries. No industries (again excluding unclassified) lost such a large share of White-owned establishments.

Table 8 shows expansion rates for establishments owned by the five racial/ethnic groups. Twenty-six percent of Black-owned establishments expanded; the comparable numbers for other groups were Hispanic-owned, 29.6 percent, “Other”-owned, 29.5 percent, Asian-owned, 28.9 percent, and White-owned, 28.5 percent. Three industries saw expansion rates of almost 30 percent or more regardless of the owner’s race or ethnicity: management of companies and enterprises (code 55), educational services (code 61), and health care and social assistance (code 62).

Table 7 Death Rates of 2002 Establishments by Industry and Race/ Ethnicity: 2002-2006 (Non-publicly Held Businesses Only)

	White	Black	Asian	Other	Hispanic
Total	29.2	39.3	32.9	33.8	33.9
11: Ag. Support, Forestry, Fishing, and Hunting	33.2	46.3	43.9	39.9	41.2
21: Mining	24.3	26.8	50.0	31.4	33.0
22: Utilities	29.4	59.0	7.1	15.6	28.6
23: Construction	30.3	42.7	30.6	38.3	34.8
31-33: Manufacturing	25.2	32.4	34.9	26.7	30.7
42: Wholesale Trade	25.9	37.1	31.1	28.1	33.9
44-45: Retail Trade	29.5	46.9	34.1	35.8	33.9
48-49: Transportation and Warehousing	35.4	45.8	33.9	46.3	41.9
51: Information	34.5	41.9	46.6	31.0	39.8
52: Finance and Insurance	26.2	29.2	33.5	25.8	30.9
53: Real Estate and Rental and Leasing	29.2	38.3	34.9	35.1	34.1
54: Professional, Scientific, and Technical Services	29.0	38.6	37.3	33.4	32.9
55: Management of Companies and Enterprises	22.0	27.6	25.2	23.9	32.5
56: Admin., Support, Waste Mngt., and Remediation	33.6	42.6	36.1	37.5	40.5
61: Educational Services	32.7	35.7	34.5	30.6	34.8
62: Health Care and Social Assistance	21.3	32.2	19.8	22.4	24.5
71: Arts, Entertainment, and Recreation	32.3	42.9	33.9	42.7	43.3
72: Accommodation and Food Services	32.4	39.8	34.7	36.9	31.9
81: Other Services (except Public Administration)	29.7	39.3	36.5	34.1	35.0
95: Auxiliaries	23.7	30.0	25.4	47.8	40.5
99: Unclassified	76.1	77.1	73.6	71.8	68.1

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

Table 9 reports contraction rates by industry and race/ethnicity. Black-owned establishments had the lowest contraction rate, on average (19.8 percent). White-owned establishments had the highest overall average contraction rate, at 24.0 percent, followed by Asian-owned establishments at 21.6 percent.

Putting Tables 7-9 together, several extreme cases are worth examining (excluding the unclassified sector). Nearly three of five Black-owned establishments (59.0 percent) in utilities (code 22) had closed by 2006. Half of all 2002 Asian-owned establishments in mining (code 21) had closed. In the utilities industry, just 7.1 percent closed, but more than half (51.8 percent) contracted over the four-year period. Almost 45 percent of Hispanic-owned establishments in mining expanded. Establishments with owners in “other” ethnic and racial groups expanded rapidly in utilities (code 22, 56.3 percent), educational services (code 61, 40.8 percent), and health care and social assistance (code 62, 40.5 percent).

Table 8 Expansion Rates of 2002 Establishments by Industry and Race/Ethnicity: 2002-2006
(Non-publicly Held Businesses Only)

	White	Black	Asian	Other	Hispanic
Total	28.5	26.0	28.9	29.5	29.6
11: Ag. Support, Forestry, Fishing, and Hunting	23.3	16.3	19.3	14.5	8.7
21: Mining	35.3	14.6	37.5	33.0	44.6
22: Utilities	26.1	15.4	33.9	56.3	22.4
23: Construction	30.1	25.4	34.5	27.6	32.1
31-33: Manufacturing	32.4	27.0	29.2	30.7	31.1
42: Wholesale Trade	29.8	28.2	29.5	31.3	33.5
44-45: Retail Trade	28.1	20.4	27.9	27.2	29.3
48-49: Transportation and Warehousing	27.7	22.2	32.2	22.4	25.1
51: Information	25.0	24.6	27.1	31.1	28.3
52: Finance and Insurance	28.9	30.1	27.6	34.5	33.6
53: Real Estate and Rental and Leasing	24.9	25.8	19.7	22.5	25.2
54: Professional, Scientific, and Technical Services	26.1	23.5	27.4	27.0	28.9
55: Management of Companies and Enterprises	32.2	30.8	31.4	34.8	32.9
56: Admin., Support, Waste Mngt., and Remediation	28.0	26.9	27.5	29.4	26.6
61: Educational Services	30.9	29.8	30.3	40.8	30.3
62: Health Care and Social Assistance	31.6	30.9	34.2	40.5	33.5
71: Arts, Entertainment, and Recreation	25.6	22.5	24.5	25.5	20.3
72: Accommodation and Food Services	30.6	29.5	29.9	32.3	32.9
81: Other Services (except Public Administration)	25.1	20.7	23.9	21.9	22.7
95: Auxiliaries	32.7	45.0	25.4	21.7	13.5
99: Unclassified	17.1	18.0	20.4	25.6	22.7
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.					

IV. Dynamics by Business Size

The dataset allows two ways to measure business: by the enterprise's employment, from fewer than 5 employees to 500 or more; and by the enterprise's business receipts, from less than \$25,000 to \$1 million or more.

Table 10 presents the 2002 total establishments and their employment by the enterprise's employment size. The table also shows the number and rate of establishment death and related employment loss over the 2002-2006 period. The 5,485,758 non-publicly held establishments employed 53,449,766 workers in 2002. Of these establishments, nearly 30 percent (3,449,766) went out of business and about 10 million jobs (9,902,718) were gone by 2006.

Table 10 and Chart 4 illustrate changes in the rates of establishment death and employment loss by enterprise employment size. The chart exhibits nonlinear (polynomial)

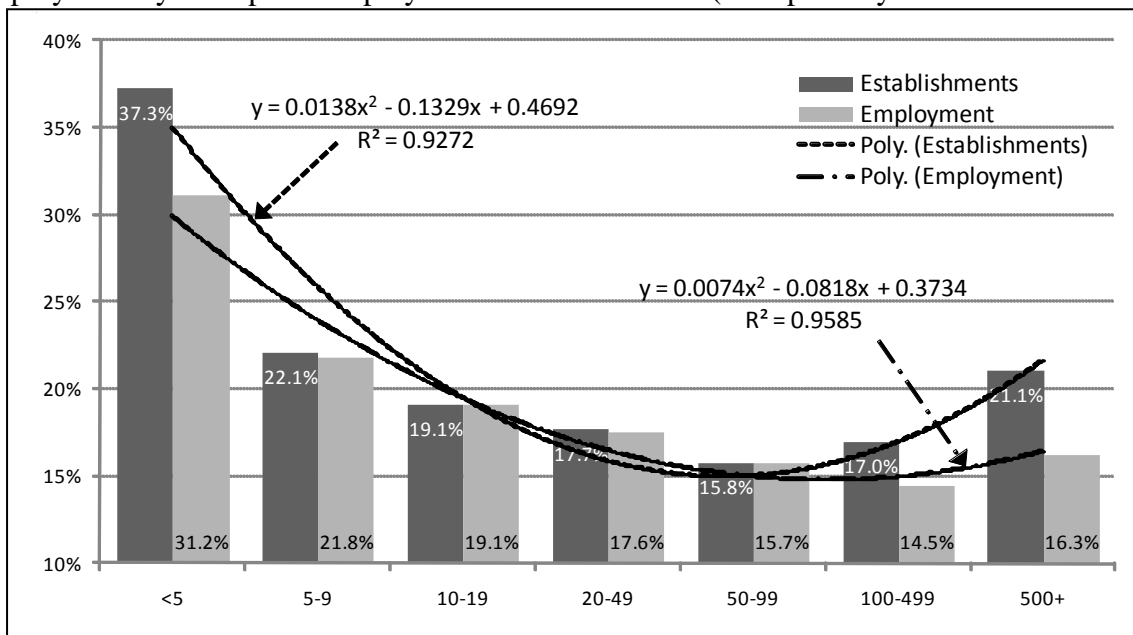
Table 9 Contraction Rates of 2002 Establishments by Industry and Race/Ethnicity: 2002-2006
(Non-publicly Held Businesses Only)

	White	Black	Asian	Other	Hispanic
Total	24.0	19.8	21.6	21.5	20.8
11: Ag. Support, Forestry, Fishing, and Hunting	24.3	19.8	33.3	26.1	34.4
21: Mining	19.5	24.4	10.7	16.0	14.6
22: Utilities	19.1	20.5	51.8	10.9	4.1
23: Construction	23.5	20.2	19.7	21.2	20.5
31-33: Manufacturing	29.6	28.4	26.1	23.8	24.8
42: Wholesale Trade	25.2	18.2	22.0	27.5	18.3
44-45: Retail Trade	26.2	18.5	21.1	24.7	20.9
48-49: Transportation and Warehousing	20.6	17.3	20.2	16.5	19.5
51: Information	23.4	19.1	14.7	21.9	18.8
52: Finance and Insurance	19.7	18.4	19.0	20.7	15.6
53: Real Estate and Rental and Leasing	20.0	15.4	19.9	14.7	17.0
54: Professional, Scientific, and Technical Services	21.0	20.4	18.1	19.3	19.0
55: Management of Companies and Enterprises	29.5	24.3	30.0	23.9	21.9
56: Admin., Support, Waste Mngt., and Remediation	22.4	19.2	22.5	21.3	19.0
61: Educational Services	20.3	19.3	20.6	17.4	21.3
62: Health Care and Social Assistance	25.9	21.4	23.5	20.8	23.6
71: Arts, Entertainment, and Recreation	22.0	14.7	24.7	17.4	20.1
72: Accommodation and Food Services	27.5	22.3	23.2	21.8	23.4
81: Other Services (except Public Administration)	25.3	20.3	20.4	25.9	22.3
95: Auxiliaries	28.9	15.0	39.0	21.7	40.5
99: Unclassified	2.0	0.9	1.9	0.5	4.9
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.					

Table 10 Total Establishments with Corresponding Total Employment, Establishment Deaths and Employment Destruction, 2002-2006, by Enterprise Employment Size (2002 Non-publicly Businesses Only)

Establishment employment size	Number of establishments (2002)	Establishment deaths (2002-2006)		Employment (2002)	Employment loss because of deaths (2002-2006)	
		Number	Rate (percent)		Number	Rate (percent)
Total	5,485,758	1,624,156	29.6	53,449,766	9,902,718	18.5
<5	3,088,445	1,150,858	37.3	5,059,780	1,577,239	31.2
5-9	903,099	199,730	22.1	5,854,363	1,279,089	21.8
10-19	570,407	108,906	19.1	7,202,371	1,378,848	19.1
20-49	396,483	70,138	17.7	9,664,950	1,697,482	17.6
50-99	158,612	25,050	15.8	6,360,157	1,001,505	15.7
100-499	200,417	34,015	17.0	9,866,870	1,431,217	14.5
500+	168,295	35,459	21.1	9,441,276	1,537,337	16.3
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.						

Chart 4 Average Death Rate of 2002 Establishments and Average Destruction Rate of Employment by Enterprise Employment Size: 2002-2006 (Non-publicly Held Businesses Only)



trendlines for the percentage changes in both establishment deaths and employment losses.¹¹ Enterprises with fewer than 5 employees had the highest rates of establishment closure (37.3 percent) and employment loss (31.2 percent). Compared with enterprises in other size categories, those with 50-499 employees appear to have had lower rates of both business closure and job loss.

Table 11 shows the number of 2002 establishments and the number and marginal rates of establishment death by enterprise employment size, time period (2002-2003, 2003-2004, 2004-2005, and 2005-2006), and enterprise owner’s race/ethnicity. The data on establishment deaths reveal a general pattern: of the establishments in operation in 2002, the overall death rates for each racial/ethnic establishment group diminished year by year. However, for some enterprise employment size groups within the ethnic/race categories, death rates did not always diminish year by year. Chart 5 examines the four-year cumulative death rates for each establishment group. An order 2 polynomial trendline for each group indicates that the lowest death rates for the four-year period of 2002-2006 were found among medium-sized enterprises with 50-99 employees.

¹¹ A polynomial trendline is a curved line that is used when data fluctuate. It is useful for analyzing gains and losses of employment over a large dataset. The order of the polynomial can be determined by the number of fluctuations in the data or by how many bends (hills and valleys) appear in the curve. An order 2 polynomial trendline generally has only one hill or valley. Order 3 generally has one or two hills or valleys. Order 4 generally has up to three.

Table 11 Establishments and Establishment Deaths, by Enterprise Employment Size, Time Period, and Race/Ethnicity, 2002-2006 (2002 Non-publicly Held Businesses Only)

Employment size	2002 number of establishment	Number of establishment deaths				Annual rate of establishment deaths			
		2002-03	2003-04	2004-05	2005-06	2002-03	2003-04	2004-05	2005-06
Total: White	5,035,274	509,233	365,891	313,527	281,174	10.1	8.1	7.5	7.3
<5	2,800,203	386,973	253,902	210,118	184,849	13.8	10.5	9.7	9.5
5-9	828,063	52,200	46,699	43,282	38,412	6.3	6.0	5.9	5.6
10-19	528,054	26,823	25,595	23,867	22,507	5.1	5.1	5.0	5.0
20-49	371,830	17,855	16,011	15,232	15,207	4.8	4.5	4.5	4.7
50-99	150,782	6,239	5,844	5,641	5,606	4.1	4.0	4.1	4.2
100-499	191,939	9,144	8,451	7,680	7,145	4.8	4.6	4.4	4.3
500+	164,403	9,998	9,390	7,707	7,448	6.1	6.1	5.3	5.4
Total: Black	95,330	13,504	9,348	8,126	6,528	14.2	11.4	11.2	10.1
<5	62,978	10,775	7,083	6,167	4,639	17.1	13.6	13.7	11.9
5-9	13,996	1,199	1,106	933	871	8.6	8.6	8.0	8.1
10-19	7,710	767	622	529	483	9.9	9.0	8.4	8.3
20-49	4,981	421	255	300	311	8.5	5.6	7.0	7.8
50-99	2,142	108	59	79	56	5.0	2.9	4.0	3.0
100-499	2,468	179	120	73	135	7.3	5.2	3.4	6.4
500+	1,055	55	103	45	32	5.2	10.3	5.0	3.8
Total: Asian	320,527	35,641	26,553	23,866	19,404	11.1	9.3	9.2	8.3
<5	205,878	27,904	19,527	16,840	13,956	13.6	11.0	10.6	9.9
5-9	55,000	3,889	3,313	3,680	2,860	7.1	6.5	7.7	6.5
10-19	30,496	1,948	2,029	1,691	1,191	6.4	7.1	6.4	4.8
20-49	17,006	1,076	919	985	931	6.3	5.8	6.6	6.6
50-99	4,779	405	243	385	171	8.5	5.6	9.3	4.6
100-499	4,815	272	307	168	174	5.6	6.8	4.0	4.3
500+	2,553	148	214	116	121	5.8	8.9	5.3	5.8
Total: Other	56,787	6,854	4,957	3,903	3,481	12.1	9.9	8.7	8.5
<5	34,350	5,498	3,573	2,711	2,580	16.0	12.4	10.7	11.4
5-9	9,393	501	645	551	404	5.3	7.3	6.7	5.2
10-19	6,145	418	396	299	208	6.8	6.9	5.6	4.1
20-49	3,718	251	202	193	166	6.8	5.8	5.9	5.4
50-99	1,245	84	51	75	79	6.7	4.4	6.8	7.6
100-499	1,568	71	63	46	38	4.5	4.2	3.2	2.7
500+	369	30	27	30	6	8.1	8.0	9.6	2.1
Total: Hispanic	197,893	23,503	17,358	14,381	11,806	11.9	10.0	9.2	8.3
<5	128,631	19,262	12,775	10,652	8,471	15.0	11.7	11.0	9.9
5-9	32,525	2,210	2,035	2,148	1,527	6.8	6.7	7.6	5.8
10-19	18,665	1,117	1,459	750	970	6.0	8.3	4.7	6.3
20-49	10,321	625	698	410	486	6.1	7.2	4.6	5.7
50-99	3,635	114	167	156	111	3.1	4.7	4.7	3.5
100-499	3,157	129	163	237	179	4.1	5.4	8.3	6.8
500+	960	45	62	28	62	4.7	6.8	3.3	7.5

* Death of establishments incurred from the cohort of 2002 establishments during the period indicated.
** Rate of establishments death number during the indicated time period divided by the 2002 cohort number subtracting the previous death number.
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

Chart 5 Average Four-year Death Rates of 2002 Establishments by Enterprise Employment Size and Race/Ethnicity, 2002-2006 (Non-publicly Held Businesses Only)

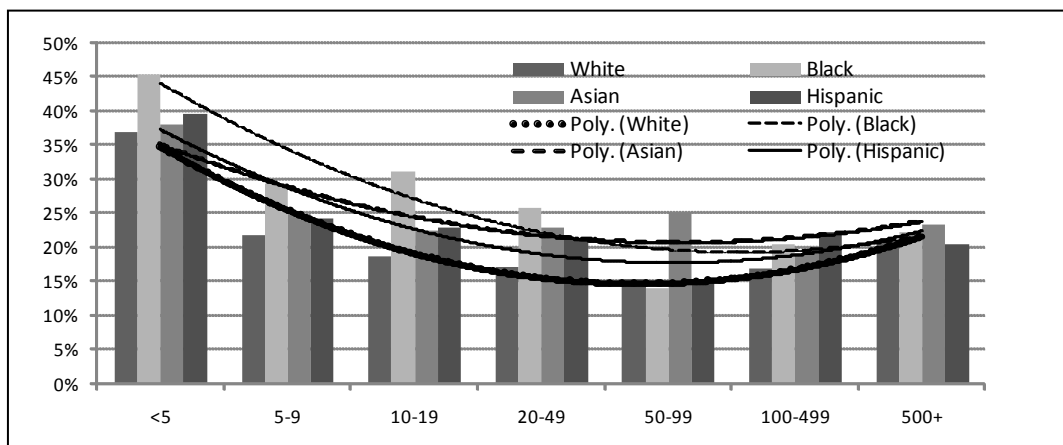


Table 12 compares the average number of employees per establishment, annual payroll per worker, and receipts per establishment, by enterprise employment size and race/ethnicity, using the 2002 record. The table also presents the number of White-owned establishments per minority-owned establishment; annual payroll per worker of minority-owned establishments as a percentage of White-owned establishment payroll per worker; and receipts per minority-owned establishment as a percentage of White, all from the 2002 record. In Table 1, the White population was 6.3 times the Black population, 19.0 times the Asian, and 5.6 times the Hispanic population, and the White civilian labor force was 7.3 times the Black labor force, 18.2 times the Asian, and 6.7 times the Hispanic labor force in 2002. The number of White-owned establishments was 53 times the number of Black-owned establishments, 16 times the Asian-owned, and 25 times the number of Hispanic-owned establishments. With few exceptions, the annual payroll per worker and receipts per establishment of minority-owned enterprises were fractions of those of White-owned enterprises on average.

Tables 13 and 14 show business dynamics by enterprise receipts size for all establishments in the 2002 cohort. The four-year expansion rate drops rapidly as enterprise receipts size increases. Chart 6 clearly shows the higher rates of 2002-2006 job creation because of the expansion of smaller enterprises with less than \$50,000 receipts in 2002. This was especially true for minority-owned enterprises: Black-owned enterprises had higher rates of job creation regardless of their receipts size (the trendline of Black-owned enterprise job creation is

Table 12 Average Number of Employees per Establishment, Annual Payroll per Worker, and Receipts per Establishment, by Enterprise Employment Size and Owner's Race/Ethnicity, 2002
(Non-publicly Held Businesses Only)

Enterprise employee size	Number of employees per establishment	Annual payroll per worker (dollars)	Receipts per establishment (dollars)	Number of White-owned per minority-owned establishments	Annual payroll per worker of minority-owned establishment as percentage of White	Receipts per minority-owned establishment as percentage of White
Total: White	10.0	30,743	1,490,641	---	---	---
<5	1.6	34,560	329,942	---	---	---
5-9	6.5	28,572	893,079	---	---	---
10-19	12.6	30,150	1,704,205	---	---	---
20-49	24.3	31,523	3,409,285	---	---	---
50-99	39.9	32,312	6,064,513	---	---	---
100-499	48.9	32,109	7,518,019	---	---	---
500+	55.9	27,347	8,012,927	---	---	---
Total: Black	7.7	23,747	683,311	53	77	46
<5	1.5	30,458	220,264	44	88	67
5-9	6.5	22,967	564,780	59	80	63
10-19	13.0	23,388	1,052,849	68	78	62
20-49	26.3	22,816	2,126,540	75	72	62
50-99	41.9	25,326	4,462,451	70	78	74
100-499	62.8	22,454	4,329,730	78	70	58
500+	69.3	18,823	4,179,660	156	69	52
Total: Asian	6.8	26,036	901,737	16	85	60
<5	1.7	28,709	330,588	14	83	100
5-9	6.4	23,394	859,196	15	82	96
10-19	12.9	23,766	1,461,122	17	79	86
20-49	25.9	24,989	3,004,176	22	79	88
50-99	46.9	27,126	5,962,945	32	84	98
100-499	57.8	29,284	6,611,925	40	91	88
500+	55.0	27,593	6,946,244	64	101	87
Total: Other	8.0	27,991	909,427	89	91	61
<5	1.6	33,593	294,518	82	97	89
5-9	6.6	27,047	749,326	88	95	84
10-19	12.6	28,490	1,327,053	86	94	78
20-49	25.8	27,401	2,691,666	100	87	79
50-99	39.5	28,125	4,793,384	121	87	79
100-499	46.3	25,990	4,761,512	122	81	63
500+	111.2	25,681	7,838,407	446	94	98
Total: Hispanic	7.3	25,345	894,549	25	82	60
<5	1.6	28,545	277,208	22	83	84
5-9	6.5	23,654	828,229	25	83	93
10-19	12.9	23,579	1,347,536	28	78	79
20-49	26.0	24,753	2,971,043	36	79	87
50-99	48.1	27,496	5,201,493	41	85	86
100-499	72.2	25,558	8,368,108	61	80	111
500+	119.5	24,274	13,841,532	171	89	173

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

Table 13 Four-year Percent Changes in Employment: Job Creation and Destruction, by Receipts Size and Race/Ethnicity of Enterprise Owner, 2002-2006 (2002 Non-publicly Held Businesses Only)

Receipts size (\$1,000)	Average four-year rate of job creation due to establishment expansion (percent)				Average four-year rate of job destruction due to establishment death and contraction (percent)			
	White	Black	Asian	Hispanic	White	Black	Asian	Hispanic
Total	23.3	31.1	26.9	30.0	32.4	42.7	39.3	38.2
<25	77.2	92.6	63.8	96.1	76.8	79.0	86.4	76.4
25-49	58.4	96.5	78.1	66.2	69.9	70.1	71.7	71.7
50-99	41.6	45.1	46.7	48.2	60.7	62.0	63.0	59.1
100-499	28.0	35.6	28.6	35.2	43.9	49.7	47.7	44.3
500-999	23.3	27.1	23.4	28.1	34.9	45.1	36.5	38.5
1,000+	21.4	26.9	24.5	26.3	28.8	37.1	33.4	33.9

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

Table 14 Change in Establishment Deaths, Expansions, and Contractions, and Net Change in Employment of 2002 Establishments, by Receipts Size and Race/Ethnicity of Enterprise Owner, 2002-2006 (2002 Non-publicly Held Businesses Only)

Enterprise Receipts Size (\$1,000)	Percentage of establishments experiencing			Net change in employment	Enterprise receipts size (\$1,000)	Percentage of establishments experiencing			Net change in employment
	Death	Expansion	Contraction			Death	Expansion	Contraction	
All U.S. non-publicly held enterprises					Asian				
Total	29.6	28.5	23.8	-4,988,473	Total	32.9	28.9	21.6	-269,855
<25	68.5	16.4	3.7	-4,534	<25	68.2	22.5	2.4	-6,007
25-49	57.0	17.9	6.7	-29,196	25-49	57.6	23.8	3.8	1,231
50-99	46.1	18.9	11.2	-159,412	50-99	50.0	22.6	9.2	-9,174
100-499	29.8	25.4	22.1	-1,206,232	100-499	31.6	26.8	21.6	-103,456
500-999	19.7	32.7	31.6	-714,356	500-999	20.0	33.1	32.3	-48,961
1,000+	16.8	38.3	33.4	-2,874,743	1,000+	19.0	38.1	31.4	-103,487
White					Others				
Total	29.2	28.5	24.0	-4,590,425	Total	33.8	29.5	21.5	-54,911
<25	68.4	16.0	3.8	833	<25	71.9	17.2	2.2	-519
25-49	56.8	17.5	6.9	-32,220	25-49	58.3	16.2	9.1	-541
50-99	45.7	18.6	11.3	-147,416	50-99	47.2	23.8	10.3	641
100-499	29.5	25.2	22.2	-1,070,248	100-499	33.8	26.7	20.8	-17,674
500-999	19.5	32.6	31.6	-642,265	500-999	22.2	35.4	29.0	-5,402
1,000+	16.6	38.3	33.5	-2,699,108	1,000+	17.6	40.9	32.5	-31,415
Black					Hispanic				
Total	39.3	26.0	19.8	-85,698	Total	33.9	29.6	20.8	-117,455
<25	70.5	16.6	3.7	945	<25	69.0	19.0	3.3	1,912
25-49	60.2	18.2	7.6	2,826	25-49	57.4	20.8	5.8	-855
50-99	50.3	19.7	11.8	-4,378	50-99	46.3	21.7	12.1	-4,353
100-499	34.6	26.2	21.0	-23,112	100-499	30.7	28.3	22.0	-27,445
500-999	25.7	30.8	32.4	-17,550	500-999	23.0	36.7	27.9	-22,699
1,000+	21.4	38.0	32.0	-44,430	1,000+	19.0	41.1	31.1	-64,016

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

Chart 6 Average Rate of Employment Expansion of 2002 Establishments by Enterprise Receipts Size and Race/Ethnicity of Owner, 2002-2006 (Non-publicly Held Businesses Only)

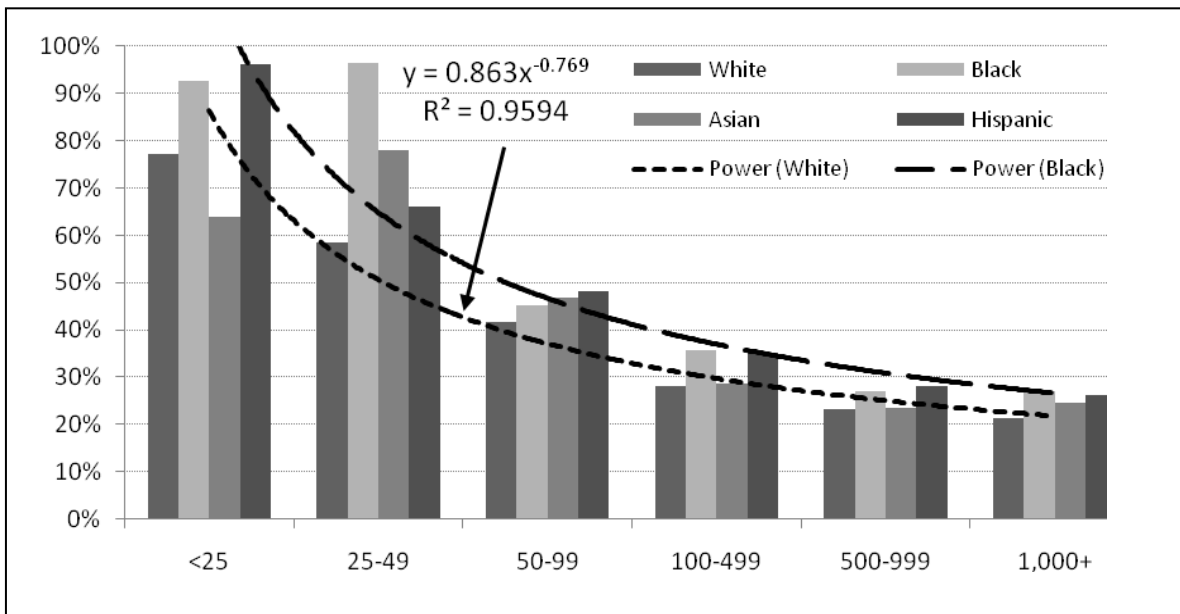
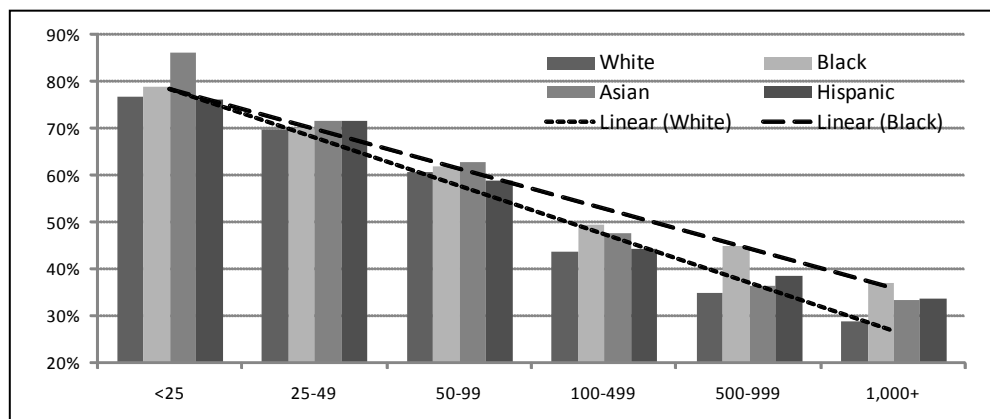


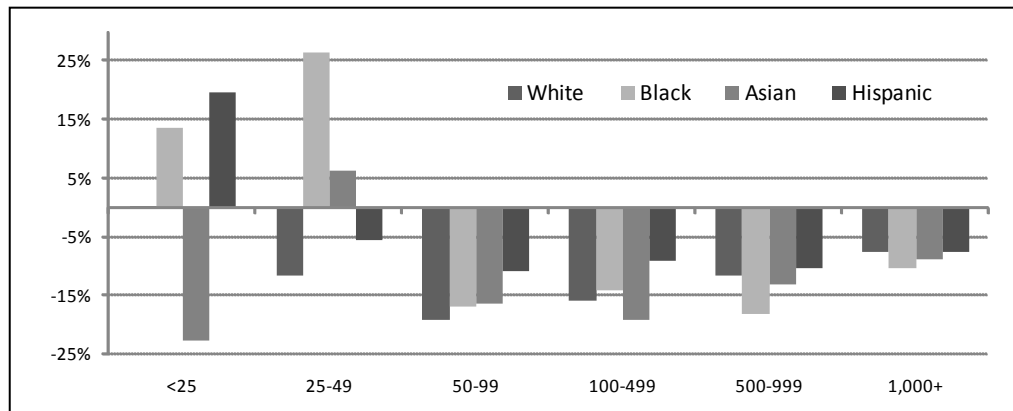
Chart 7 Average Four-Year Rate of Job Destruction Due to Establishment Deaths and Contractions by Enterprise Receipts Size and Race/Ethnicity of Owner, 2002-2006 (Non-publicly Held Businesses Only)



above that of White-owned enterprises).¹² Chart 7 exhibits a linear trendline for the four-year rate of job destruction attributable to business deaths and contractions: the larger the receipts size,

¹² The chart shows power trendlines in terms of average expansion rates with respect to the enterprises' receipt sizes. A power trendline is a curved line that is used with datasets that compare measurements that increase (or decrease) at a specific rate. In Chart 6, the average expansion rate of establishments is a function of their enterprises' receipts

Chart 8 Four-Year Rate of Net Change in Employment by Race/Ethnicity and Enterprise Receipts Size, 2002-2006



the lower the rate of job destruction. The average four-year rate of job destruction of minority-owned enterprises was generally higher than that of White-owned enterprises.

Chart 8 displays the four-year (2002-2006) rates of net change in employment by race/ethnicity of enterprise owner and by enterprise receipts size. With establishment births excluded, employment declined over the four-year period for all enterprise receipts sizes over \$50,000 regardless of the owner’s race or ethnicity. Employment change was not always negative over the same period for enterprise receipts sizes of less than \$50,000.

For the cohort of 2002 establishments, the smaller the receipts size of the enterprise, the more likely it was to close: 68.5 percent of enterprises with less than \$25,000 in receipts, 57 percent of those with \$25,000 to \$49,000, and 46.1 percent of those with \$50,000-\$99,000 in receipts experienced closings or business deaths (Table 14). More than 30 percent of those with receipts of \$500,000 or more experienced expansions; the same was true of contractions. Although a smaller share of large enterprises closed, those with \$1,000,000 or more in annual receipts were responsible for more than 50 percent of total job destruction in each racial/ethnic ownership group except Asian between 2002 and 2006.

size: the smaller the size, the higher the expansion rate. Note that the R-squared value is 0.9594, which is a good fit of the line to the data of White-owned businesses.

Table 15 Top 10 States: Establishment Change Due to Deaths, Expansions, and Contractions, and Net Change in Employment by State, 2002-2006 (2002 Non-publicly Held Businesses Only)

Top 10 states	Deaths (percent)	Top 10 states	Expansions (percent)	Top 10 states	Contractions (percent)	Top 10 states	Net job change
North Dakota	23.9	Idaho	35.3	Nevada	19.1	Hawaii	5,698
Hawaii	24.9	Hawaii	34.2	Florida	19.5	Nevada	3,498
Wisconsin	25.2	New Mexico	31.9	Utah	19.6	Alaska	-3,141
Rhode Island	25.6	Alaska	31.5	Idaho	19.8	Wyoming	-3,730
Vermont	25.8	Oregon	31.4	Hawaii	20.7	New Mexico	-7,727
Pennsylvania	25.9	Wyoming	31.2	Wyoming	21.6	Idaho	-7,926
South Dakota	26.0	Nevada	31.1	Arizona	21.8	North Dakota	-8,626
Iowa	26.4	Washington	31.1	Maine	21.8	South Dakota	-9,777
Connecticut	26.9	Utah	30.9	Washington	21.9	Delaware	-11,464
Maryland	27.1	Virginia	30.7	Oregon	21.9	District of Columbia	-13,581

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

V. Business Dynamics by State

Table 15 lists the 10 states with the lowest establishment death rates, the highest business expansion rates, and the highest net job gains over the 2002-2006 period. Of all employer establishments in existence in 2002, 23.9 percent were closed by 2006 in North Dakota and 24.9 percent in Hawaii. In Idaho, 35.5 percent of establishments expanded; in Hawaii, 34.2 percent. With establishment births excluded, the 2002 cohort of establishments lost jobs by 2006 on net in all except two states. Establishments in Hawaii gained 5,698 jobs; Nevada job gains totaled 3,498.

Table 16 highlights the differences, if any, by race/ethnicity of ownership by state. North Dakota was the top state in the nation for survival of both White-owned and Hispanic-owned establishments.¹³ Wyoming was the top state for the survival of the 2002 cohort of Black-owned establishments—just 16.2 percent had closed after four years. Of Asian-owned establishments in Hawaii, 24.4 percent had closed after four years, while 29.7 percent had closed in Maryland. More than 70 percent of Black-owned and more than 40 percent of Asian-owned establishments

¹³ Caution should be exercised in interpreting these results as both the number and minority-owned share of businesses in many of these states is relatively small. See <http://www.sba.gov/advo/research/profiles/> for data by state. Note also that as this cohort includes businesses of all ages and sizes, discussions of their survival rates should not be confused with the survival rates of new business startups

Table 17 Four-year Change in Net Employment, by Enterprise State and Owner's Race/Ethnicity, 2002-2006 (2002 Non-publicly Held Businesses Only)

State	Total	White	Black	Asian	Hispanic
United States	-4,988,473	-4,590,425	-85,698	-269,855	-117,455
01: Alabama	-67,562	-62,720	-3,410	-1,385	-1,734
02: Alaska	-3,141	(D)	(D)	-873	134
04: Arizona	-24,678	-14,750	-2,055	-6,262	-1,015
05: Arkansas	-53,477	-49,085	-3,149	-982	-463
06: California	-757,266	-627,923	2,125	-111,387	-53,095
08: Colorado	-91,011	-85,030	-1,460	-4,577	-5,652
09: Connecticut	-65,101	-60,807	-858	-2,349	-980
10: Delaware	-11,464	-9,277	(D)	-1,022	(D)
11: District of Columbia	-13,581	(D)	-2,656	(D)	86
12: Florida	-212,557	-184,480	-19,485	-9,205	-18,731
13: Georgia	-148,612	-139,620	-3,595	-4,880	-1,635
15: Hawaii	5,698	6,855	61	81	180
16: Idaho	-7,926	-8,179	(D)	(D)	-82
17: Illinois	-258,127	-233,070	-6,263	-17,067	6,243
18: Indiana	-90,774	-88,563	-566	-83	1,133
19: Iowa	-49,443	-49,148	-398	563	-671
20: Kansas	-57,811	-55,915	-333	-1,553	-1,384
21: Kentucky	-61,872	-60,374	171	-1,127	73
22: Louisiana	-102,584	-91,108	-6,573	-3,297	5,238
23: Maine	-25,564	-25,104	(D)	(D)	(D)
24: Maryland	-53,840	-50,805	-635	-2,702	209
25: Massachusetts	-126,013	-120,799	-1,599	-2,940	-1,686
26: Michigan	-287,813	-274,066	-8,052	-4,900	-3,624
27: Minnesota	-70,871	-69,508	703	-2,612	306
28: Mississippi	-44,134	-40,968	-1,523	-1,852	-563
29: Missouri	-110,816	-105,038	-908	-3,856	-383
30: Montana	-18,867	-18,742	(D)	(D)	159
31: Nebraska	-46,479	-45,131	-261	-745	-118
32: Nevada	3,498	4,129	666	-1,765	1,288
33: New Hampshire	-21,357	-20,099	(D)	(D)	121
34: New Jersey	-203,097	-194,600	-4,776	-2,405	-2,277
35: New Mexico	-7,727	-7,287	-173	-436	-1,893
36: New York	-431,513	-401,373	-8,420	-21,556	-12,152
37: North Carolina	-150,082	-136,953	-4,730	-6,809	-804
38: North Dakota	-8,626	-8,190	(D)	(D)	(D)
39: Ohio	-226,261	-215,007	-4,042	-7,214	-2,495
40: Oklahoma	-42,805	-39,480	-112	-402	399
41: Oregon	-33,809	-31,262	-147	-1,932	671
42: Pennsylvania	-212,713	-199,884	-5,037	-6,576	1,133
44: Rhode Island	-26,886	-26,399	-170	-354	-243
45: South Carolina	-67,949	-61,838	-3,436	-2,904	-688
46: South Dakota	-9,777	(D)	(D)	(D)	-290
47: Tennessee	-61,061	-52,948	-1,116	-6,161	855
48: Texas	-377,691	-369,756	11,662	-14,676	-19,884
49: Utah	-21,235	-20,917	-257	-315	11
50: Vermont	-15,028	-15,418	(D)	(D)	(D)
51: Virginia	-71,732	-67,116	-3,997	-3,165	-1,933
53: Washington	-32,757	-25,965	115	-4,466	-1,439
54: West Virginia	-27,024	-26,136	-482	-386	-49
55: Wisconsin	-83,429	-83,524	768	146	153
56: Wyoming	-3,730	-3,129	(D)	(D)	90

Note: (D) denotes data suppression to avoid disclosure of business identity due to small samples.
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.

Table 16 Top 10 States: Percent of Establishment Change due to Business Deaths, Expansions, and Contractions, by State and Owner's Race/Ethnicity, 2002-2006 (2002 Non-publicly Held Businesses Only)

State	White	State	Black	State	Asian	State	Hispanic
Establishment death rate							
North Dakota	23.7	Wyoming	16.2	Hawaii	24.4	North Dakota	10.3
Wisconsin	25.0	Hawaii	26.5	West Virginia	24.6	Montana	19.6
Rhode Island	25.2	District of Columbia	30.1	Maine	26.0	South Dakota	20.2
Pennsylvania	25.5	Minnesota	32.1	Wyoming	27.0	New Mexico	27.8
Hawaii	25.6	New York	34.0	Ohio	27.2	Illinois	27.8
Vermont	25.8	Maryland	34.1	Oklahoma	28.1	Maryland	28.8
South Dakota	25.8	Montana	35.4	Idaho	28.9	Wisconsin	29.2
Iowa	26.1	Pennsylvania	36.0	Massachusetts	29.5	Delaware	29.7
Connecticut	26.5	Michigan	36.4	Delaware	29.7	Arizona	30.1
Maryland	26.6	Tennessee	36.5	Maryland	29.7	Louisiana	30.8
Establishment expansion rate							
Hawaii	37.1	Wyoming	70.3	Wyoming	40.3	Montana	46.4
Idaho	35.4	Hawaii	47.1	North Dakota	36.1	Tennessee	40.3
Alaska	32.1	Wisconsin	32.5	Oklahoma	35.5	Wyoming	40.2
New Mexico	31.9	Rhode Island	31.9	Montana	33.5	North Dakota	38.5
Oregon	31.4	Idaho	31.9	Delaware	32.8	Indiana	35.7
Nevada	31.3	Minnesota	31.3	Kentucky	32.6	New Mexico	35.7
Washington	31.2	Maryland	31.1	Alabama	32.5	Minnesota	35.2
Wyoming	31.0	Tennessee	30.7	Arkansas	31.8	Wisconsin	35.2
Utah	30.9	Oregon	30.6	Texas	31.2	Utah	33.7
Virginia	30.8	New Mexico	30.0	Hawaii	31.2	Hawaii	33.4
Establishment contraction rate							
Hawaii	18.7	Idaho	2.7	Nevada	14.1	New Hampshire	12.2
Nevada	19.5	Wyoming	2.7	New Hampshire	16.5	Kentucky	14.2
Florida	19.5	Maine	3.0	Montana	16.7	Wyoming	14.7
Utah	19.5	Montana	4.2	New York	16.9	Idaho	14.8
Idaho	19.8	New Hampshire	4.2	Kentucky	18.4	North Dakota	15.4
Wyoming	21.6	Rhode Island	7.8	South Dakota	18.4	Kansas	16.7
Arizona	21.7	Vermont	10.3	Pennsylvania	18.8	Washington	17.1
Oregon	21.8	Oregon	12.3	Arkansas	18.8	Minnesota	17.2
Maine	21.9	North Dakota	13.3	New Jersey	19.2	Missouri	17.2
Alaska	21.9	Hawaii	14.7	North Dakota	19.4	Oregon	17.3
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census.							

enjoyed robust expansions in Wyoming. More than 46 percent of Hispanic-owned businesses expanded in Montana, while 37.1 percent of White-owned establishments expanded in Hawaii.

Table 17 records the four-year changes in net employment, by state and race/ethnicity of the enterprise owner. For the 2002 cohort of all non-publicly held businesses, Hawaii had net

employment gains in enterprises owned by all racial/ethnic groups between 2002 and 2006. The most striking feature of this table is the strong job creation through business expansions (and not including job creation in new business startups) by Hispanic-owned businesses in the 2002 cohort in 19 states. In five states Hispanic-owned businesses had employment gains of more than 1,000 over the four years: 6,243 in Illinois, 5,238 in Louisiana, 1,288 in Nevada, 1,133 in Indiana, and 1,133 in Pennsylvania. In Nevada enterprises made strong employment gains in all but one racial/ethnic ownership group; the exception was Asian-owned establishments, which lost 1,765 jobs.

VI. Conclusion: Business Dynamics and Employment

Business expansions, by definition, create jobs. Job creation due to expansions was significant in two periods for which data were available. Over the four-year 1997-2001 period, the job creation due to expansion was almost 22 million, compared with more than 21 million over the four-year 2002-2006 period.¹⁴ With the employment of new startups omitted, net job losses as a result of gains from expansions minus losses from contractions and business closings amounted to nearly 10 percent of total 1997 employment by 2001 and 9 percent of total 2002 employment by 2006 (Table 18). Interestingly, despite the omission of employment in new business startups, Hispanic-owned businesses alone had a net gain in jobs over the 1997-2001 period. Chart 9 clearly displays the overall net job losses over the 2002-2006 period in establishments owned by the various racial/ethnic groups of the 2002 cohort of non-publicly held enterprises.

Table 19 indicates that both the establishment death rate (30 percent) and the employment destruction rate (19 percent) of non-publicly held enterprises were higher than those of publicly held enterprises, at 27 percent and 16 percent, respectively. However, non-publicly held businesses had larger increases in employment as a result of expansions; they increased employment by 12,590,325, about 50 percent more than that of publicly held enterprises. The net job destruction from all 2002 establishments over the 2002-2006 period was almost 13 million: of that total, publicly held establishments lost more than 61 percent, or 7,891,501; non-publicly held establishments lost less than 39 percent.

¹⁴ *Gender and Establishment Dynamics, 2002-2006*, U.S. Small Business Administration, Office of Advocacy, 2010.

Table 18 Change in Employment Due to Enterprise Deaths, Expansions, and Contractions, 1997-2001 and 2002-2006 (Percent)

Period	Reasons for employment change	Total ¹	White ²	Black	Asian ³	Hispanics ⁴
1997-2001*	Expansions	21	21	36	29	45
	Deaths	-18	-18	-28	-22	-27
	Contractions	-13	-13	-17	-17	-13
	Net change in employment	-10	-10	-9	-10	5
2002-2006	Expansions	24	23	31	27	30
	Deaths	-19	-18	-27	-24	-24
	Contractions	-14	-14	-16	-16	-14
	Net change in employment	-9	-9	-12	-13	-8

Note: 1997-2001 and 2002-2006 business dynamic data were collected in a separate interagency contract between the U.S. Small Business Administration, Office of Advocacy, and the U.S. Census Bureau. Definitions and samplings of these two data collections were very different. For example, no race category was specified for White-owned enterprises for the first, 1997-2001, data collection.

1. For 1997-2001, "Total" includes both publicly held and non-publicly held enterprises. For 2002-2006, "Total" includes only non-publicly held. For publicly held data, see Table 19.
2. The author uses employment change rates of "all U.S." establishments as proxies for those of White-owned enterprises.
3. For 1997-2001, "Asian" includes Pacific Islanders.
4. Hispanics can be of any race.

* Data can be found in *Dynamics of Minority-Owned Employer Establishments, 1997-2001*, U.S. Small Business Administration, Office of Advocacy, <http://www.sba.gov/advo/research/rs251tot.pdf>.

Chart 9 Rates of Job Creation and Destruction of 2002 Establishments, 2002-2006

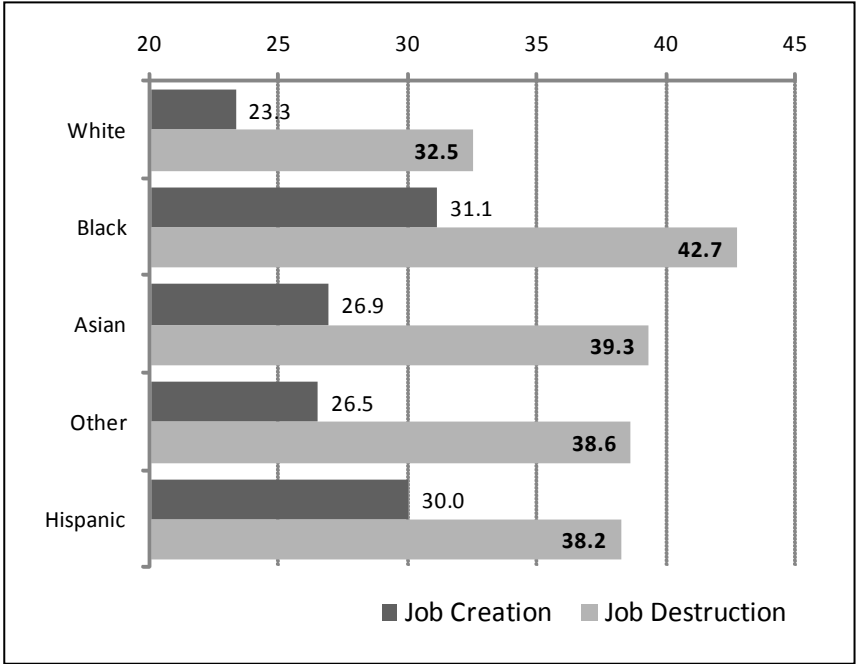


Table 19 Business Dynamics of All Enterprises by Type of Business, 2002-2006

Establishments by type of business	2002		Net change in employment	Deaths, 2002-2006		Expansions, 2002-2006		Contractions, 2002-2006	
	Establishments	Employment		Establishments	Employment	Establishments	Employment	Establishments	Employment
Total									
Number	6,807,798	106,994,852	-12,879,973	1,975,160	-18,621,805	1,984,860	21,145,177	1,685,815	-15,403,345
Percent	--	--	-12	29	-17	29	20	25	-14
Publicly held									
Number	1,322,040	53,545,085	-7,891,501	351,004	-8,719,087	422,326	8,554,852	380,669	-7,727,265
Percent	--	--	-15	27	-16	32	16	29	-14
Non-publicly held									
Number	5,485,758	53,449,766	-4,988,473	1,624,156	-9,902,718	1,562,534	12,590,325	1,305,146	-7,676,080
Percent	--	--	-9	30	-19	28	24	24	-14

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census

We have examined the impacts of establishment expansions, contractions, and closings on business dynamics by industry sector, enterprise size, business owners' racial/ethnic background, geographic location, and, briefly, type of ownership (publicly or non-publicly held). Further research to investigate business dynamics in publicly and non-publicly held businesses may prove fruitful in advancing the understanding of small business contributions to job creation.

Appendix A Explanation of the Data

1. About the Tables Provided by the U.S. Census Bureau

Data used in this report were processed by the U.S. Small Business Administration, Office of Advocacy, from data provided by the Census Bureau to the Office of Advocacy, tracking minority-owned businesses enterprises that responded to the 2002 Survey of Business Owners matched with the 1989-2006 Business Information Tracking Series.

Establishments, employment, annual payroll, and receipts data for subsequent year "deaths" or closings are the 2002 data for these establishments. For example, 1,975,160 establishments operating in 2002 were closed by 2006. Those firms—in 2002—had 18,621,805 employees, \$607,106,407,000 in annual payroll, and \$3,378,088,078,000 in receipts.

Note that a small number of estimates have extremely large relative standard errors (RSEs). They are primarily associated with "net change in employment" estimates of zero and are a result of the Census Bureau's RSE calculation methodology when applied to positive and negative subsample estimates (as is the case with the net change in employment estimates). They are obviously extreme cases, but any estimate with a large RSE should be used with caution.

The U.S. Census Bureau provided tabulations for the periods 2002-2003, 2002-2004, 2002-2005, and 2002-2006 as listed below. They are available to the public.

- Table 1 The Number of Initial-Year Establishments, Deaths, Expansions, and Contractions with Corresponding Change in Employment by Industry, Enterprise Receipts Size, and Type of Business: 2002-2003
- Table 2 The Number of Initial-Year Establishments, Deaths, Expansions, and Contractions with Corresponding Change in Employment by Industry, Enterprise Receipts Size, Gender, and Race: 2002-2003 (Non-Public Businesses Only)
- Table 3 The Number of Initial-Year Establishments, Deaths, Expansions, and Contractions with Corresponding Change in Employment by State, Enterprise Receipts Size, and Type of Business: 2002-2003
- Table 4 The Number of Initial-Year Establishments, Deaths, Expansions, and Contractions with Corresponding Change in Employment by State, Enterprise Receipts Size, Gender, and Race: 2002-2003 (Non-Public Businesses Only)
- Table 5 The Number of 2002 Establishments with Corresponding Employment, Annual Payroll, and Receipts, by Industry, Initial-Year Enterprise Employment Size, Subsequent-Year Enterprise Employment Size, and Type of Business: 2002-2003
- Table 6 The Number of 2002 Establishments with Corresponding Employment, Annual Payroll, and Receipts, by Industry, Initial-Year Enterprise Employment Size, Subsequent-Year Enterprise Employment Size, Gender, and Race: 2002-2003 (Non-Public Businesses Only)

"Public" refers to companies that are publicly held or cannot be classified by gender, ethnicity, and race.

2. About Classification of Variables

Industry:

- : Total
- 11: Ag. Support, Forestry, Fishing, and Hunting
- 21: Mining
- 22: Utilities
- 23: Construction
- 31-33: Manufacturing
- 42: Wholesale Trade
- 44-45: Retail Trade
- 48-49: Transportation and Warehousing
- 51: Information
- 52: Finance and Insurance
- 53: Real Estate and Rental and Leasing
- 54: Professional, Scientific, and Technical Services
- 55: Management of Companies and Enterprises
- 56: Admin., Support, Waste Mngt., and Remediation
- 61: Educational Services
- 62: Health Care and Social Assistance
- 71: Arts, Entertainment, and Recreation
- 72: Accommodation and Food Services
- 81: Other Services (except Public Administration)
- 95: Auxiliaries
- 99: Unclassified

Seven Establishment Receipts Size (in \$1,000)

- | | |
|----------|------------|
| 1: Total | 5: 100-499 |
| 2: <25 | 6: 500-999 |
| 3: 25-49 | 7: 1,000+ |
| 4: 50-99 | |

Two Type of Business:

- 1: Total
- 2: Public
- 3: Non-Public

Gender

- 1: Total
- 2: Male
- 3: Female
- 4: Equally Owned

Race

- | | |
|----------|----------|
| 1: Total | 3: Black |
| 2: White | 4: Asian |

5: Other
6: Hispanic

7: Non-Hispanic

Subsequent-Year Enterprise Employment Size:

1: Total
2: Deaths
3: <5
4: 5-9
5: 10-19

6: 20-49
7: 50-99
8: 100-499
9: 500+

States:

--: United States
01: Alabama
02: Alaska
04: Arizona
05: Arkansas
06: California
08: Colorado
09: Connecticut
10: Delaware
11: District of Columbia
12: Florida
13: Georgia
15: Hawaii
16: Idaho
17: Illinois
18: Indiana
19: Iowa
20: Kansas
21: Kentucky
22: Louisiana
23: Maine
24: Maryland
25: Massachusetts
26: Michigan
27: Minnesota
28: Mississippi

29: Missouri
30: Montana
31: Nebraska
32: Nevada
33: New Hampshire
34: New Jersey
35: New Mexico
36: New York
37: North Carolina
38: North Dakota
39: Ohio
40: Oklahoma
41: Oregon
42: Pennsylvania
44: Rhode Island
45: South Carolina
46: South Dakota
47: Tennessee
48: Texas
49: Utah
50: Vermont
51: Virginia
53: Washington
54: West Virginia
55: Wisconsin
56: Wyoming

3. Defining Business Terms

<http://www.census.gov/econ/susb/definitions.html>

Establishment An establishment is a single physical location where business is conducted or where services or industrial operations are performed.

Firm A firm is a business organization consisting of one or more domestic establishments in the same state and industry that were specified under common ownership or control. The firm and the establishment are the same for single-establishment firms. For each multi-establishment firm, establishments in the same industry within a state will be counted as one firm—the firm employment and annual payroll are summed from the associated establishments.

Enterprise An enterprise is a business organization consisting of one or more domestic establishments that were specified under common ownership or control. The enterprise and the establishment are the same for single-establishment firms. Each multi-establishment company forms one enterprise—the enterprise employment and annual payroll are summed from the associated establishments.

Employment Paid employment consists of full and part-time employees, including salaried officers and executives of corporations, who were on the payroll in the pay period including March 12. Included are employees on sick leave, holiday, and vacation; not included are proprietors and partners of unincorporated businesses.

Annual Payroll Total annual payroll includes all forms of compensation, such as salaries, wages, commissions, bonuses, vacation allowances, sick-leave pay, and the value of payments in kind (e.g., free meals and lodgings) paid during the year to all employees.

Receipts Receipts (net of taxes) are defined as the revenue for goods produced, distributed, or services provided, including revenue earned from premiums, commissions and fees, rents, interest, dividends, and royalties. Receipts exclude all revenue collected for local, state, and federal taxes. Receipts are acquired from the Economic Census data for establishments in industries that are in-scope to the Economic Census; receipts are acquired from IRS tax data for single-establishment businesses in industries that are out of scope to the Economic Census; payroll-to-receipts ratios are used to estimate receipts for multi-establishment businesses in industries that are out of scope to the Economic Census. Statistics of U.S. Businesses has receipts for 1997 and 2002 only.

Enterprise Size Enterprise size designations are determined by the summed employment of all associated establishments. The enterprise size group "0" includes enterprises for which no associated establishments reported paid employees in the mid-March pay period but that did have paid employees at some time during the year.

Business Information Tracking Series (BITS) The BITS is a file that links establishments in the annual County Business Patterns data from year to year. A series of matches is used to link establishments across years. The primary match links establishments having the same Census

identification number in both the initial and subsequent years. These are establishments that have undergone no ownership or organizational changes.

The remainder of the matches use establishment identification numbers such as the employer identification number, as well as establishment attributes like business name and address, ZIP code, and industry code to create links for establishments that have remained in existence but have undergone ownership or organizational changes that led to changes in the Census file numbers across years.

This file is used to create longitudinal tabulations. A longitudinal tabulation is a tabulation that allows a study of business entities across a span of years. A longitudinal tabulation permits researchers to follow the changes in individual business entities, which makes it possible to tabulate establishment births, deaths, expansions, and contractions for an industry and/or enterprise size. In contrast, nonlongitudinal tabulations show aggregate totals for an industry and/or enterprise size. Comparisons of nonlongitudinal tabulations over time periods do not allow for tracking or explanations of changes in business entities.

Establishment Births Births are establishments that have zero employment in the first quarter of the initial year and positive employment in the first quarter of the subsequent year.

Establishment Deaths Deaths are establishments that have positive employment in the first quarter of the initial year and zero employment in the first quarter of the subsequent year.

Establishment Expansions Expansions are establishments that have positive first quarter employment in both the initial and subsequent years and that increase employment over the time period between the first quarter of the initial year and the first quarter of the subsequent year.

Establishment Contractions Contractions are establishments that have positive first quarter employment in both the initial and subsequent years and that decrease employment over the time period between the first quarter of the initial year and the first quarter of the subsequent year.

Firm Closure Firm closure means to shut down or transfer the ownership of a firm. See 1989-2001 Employer Firm Births and Deaths by Employment Size of Firm at www.sba.gov/advo/stats/dyn_b_d8901.pdf.

4. Defining Gender and Race/Ethnicity of Non-publicly Held Enterprises

<http://www.census.gov/econ/sbo/definitions.html>

- **American Indian or Alaska Native** A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- **Asian** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

- **Black or African American** A person having origins in any of the black racial groups of Africa, including those who consider themselves to be "Haitian."
- **Hispanic or Latino** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- **Native Hawaiian or Other Pacific Islander** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- **White** A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.
- **Some other race** This category includes all other responses not included in the American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, or White race categories described above.
- **Male/female** ownership of a business in 2002 was based on the gender of the person(s) owning the majority interest in the business. However, in 2002, equally male/female ownership was based on equal shares of interest reported for businesses with male and female owners. Businesses equally male-/female-owned were tabulated and published as a separate entity.

Appendix B Tables

Table A1 Number of 2002 Establishments, Deaths, Expansions, and Contractions with Corresponding Change in Employment by Enterprise Owners' Race/Ethnicity, 2002-2003, 2002-2004, 2002-2005, and 2002-2006 (Non-publicly Held Businesses Only)

Race or ethnicity	Initial year 2002		Net change in employment	Deaths		Expansions		Contractions	
	Establishments	Employment		Establishments	Change in employment	Establishments	Change in employment	Establishments	Change in employment
2002-2003									
Total	5,485,758	53,449,766	-51,050	562,486	-2,763,026	1,735,953	8,856,309	1,345,971	-6,144,333
White	5,035,274	50,221,784	-80,973	509,233	-2,521,853	1,583,187	8,165,923	1,242,469	-5,725,043
Black	95,330	737,023	16,605	13,504	-61,343	32,195	170,912	21,580	-92,963
Asian	320,527	2,176,260	16,043	35,641	-157,609	107,774	450,540	73,938	-276,889
Other	56,787	453,245	-2,062	6,854	-29,480	19,643	94,438	13,293	-67,021
Hispanic	197,893	1,436,854	63,779	23,503	-86,566	67,875	328,866	46,633	-178,521
2002-2004									
Total	5,485,758	53,449,766	-1,627,214	967,285	-5,325,983	1,744,232	10,721,495	1,360,028	-7,022,726
White	5,035,274	50,221,784	-1,523,235	875,124	-4,888,147	1,595,049	9,909,100	1,256,623	-6,544,188
Black	95,330	737,023	-8,654	22,852	-105,583	30,127	206,493	21,118	-109,563
Asian	320,527	2,176,260	-72,806	62,194	-290,780	107,077	534,604	74,111	-316,630
Other	56,787	453,245	-22,759	11,811	-55,027	18,707	107,180	13,426	-74,912
Hispanic	197,893	1,436,854	14,429	40,861	-186,989	65,825	398,664	46,097	-197,246
2002-2005									
Total	5,485,758	53,449,766	-4,061,677	1,315,125	-7,751,603	1,628,845	11,168,254	1,355,320	-7,478,328
White	5,035,274	50,221,784	-3,744,741	1,188,651	-7,129,967	1,492,908	10,352,528	1,253,393	-6,967,301
Black	95,330	737,023	-62,001	30,978	-153,591	27,387	213,777	20,194	-122,187
Asian	320,527	2,176,260	-222,378	86,060	-415,155	97,577	526,305	73,426	-333,527
Other	56,787	453,245	-43,217	15,714	-78,043	17,019	111,428	13,506	-76,602
Hispanic	197,893	1,436,854	-79,499	55,242	-271,766	61,351	399,147	44,838	-206,879
2002-2006									
Total	5,485,758	53,449,766	-4,988,473	1,624,156	-9,902,718	1,562,534	12,590,325	1,305,146	-7,676,080
White	5,035,274	50,221,784	-4,590,425	1,469,825	-9,124,677	1,434,310	11,695,354	1,209,233	-7,161,102
Black	95,330	737,023	-85,698	37,506	-196,318	24,764	229,311	18,882	-118,692
Asian	320,527	2,176,260	-269,855	105,464	-517,130	92,621	584,383	69,375	-337,108
Other	56,787	453,245	-54,911	19,195	-96,747	16,777	120,081	12,234	-78,245
Hispanic	197,893	1,436,854	-117,455	67,048	-345,606	58,631	430,951	41,089	-202,800
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census									

Table A2 Number of 2002 Establishments that Closed by 2006 with Corresponding Employment, Annual Payroll, and Receipts by Industry (Non-publicly Held Businesses Only)

NAICS	Total establishments	Employment	Annual payroll (thousands of dollars)	Receipts (thousands of dollars)
--: Total	1,624,156	9,902,718	243,228,114	1,148,186,633
11: Ag. Support, Forestry, Fishing, and Hunting	7,835	30,113	590,266	3,269,429
21: Mining	4,455	32,322	1,134,982	5,789,048
22: Utilities	1,004	6,232	301,174	2,733,414
23: Construction	206,918	945,535	27,812,406	138,340,877
31-33: Manufacturing	74,996	915,276	25,141,550	120,236,496
42: Wholesale Trade	93,950	536,012	17,841,952	212,827,555
44-45: Retail Trade	249,563	1,245,236	22,730,115	218,887,681
48-49: Transportation and Warehousing	57,630	327,417	8,195,473	33,472,851
51: Information	26,746	200,943	8,447,881	30,950,319
52: Finance and Insurance	63,207	262,863	11,538,950	45,279,110
53: Real Estate and Rental and Leasing	77,995	279,109	7,563,421	42,347,716
54: Professional, Scientific, and Technical Services	205,928	825,519	32,873,661	84,928,332
55: Management of Companies and Enterprises	4,368	82,240	3,981,937	6,534,267
56: Admin., Support, Waste Mngt., and Remediation	98,531	1,271,988	27,131,597	54,420,909
61: Educational Services	13,361	83,499	1,717,485	4,481,624
62: Health Care and Social Assistance	110,529	725,088	19,250,214	49,071,130
71: Arts, Entertainment, and Recreation	25,706	165,866	3,042,365	10,824,636
72: Accommodation and Food Services	155,840	1,479,357	15,157,601	52,901,222
81: Other Services (except Public Administration)	120,665	446,974	7,590,568	27,497,408
95: Auxiliaries	885	20,642	685,135	517,840
99: Unclassified	24,047	20,488	499,380	2,874,769
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census				

Table A3 Rates of Business Death, Expansion, Contraction and Net Change in Employment of 2002 Establishments by Industry and Race/Ethnicity: 2002-2006 (Non-publicly Held Businesses Only, Rates are Percentages)

NAICS code / industry	Establishments				Net change in employment	
	Number	Death rate	Expansion rate	Contraction rate	Number	Rate
Total: All non-public businesses	5,485,758	29.6	28.5	23.8	-4,988,473	-9.3
11: Ag. Support, Forestry, Fishing, and Hunting	23,388	33.5	23.1	24.3	-28,295	-20.0
21: Mining	18,180	24.5	35.2	19.5	12,757	6.8
22: Utilities	3,456	29.1	26.6	19.6	-3,251	-13.1
23: Construction	677,526	30.5	30.0	23.4	-161,516	-2.9
31-33: Manufacturing	292,877	25.6	32.2	29.4	-593,975	-9.4
42: Wholesale Trade	356,856	26.3	29.8	25.0	-155,380	-4.4
44-45: Retail Trade	830,035	30.1	28.0	25.8	-974,824	-13.7
48-49: Transportation and Warehousing	161,035	35.8	27.7	20.4	-157,803	-9.6
51: Information	76,168	35.1	25.1	23.0	-142,118	-15.0
52: Finance and Insurance	239,450	26.4	29.0	19.6	-69,121	-5.0
53: Real Estate and Rental and Leasing	264,011	29.5	24.7	20.0	-165,406	-11.7
54: Professional, Scientific, and Technical Services	698,423	29.5	26.1	20.8	-360,867	-8.2
55: Management of Companies and Enterprises	19,768	22.1	32.2	29.4	-35,695	-6.5
56: Admin., Support, Waste Mngt., and Remediation	289,976	34.0	28.0	22.3	-347,487	-7.0
61: Educational Services	40,667	32.9	30.9	20.3	-13,478	-3.3
62: Health Care and Social Assistance	510,209	21.7	31.9	25.5	-203,019	-4.2
71: Arts, Entertainment, and Recreation	78,713	32.7	25.5	21.8	-95,012	-11.8
72: Accommodation and Food Services	472,850	33.0	30.5	26.7	-1,155,016	-16.6
81: Other Services (except Public Administration)	396,832	30.4	24.9	24.8	-338,549	-15.5
95: Auxiliaries	3,697	23.9	32.6	29.0	-6,629	-5.5
99: Unclassified	31,643	76.0	17.4	2.0	6,210	22.0
Total: White	5,035,274	29.2	28.5	24.0	-4,590,425	-9.1
11: Ag. Support, Forestry, Fishing, and Hunting	22,657	33.2	23.3	24.3	-26,566	-19.3
21: Mining	17,948	24.3	35.3	19.5	(D)	(D)
22: Utilities	3,303	29.4	26.1	19.1	(D)	(D)
23: Construction	658,453	30.3	30.1	23.5	-147,997	-2.7
31-33: Manufacturing	277,704	25.2	32.4	29.6	-554,748	-9.1
42: Wholesale Trade	329,605	25.9	29.8	25.2	-148,920	-4.4
44-45: Retail Trade	752,969	29.5	28.1	26.2	-911,130	-13.5
48-49: Transportation and Warehousing	151,872	35.4	27.7	20.6	-152,295	-9.6
51: Information	71,129	34.5	25.0	23.4	-138,769	-15.3
52: Finance and Insurance	229,250	26.2	28.9	19.7	-70,520	-5.2
53: Real Estate and Rental and Leasing	251,498	29.2	24.9	20.0	-153,030	-11.2
54: Professional, Scientific, and Technical Services	653,772	29.0	26.1	21.0	-330,379	-8.1
55: Management of Companies and Enterprises	19,028	22.0	32.2	29.5	(D)	(D)
56: Admin., Support, Waste Mngt., and Remediation	270,824	33.6	28.0	22.4	-302,570	-6.5
61: Educational Services	37,057	32.7	30.9	20.3	-10,853	-2.9
62: Health Care and Social Assistance	441,212	21.3	31.6	25.9	-223,501	-5.2
71: Arts, Entertainment, and Recreation	74,878	32.3	25.6	22.0	-93,990	-12.2
72: Accommodation and Food Services	384,061	32.4	30.6	27.5	-1,007,279	-16.5
81: Other Services (except Public Administration)	356,282	29.7	25.1	25.3	-305,988	-15.1
95: Auxiliaries	3,601	23.7	32.7	28.9	(D)	(D)
99: Unclassified	28,171	76.1	17.1	2.0	4,223	(D)
Total: Black	95,330	39.3	26.0	19.8	-85,698	-11.6
11: Ag. Support, Forestry, Fishing, and Hunting	313	46.3	16.3	19.8	-584	-43.4
21: Mining	41	26.8	14.6	24.4	(D)	(D)
22: Utilities	39	59.0	15.4	20.5	(D)	(D)
23: Construction	8,277	42.7	25.4	20.2	-13,533	-24.1
31-33: Manufacturing	1,947	32.4	27.0	28.4	-2,754	-10.3
42: Wholesale Trade	1,894	37.1	28.2	18.2	-1,826	-15.8
44-45: Retail Trade	8,751	46.9	20.4	18.5	-14,126	-30.5

48-49: Transportation and Warehousing	4,457	45.8	22.2	17.3	-2,726	-11.2
51: Information	1,447	41.9	24.6	19.1	210	1.9
52: Finance and Insurance	3,727	29.2	30.1	18.4	-1,241	-9.4
53: Real Estate and Rental and Leasing	2,477	38.3	25.8	15.4	-1,587	-14.7
54: Professional, Scientific, and Technical Services	11,047	38.6	23.5	20.4	-2,813	-4.1
55: Management of Companies and Enterprises	185	27.6	30.8	24.3	(D)	(D)
56: Admin., Support, Waste Mngt., and Remediation	9,516	42.6	26.9	19.2	-19,688	-15.4
61: Educational Services	1,225	35.7	29.8	19.3	-1,342	-12.6
62: Health Care and Social Assistance	20,345	32.2	30.9	21.4	-1,581	-1.0
71: Arts, Entertainment, and Recreation	1,852	42.9	22.5	14.7	1,804	17.8
72: Accommodation and Food Services	7,989	39.8	29.5	22.3	-14,314	-12.5
81: Other Services (except Public Administration)	8,496	39.3	20.7	20.3	-8,792	-25.0
95: Auxiliaries	20	30.0	45.0	15.0	(D)	(D)
99: Unclassified	1,286	77.1	18.0	0.9%	276	(D)
Total: Asian	320,527	32.9	28.9	21.6	-269,855	-12.4
11: Ag. Support, Forestry, Fishing, and Hunting	171	43.9	19.3	33.3	-416	-38.0
21: Mining	56	50.0	37.5	10.7	(D)	(D)
22: Utilities	56	7.1	33.9	51.8	(D)	(D)
23: Construction	6,997	30.6	34.5	19.7	3,868	9.3
31-33: Manufacturing	11,441	34.9	29.2	26.1	-32,272	-18.5
42: Wholesale Trade	23,917	31.1	29.5	22.0	-4,279	-2.9
44-45: Retail Trade	63,639	34.1	27.9	21.1	-41,097	-14.0
48-49: Transportation and Warehousing	3,426	33.9	32.2	20.2	-2,518	-9.9
51: Information	3,192	46.6	27.1	14.7	-3,233	-14.8
52: Finance and Insurance	5,435	33.5	27.6	19.0	1,998	8.4
53: Real Estate and Rental and Leasing	8,771	34.9	19.7	19.9	-10,617	-28.0
54: Professional, Scientific, and Technical Services	29,571	37.3	27.4	18.1	-17,090	-8.8
55: Management of Companies and Enterprises	497	25.2	31.4	30.0	-15,547	-59.7
56: Admin., Support, Waste Mngt., and Remediation	7,440	36.1	27.5	22.5	-23,683	-21.4
61: Educational Services	2,040	34.5	30.3	20.6	-1,010	-10.0
62: Health Care and Social Assistance	44,687	19.8	34.2	23.5	19,174	7.0
71: Arts, Entertainment, and Recreation	1,618	33.9	24.5	24.7	-2,070	-12.2
72: Accommodation and Food Services	75,712	34.7	29.9	23.2	-120,997	-18.3
81: Other Services (except Public Administration)	29,878	36.5	23.9	20.4	-21,713	-18.9
95: Auxiliaries	59	25.4	25.4	39.0	(D)	(D)
99: Unclassified	1,924	73.6	20.4	1.9	1,612	(D)
Total: Other	56,787	33.8	29.5	21.5	-54,911	-12.1
11: Ag. Support, Forestry, Fishing, and Hunting	283	39.9	14.5	26.1	-830	-50.2
21: Mining	188	31.4	33.0	16.0	-526	-12.9
22: Utilities	64	15.6	56.3	10.9	(D)	(D)
23: Construction	6,819	38.3	27.6	21.2	-4,472	-9.6
31-33: Manufacturing	2,758	26.7	30.7	23.8	-3,358	-9.7
42: Wholesale Trade	2,317	28.1	31.3	27.5	-672	-4.4
44-45: Retail Trade	7,721	35.8	27.2	24.7	-11,206	-23.4
48-49: Transportation and Warehousing	1,898	46.3	22.4	16.5	-1,258	-11.2
51: Information	781	31.0	31.1	21.9	48	0.7
52: Finance and Insurance	1,795	25.8	34.5	20.7	708	8.4
53: Real Estate and Rental and Leasing	2,042	35.1	22.5	14.7	-565	-6.8
54: Professional, Scientific, and Technical Services	7,394	33.4	27.0	19.3	-12,285	-23.8
55: Management of Companies and Enterprises	92	23.9	34.8	23.9	(D)	(D)
56: Admin., Support, Waste Mngt., and Remediation	3,794	37.5	29.4	21.3	-4,220	-9.9
61: Educational Services	625	30.6	40.8	17.4	551	9.7
62: Health Care and Social Assistance	6,491	22.4	40.5	20.8	3,542	6.1
71: Arts, Entertainment, and Recreation	695	42.7	25.5	17.4	-2,153	-34.8
72: Accommodation and Food Services	6,633	36.9	32.3	21.8	-15,380	-18.6
81: Other Services (except Public Administration)	3,995	34.1	21.9	25.9	-3,419	-17.5
95: Auxiliaries	23	47.8	21.7	21.7	(D)	(D)
99: Unclassified	379	71.8	25.6	0.5	146	(D)
Total: Hispanic	197,893	33.9	29.6	20.8	-117,455	-8.2
11: Ag. Support, Forestry, Fishing, and Hunting	573	41.2	8.7	34.4	-3,211	-54.5

21: Mining	336	33.0	44.6	14.6	(D)	(D)
22: Utilities	49	28.6	22.4	4.1	(D)	(D)
23: Construction	24,012	34.8	32.1	20.5	10,785	5.9
31-33: Manufacturing	10,238	30.7	31.1	24.8	-14,480	-11.0
42: Wholesale Trade	12,092	33.9	33.5	18.3	-2,829	-3.2
44-45: Retail Trade	26,406	33.9	29.3	20.9	-12,397	-8.2
48-49: Transportation and Warehousing	8,340	41.9	25.1	19.5	-6,418	-12.7
51: Information	1,925	39.8	28.3	18.8	-1,787	-15.4
52: Finance and Insurance	6,576	30.9	33.6	15.6	796	3.5
53: Real Estate and Rental and Leasing	5,903	34.1	25.2	17.0	-2,130	-9.9
54: Professional, Scientific, and Technical Services	19,243	32.9	28.9	19.0	-853	-0.9
55: Management of Companies and Enterprises	228	32.5	32.9	21.9	-607	-13.3
56: Admin., Support, Waste Mngt., and Remediation	14,820	40.5	26.6	19.0	-46,562	-23.7
61: Educational Services	1,427	34.8	30.3	21.3	-343	-2.8
62: Health Care and Social Assistance	20,171	24.5	33.5	23.6	-3,006	-2.3
71: Arts, Entertainment, and Recreation	1,738	43.3	20.3	20.1	-2,159	-23.5
72: Accommodation and Food Services	22,879	31.9	32.9	23.4	-24,755	-10.8
81: Other Services (except Public Administration)	19,085	35.0	22.7	22.3	-9,480	-12.0
95: Auxiliaries	37	40.5	13.5	40.5	(D)	(D)
99: Unclassified	1,814	68.1	22.7	4.9	(D)	(D)
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census						

Table A4 Number of 2002 Establishments with Corresponding Employment, Annual Payroll, and Receipts by Industry, 2002 Enterprise Employment Size, 2002-2006 (Non-publicly Held Businesses Only)

Initial year enterprise size	Establishments	Employment	Annual payroll (thousands of dollars)	Receipts (thousands of dollars)	Average number of employees per establish.	Average payroll per employee (dollars)	Average receipt per establish. (dollars)
2002 record of all establishments that were in operation in 2002							
1: Total	5,485,758	53,449,766	1,626,998,598	7,895,771,490	9.7	30,440	1,439,322
2: <5	3,088,445	5,059,780	172,486,533	1,011,973,708	1.6	34,090	327,664
3: 5-9	903,099	5,854,363	164,901,679	799,294,814	6.5	28,167	885,058
4: 10-19	570,407	7,202,371	213,915,322	958,289,542	12.6	29,701	1,680,010
5: 20-49	396,483	9,664,950	300,364,383	1,336,606,878	24.4	31,078	3,371,158
6: 50-99	158,612	6,360,157	203,509,095	955,981,514	40.1	31,997	6,027,170
7: 100-499	200,417	9,866,870	314,275,524	1,491,529,364	49.2	31,852	7,442,130
8: 500+	168,295	9,441,276	257,546,063	1,342,095,669	56.1	27,279	7,974,662
2002 record of establishments that were in operation in 2002 but closed by 2006							
1: Total	1,624,156	9,902,718	243,228,114	1,148,186,633	6.1	24,562	706,944
2: <5	1,150,858	1,577,239	42,924,976	263,551,267	1.4	27,215	229,004
3: 5-9	199,730	1,279,089	25,923,428	132,581,251	6.4	20,267	663,802
4: 10-19	108,906	1,378,848	29,450,015	136,107,719	12.7	21,358	1,249,772
5: 20-49	70,138	1,697,482	40,027,276	173,555,856	24.2	23,580	2,474,491
6: 50-99	25,050	1,001,505	25,614,708	112,889,803	40.0	25,576	4,506,579
7: 100-499	34,015	1,431,217	39,916,382	172,286,393	42.1	27,890	5,065,012
8: 500+	35,459	1,537,337	39,371,330	157,214,343	43.4	25,610	4,433,694
Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census							

Table A5 Number of 2002 Establishments, Number and Rate of Establishment Deaths, by Enterprise Employment Size, Time Period and Enterprise Owner's Race/Ethnicity: 2002-2006 (Non-publicly Held Businesses Only)

Enterprise owner's race/ethnicity and enterprise employment size	2002 number of establishments	Cumulative number of establishment deaths by time period				Cumulative rate of establishment death by time period			
		2002-03	2002-04	2002-05	2002-06	2002-03	2002-04	2002-05	2002-06
Total: White	5,035,274	509,233	875,124	1,188,651	1,469,825	10.1	17.4	23.6	29.2
<5	2,800,203	386,973	640,875	850,993	1,035,842	13.8	22.9	30.4	37.0
5-9	828,063	52,200	98,899	142,181	180,593	6.3	11.9	17.2	21.8
10-19	528,054	26,823	52,418	76,285	98,792	5.1	9.9	14.4	18.7
20-49	371,830	17,855	33,866	49,098	64,305	4.8	9.1	13.2	17.3
50-99	150,782	6,239	12,083	17,724	23,330	4.1	8.0	11.8	15.5
100-499	191,939	9,144	17,595	25,275	32,420	4.8	9.2	13.2	16.9
500+	164,403	9,998	19,388	27,095	34,543	6.1	11.8	16.5	21.0
Total: Black	95,330	13,504	22,852	30,978	37,506	14.2	24.0	32.5	39.3
<5	62,978	10,775	17,858	24,025	28,664	17.1	28.4	38.1	45.5
5-9	13,996	1,199	2,305	3,238	4,109	8.6	16.5	23.1	29.4
10-19	7,710	767	1,389	1,918	2,401	9.9	18.0	24.9	31.1
20-49	4,981	421	676	976	1,287	8.5	13.6	19.6	25.8
50-99	2,142	108	167	246	302	5.0	7.8	11.5	14.1
100-499	2,468	179	299	372	507	7.3	12.1	15.1	20.5
500+	1,055	55	158	203	235	5.2	15.0	19.2	22.3
Total: Asian	320,527	35,641	62,194	86,060	105,464	11.1	19.4	26.8	32.9
<5	205,878	27,904	47,431	64,271	78,227	13.6	23.0	31.2	38.0
5-9	55,000	3,889	7,202	10,882	13,742	7.1	13.1	19.8	25.0
10-19	30,496	1,948	3,977	5,668	6,859	6.4	13.0	18.6	22.5
20-49	17,006	1,076	1,995	2,980	3,911	6.3	11.7	17.5	23.0
50-99	4,779	405	648	1,033	1,204	8.5	13.6	21.6	25.2
100-499	4,815	272	579	747	921	5.6	12.0	15.5	19.1
500+	2,553	148	362	478	599	5.8	14.2	18.7	23.5
Total: Other	56,787	6,854	11,811	15,714	19,195	12.1	20.8	27.7	33.8
<5	34,350	5,498	9,071	11,782	14,362	16.0	26.4	34.3	41.8
5-9	9,393	501	1,146	1,697	2,101	5.3	12.2	18.1	22.4
10-19	6,145	418	814	1,113	1,321	6.8	13.2	18.1	21.5
20-49	3,718	251	453	646	812	6.8	12.2	17.4	21.8
50-99	1,245	84	135	210	289	6.7	10.8	16.9	23.2
100-499	1,568	71	134	180	218	4.5	8.5	11.5	13.9
500+	369	30	57	87	93	8.1	15.4	23.6	25.2
Total: Hispanic	197,893	23,503	40,861	55,242	67,048	11.9	20.6	27.9	33.9
<5	128,631	19,262	32,037	42,689	51,160	15.0	24.9	33.2	39.8
5-9	32,525	2,210	4,245	6,393	7,920	6.8	13.1	19.7	24.4
10-19	18,665	1,117	2,576	3,326	4,296	6.0	13.8	17.8	23.0
20-49	10,321	625	1,323	1,733	2,219	6.1	12.8	16.8	21.5
50-99	3,635	114	281	437	548	3.1	7.7	12.0	15.1
100-499	3,157	129	292	529	708	4.1	9.2	16.8	22.4
500+	960	45	107	135	197	4.7	11.1	14.1	20.5

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census

Table A6 Four-year Average Rates of Establishment Death, Expansion and Contraction, by Enterprise State Location and Owner's Race/Ethnicity, 2002-2006 (Non-publicly Held Businesses Only)

State	Death rates of 2002 establishments				Expansion rates of 2002 establishments				Contraction rates of 2002 establishments			
	White	Black	Asian	Hispanic	White	Black	Asian	Hispanic	White	Black	Asian	Hispanic
United States Total	29	39	33	34	28	26	29	30	24	20	22	21
Alabama	29	39	32	44	30	23	32	24	25	22	21	20
Alaska	27	47	37	35	32	17	23	30	22	20	31	24
Arizona	32	41	36	30	30	23	27	33	22	21	24	22
Arkansas	31	44	36	43	28	22	32	21	24	22	19	25
California	31	42	33	34	28	26	29	30	24	18	23	22
Colorado	31	43	37	38	27	20	22	27	22	26	25	21
Connecticut	26	39	31	33	29	27	28	27	26	17	20	26
Delaware	28	46	30	30	29	28	33	27	23	19	21	20
District of Columbia	30	30	35	33	27	28	29	28	24	25	21	23
Florida	33	41	34	36	29	26	30	30	20	17	20	18
Georgia	31	41	34	35	29	25	30	30	23	19	21	22
Hawaii	26	26	24	32	37	47	31	33	19	15	22	24
Idaho	28	42	29	36	35	32	26	31	20	3	26	15
Illinois	27	39	32	28	27	25	27	31	26	21	22	21
Indiana	27	40	32	33	29	24	30	36	26	21	22	18
Iowa	26	37	36	33	28	24	22	28	26	23	26	20
Kansas	27	45	36	37	28	20	24	28	25	18	27	17
Kentucky	28	39	35	44	29	25	33	26	25	24	18	14
Louisiana	30	46	39	31	27	21	23	30	26	22	27	25
Maine	28	64	26	32	29	15	27	32	22	3	24	20
Maryland	27	34	30	29	30	31	31	32	24	20	22	20
Massachusetts	27	43	29	39	28	21	28	24	25	22	24	23
Michigan	28	36	31	34	26	26	27	25	28	24	23	25
Minnesota	27	32	33	40	28	31	25	35	24	23	25	17
Mississippi	31	42	34	41	28	25	27	27	25	20	28	20
Missouri	29	42	32	41	29	27	27	26	24	18	25	17
Montana	27	35	49	20	30	6	33	46	23	4	17	18
Nebraska	27	45	34	37	28	30	30	23	25	15	23	28
Nevada	35	42	45	36	31	27	30	32	19	18	14	21
New Hampshire	28	80	47	42	29	14	28	33	23	4	17	12
New Jersey	29	38	34	36	28	22	28	29	24	21	19	17
New Mexico	29	38	35	28	32	30	31	36	22	18	22	22
New York	30	34	35	36	26	26	28	25	23	18	17	20
North Carolina	29	40	36	37	29	27	28	30	25	19	20	19
North Dakota	24	53	40	10	30	7	36	38	22	13	19	15
Ohio	27	39	27	34	28	26	28	25	27	21	27	25
Oklahoma	28	45	28	36	29	24	36	28	23	18	20	21
Oregon	29	40	30	37	31	31	27	31	22	12	27	17
Pennsylvania	25	36	35	31	29	29	27	28	26	18	19	25
Rhode Island	25	40	38	40	28	32	29	25	25	8	20	24
South Carolina	29	40	33	37	29	23	28	30	25	22	26	22
South Dakota	26	69	34	20	30	8	30	29	24	23	18	47
Tennessee	29	37	37	33	30	31	28	40	24	20	23	21
Texas	31	41	33	32	28	27	31	30	24	20	22	22
Utah	32	43	35	40	31	25	31	34	20	25	22	17
Vermont	26	62	32	39	28	14	20	27	26	10	38	18
Virginia	27	38	33	31	31	27	30	33	24	21	22	23
Washington	30	38	32	36	31	24	30	32	22	20	20	17
West Virginia	28	54	25	34	30	14	31	26	25	19	23	22
Wisconsin	25	39	30	29	30	32	30	35	26	18	21	21
Wyoming	28	16	27	42	31	70	40	40	22	3	23	15

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census

Table A7 Business Dynamics by Enterprise Employment Size, 2002-2003, 2002-2004, 2002-2005, and 2002-2006

	Deaths				Subsequent year <5				Subsequent year 500+			
	Death rate (percent)	Employees per estab.	Payroll per worker (\$)	Receipts per estab. (\$)	Downsizing change rate (percent)	Employees per estab.	Payroll per worker (\$)	Receipts per estab. (\$)	Upsizing change rate (percent)	Employees per estab.	Payroll per worker (\$)	Receipts per estab. (\$)
2002-2003												
1: Total	10.25	4.9	18,777	461,897	46.84	2.1	29,054	348,732	2.98	54.9	28,259	8,126,640
2: <5	13.88	1.3	19,551	164,112	77.03	1.6	32,073	318,604	0.01	0.8	3,546,523	10,751,659
3: 5-9	6.38	6.4	12,936	468,088	18.50	5.8	21,051	611,188	0.02	5.6	80,749	1,199,470
4: 10-19	5.23	12.3	14,485	891,435	3.16	12.1	19,096	1,056,866	0.02	11.4	117,546	5,221,414
5: 20-49	4.93	23.1	16,939	1,816,536	1.10	25.7	21,049	2,123,220	0.14	16.2	60,802	4,195,911
6: 50-99	4.30	37.4	18,401	3,190,353	0.47	51.2	18,280	4,465,921	0.36	37.4	45,325	8,233,177
7: 100-499	4.82	38.1	22,980	3,762,308	0.20	101.7	19,759	8,314,370	5.05	48.6	34,807	6,928,150
8: 500+	6.08	40.5	25,238	4,132,426	0.05	419.6	21,749	12,880,393	89.98	55.7	27,655	8,224,389
2002-2004												
1: Total	17.63	5.5	22,508	593,183	41.41	2.3	29,073	373,141	2.86	54.8	28,568	8,366,854
2: <5	23.03	1.3	24,869	201,879	66.60	1.7	32,549	324,690	0.01	0.8	2,827,387	10,438,164
3: 5-9	12.08	6.4	17,497	575,679	20.29	5.9	22,497	651,197	0.02	6.0	80,341	1,957,885
4: 10-19	10.23	12.6	18,706	1,106,536	4.09	12.3	21,427	1,469,160	0.04	11.4	96,257	11,222,146
5: 20-49	9.31	23.9	20,913	2,286,963	1.58	26.2	24,825	2,314,191	0.21	19.4	52,723	4,069,210
6: 50-99	8.21	39.8	22,939	4,038,690	0.62	52.6	23,569	4,419,386	0.54	36.5	45,594	7,830,353
7: 100-499	9.27	39.7	25,652	4,464,769	0.31	88.4	24,228	7,765,705	6.86	47.6	35,086	7,469,389
8: 500+	11.86	41.4	26,100	4,150,240	0.07	875.5	15,336	20,554,144	83.60	56.1	27,763	8,481,360
2002-2005												
1: Total	23.97	5.9	23,753	659,689	37.62	2.4	29,607	396,956	2.79	55.1	28,789	8,537,196
2: <5	30.63	1.3	26,394	218,159	59.31	1.7	33,302	333,155	0.02	0.8	1,395,290	6,615,193
3: 5-9	17.43	6.4	19,204	642,091	21.45	5.9	23,364	661,325	0.03	6.1	72,360	2,256,398
4: 10-19	14.83	12.6	20,720	1,205,092	4.85	12.1	22,600	1,540,620	0.08	11.5	63,697	6,451,864
5: 20-49	13.51	24.2	22,408	2,402,201	2.00	25.7	26,684	2,517,443	0.31	21.3	48,582	4,474,298
6: 50-99	12.09	39.5	24,336	4,235,602	0.86	55.6	24,542	5,719,686	0.82	35.0	46,618	7,365,225
7: 100-499	13.24	41.6	27,098	4,849,993	0.40	105.2	25,725	10,661,100	8.19	50.0	35,045	7,845,043
8: 500+	16.55	44.8	25,425	4,294,695	0.10	335.8	17,933	10,139,651	78.80	56.7	27,801	8,701,375
2002-2006												
1: Total	29.61	6.1	24,562	706,944	33.85	2.6	30,032	421,525	2.72	55.7	29,034	8,692,503
2: <5	37.26	1.4	27,215	229,004	52.46	1.7	33,909	340,855	0.02	1.0	990,117	6,376,367
3: 5-9	22.12	6.4	20,267	663,802	21.58	6.0	24,381	707,019	0.04	6.3	61,425	2,116,102
4: 10-19	19.09	12.7	21,358	1,249,772	5.35	12.1	23,640	1,536,277	0.10	11.6	64,923	6,647,790
5: 20-49	17.69	24.2	23,580	2,474,491	2.15	25.0	27,304	2,773,893	0.36	21.4	51,146	5,053,893
6: 50-99	15.79	40.0	25,576	4,506,579	1.06	52.0	26,031	5,322,780	1.07	35.5	47,664	7,809,722
7: 100-499	16.97	42.1	27,890	5,065,012	0.46	101.7	25,968	11,367,246	9.69	50.5	34,961	7,942,541
8: 500+	21.07	43.4	25,610	4,433,694	0.08	459.7	20,532	20,316,806	74.29	57.8	27,842	8,901,886

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census

Table A8 Number of 2002 Establishments, Deaths, Expansions, and Contractions with Corresponding Four-year Change in Employment by Industry, Enterprise Receipts size, Type of Business, and Owner's Gender and Race/Ethnicity, 2002-2006

NAICS	2002		Net change in employment	Deaths		Expansions		Contractions	
	Establishments	Employment		Establishments	Net change in employment	Establishments	Net change in employment	Establishments	Net change in employment
--: Total	6,807,798	106,994,852	-12,879,973	1,975,160	-18,621,805	1,984,860	21,145,177	1,685,815	-15,403,345
11: Ag. Support, Forestry, Fishing, and Hunting	25,507	173,925	-33,120	8,382	-34,626	6,019	32,272	6,253	-30,767
21: Mining	23,629	463,553	-23,104	6,162	-88,351	8,101	130,757	4,939	-65,510
22: Utilities	17,249	628,264	-112,452	4,363	-78,541	4,640	64,268	4,921	-98,179
23: Construction	705,331	6,354,968	-356,670	215,408	-1,137,111	212,220	1,863,550	165,073	-1,083,109
31-33: Manufacturing	341,612	14,315,039	-1,914,228	85,811	-1,898,801	110,947	2,019,297	104,892	-2,034,724
42: Wholesale Trade	430,472	5,803,230	-596,652	114,895	-1,009,838	127,839	1,200,474	109,513	-787,288
44-45: Retail Trade	1,116,389	14,746,149	-1,535,294	307,529	-2,148,092	337,870	2,381,595	306,209	-1,768,796
48-49: Transportation and Warehousing	190,526	3,065,225	-559,172	67,286	-582,387	53,805	599,416	40,347	-576,201
51: Information	137,230	3,505,965	-980,802	49,826	-888,770	32,497	585,579	35,632	-677,610
52: Finance and Insurance	441,085	6,317,308	-1,426,247	133,948	-1,574,822	123,928	1,179,771	91,726	-1,031,196
53: Real Estate and Rental and Leasing	319,233	2,021,384	-322,622	93,222	-428,321	79,381	415,731	67,454	-310,032
54: Professional, Scientific, and Technical Services	764,643	6,943,433	-783,177	227,785	-1,398,676	201,039	1,763,830	164,174	-1,148,331
55: Management of Companies and Enterprises	48,767	2,916,988	-527,677	14,767	-535,480	13,755	620,864	13,160	-613,061
56: Admin., Support, Waste Mngt., and Remedia.	339,426	8,117,615	-1,162,650	118,336	-2,245,907	94,566	2,614,707	76,198	-1,531,450
61: Educational Services	68,899	2,530,456	91,414	17,879	-187,586	24,740	499,248	17,053	-220,249
62: Health Care and Social Assistance	685,721	13,695,738	-314,221	141,455	-1,428,119	230,095	2,480,629	183,177	-1,366,731
71: Arts, Entertainment, and Recreation	105,531	1,653,729	-165,065	29,770	-243,008	28,830	328,261	25,141	-250,318
72: Accommodation and Food Services	559,128	10,004,527	-1,547,301	176,212	-1,964,132	173,747	1,638,467	155,439	-1,221,636
81: Other Services (except Public Administration)	440,315	2,694,169	-449,210	132,511	-557,259	111,099	515,329	109,903	-407,280
95: Auxiliaries	13,639	1,013,432	-168,518	4,238	-170,360	3,867	180,790	3,948	-178,948
99: Unclassified	33,466	29,754	6,795	25,375	-21,618	5,875	30,342	664	-1,930
--: Total male	3,828,552	40,934,420	-3,571,937	1,084,997	-7,226,491	1,118,287	9,514,529	925,162	-5,859,975
11: Ag. Support, Forestry, Fishing, and Hunting	16,809	109,415	-20,768	5,418	(D)	4,048	(D)	4,180	(D)
21: Mining	14,315	156,507	10,615	3,476	-27,554	5,267	56,401	2,683	-18,232
22: Utilities	2,706	(D)	(D)	827	(D)	731	(D)	470	(D)
23: Construction	540,809	4,583,510	-117,283	166,286	-756,246	161,680	1,384,057	125,635	-745,093
31-33: Manufacturing	216,442	5,248,356	-459,391	52,757	-736,945	72,330	955,196	64,896	-677,642
42: Wholesale Trade	268,486	2,847,306	-131,070	67,762	-415,564	83,135	632,953	67,685	-348,459
44-45: Retail Trade	538,974	5,341,519	-664,452	152,368	-866,419	157,187	890,886	141,844	-688,919

48-49: Transportation and Warehousing	114,533	1,292,294	-105,473	40,069	-245,718	32,833	321,839	23,512	-181,594
51: Information	54,881	743,907	-113,989	19,215	-158,571	13,989	164,278	12,877	-119,696
52: Finance and Insurance	186,415	1,175,733	-71,803	48,212	-223,114	55,044	323,987	36,562	-172,676
53: Real Estate and Rental and Leasing	175,982	1,108,805	-129,228	50,202	-213,768	44,938	240,044	36,687	-155,505
54: Professional, Scientific, and Technical Services	506,514	3,520,570	-264,465	142,962	-619,812	136,017	961,759	107,941	-606,413
55: Management of Companies and Enterprises	16,071	465,807	-16,944	3,512	-74,342	5,258	147,082	4,738	-89,683
56: Admin., Support, Waste Mngt., and Remedia.	189,436	3,567,718	-260,162	63,472	-929,881	54,201	1,307,704	41,565	-637,986
61: Educational Services	17,529	225,660	1,062	5,703	-42,439	5,505	69,545	3,585	-26,044
62: Health Care and Social Assistance	355,412	3,417,108	-180,338	68,509	-487,090	113,533	726,560	94,041	-419,808
71: Arts, Entertainment, and Recreation	49,884	590,940	-63,471	15,527	-112,830	13,011	133,489	11,262	-84,131
72: Accommodation and Food Services	291,502	4,945,382	-764,299	90,405	-976,082	92,385	841,261	80,640	-629,477
81: Other Services (except Public Administration)	248,726	1,448,551	-217,485	72,492	-280,452	62,617	281,196	63,084	-218,228
95: Auxiliaries	3,114	(D)	(D)	761	(D)	1,022	(D)	907	(D)
99: Unclassified	20,010	(D)	(D)	15,064	-12,477	3,560	18,831	372	-1,196
--: Total female	923,978	6,963,492	-801,400	313,666	-1,502,924	240,638	1,726,407	203,001	-1,024,882
11: Ag. Support, Forestry, Fishing, and Hunting	2,265	(D)	(D)	917	(D)	382	(D)	503	(D)
21: Mining	1,688	(D)	(D)	389	(D)	485	(D)	436	(D)
22: Utilities	329	(D)	(D)	86	(D)	74	(D)	113	(D)
23: Construction	49,557	(D)	(D)	16,569	(D)	14,741	(D)	11,964	(D)
31-33: Manufacturing	38,867	619,203	-83,656	11,939	(D)	10,777	102,765	11,089	(D)
42: Wholesale Trade	44,216	376,222	(D)	13,273	(D)	11,500	(D)	11,036	-47,780
44-45: Retail Trade	150,985	847,572	-153,570	53,714	(D)	37,248	(D)	35,470	-124,386
48-49: Transportation and Warehousing	19,581	(D)	(D)	7,624	(D)	4,893	(D)	4,135	-27,294
51: Information	11,939	132,042	-18,418	4,330	(D)	2,847	29,224	2,557	(D)
52: Finance and Insurance	33,282	132,525	-8,849	9,994	(D)	8,714	33,583	6,315	(D)
53: Real Estate and Rental and Leasing	49,947	173,370	-23,947	16,460	(D)	10,820	(D)	8,734	(D)
54: Professional, Scientific, and Technical Services	129,529	579,558	-57,409	43,025	-141,676	31,126	171,289	24,870	-87,023
55: Management of Companies and Enterprises	2,184	(D)	(D)	529	(D)	669	9,837	580	(D)
56: Admin., Support, Waste Mngt., and Remedia	59,365	934,867	-53,556	21,898	(D)	15,415	348,692	12,673	(D)
61: Educational Services	15,625	(D)	(D)	5,304	-24,950	4,773	(D)	3,082	-13,833
62: Health Care and Social Assistance	115,846	941,283	(D)	32,058	-161,724	36,179	(D)	25,851	(D)
71: Arts, Entertainment, and Recreation	16,319	(D)	(D)	6,059	(D)	3,830	26,566	3,238	(D)
72: Accommodation and Food Services	89,151	(D)	(D)	33,901	(D)	24,929	(D)	20,947	(D)
81: Other Services (except Public Administration)	85,121	(D)	(D)	29,421	(D)	19,800	(D)	19,135	-58,993
95: Auxiliaries	312	(D)	(D)	72	(D)	95	(D)	98	(D)
99: Unclassified	7,869	6,971	(D)	6,104	-5,098	1,341	5,745	173	-464
--: Total Equally owned	732,818	5,536,227	-618,811	225,398	-1,170,490	203,463	1,340,619	176,843	-788,941
11: Ag. Support, Forestry, Fishing, and Hunting	4,310	(D)	(D)	1,499	(D)	961	(D)	1,003	(D)
21: Mining	2,173	(D)	(D)	588	(D)	645	(D)	421	(D)
22: Utilities	411	(D)	(D)	88	(D)	110	(D)	91	(D)
23: Construction	87,134	(D)	(D)	24,053	(D)	27,139	187,115	20,783	-86,412
31-33: Manufacturing	37,551	(D)	(D)	10,298	(D)	11,283	(D)	10,164	(D)

42: Wholesale Trade	44,126	(D)	(D)	12,899	(D)	11,773	106,510	10,438	(D)
44-45: Retail Trade	139,969	919,538	-156,555	43,460	(D)	37,951	166,710	36,413	(D)
48-49: Transportation and Warehousing	26,909	(D)	(D)	9,932	(D)	6,821	40,264	5,270	(D)
51: Information	9,329	(D)	(D)	3,196	(D)	2,287	(D)	2,072	(D)
52: Finance and Insurance	19,735	(D)	(D)	5,000	(D)	5,575	(D)	4,126	(D)
53: Real Estate and Rental and Leasing	38,055	(D)	(D)	11,321	(D)	9,417	(D)	7,260	(D)
54: Professional, Scientific, and Technical Services	62,316	(D)	(D)	19,932	(D)	15,109	(D)	12,751	(D)
55: Management of Companies and Enterprises	1,502	(D)	(D)	326	(D)	435	(D)	492	(D)
56: Admin., Support, Waste Mngt., and Remedia	41,147	428,345	-34,741	13,155	(D)	11,509	(D)	10,337	(D)
61: Educational Services	7,512	(D)	(D)	2,354	-16,110	2,270	(D)	1,596	-9,940
62: Health Care and Social Assistance	38,946	(D)	(D)	9,963	-76,274	13,018	(D)	10,036	(D)
71: Arts, Entertainment, and Recreation	12,508	(D)	(D)	4,120	(D)	3,208	26,787	2,658	(D)
72: Accommodation and Food Services	92,181	1,113,785	-217,785	31,533	(D)	26,886	197,930	24,453	(D)
81: Other Services (except Public Administration)	62,976	335,798	(D)	18,753	(D)	16,365	(D)	16,338	-45,826
95: Auxiliaries	265	(D)	(D)	51	(D)	87	(D)	65	(D)
99: Unclassified	3,763	3,813	870	2,879	-2,912	615	3,985	77	-203

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census

Table A9 Number of Initial-year Establishments, Deaths, Expansions, and Contractions with Corresponding Changes in Employment by State, Enterprise Receipts Size, and Type of Business, 2002-2006

State	Initial Year		Net change in employment	Deaths		Expansions		Contractions	
	Establishments	Employment		Establishments	Net change in employment	Establishments	Net change in employment	Establishments	Net change in employment
United States: Total	6,807,798	106,994,852	-12,879,973	1,975,160	-18,621,805	1,984,860	21,145,177	1,685,815	-15,403,345
01: Alabama	93,288	1,494,809	-154,538	26,203	-248,836	28,371	296,398	23,860	-202,100
02: Alaska	17,716	195,057	-6,098	4,739	-29,807	5,673	48,997	4,234	-25,289
04: Arizona	115,432	1,871,325	-159,101	36,270	-383,382	35,146	504,219	26,455	-279,938
05: Arkansas	59,496	927,601	-85,116	17,153	-134,328	17,603	166,236	14,976	-117,024
06: California	790,806	12,274,725	-1,579,625	245,532	-2,337,994	227,919	2,662,701	196,024	-1,904,332
08: Colorado	137,227	1,814,181	-267,809	42,799	-362,271	37,663	356,965	32,329	-262,503
09: Connecticut	87,860	1,512,811	-230,587	23,653	-237,436	25,806	240,451	23,185	-233,601
10: Delaware	23,087	379,508	-65,038	6,679	-80,807	6,488	63,463	5,178	-47,694
11: District of Columbia	16,588	348,585	-42,169	5,047	-54,772	4,699	63,896	4,326	-51,293
12: Florida	430,725	6,064,597	-730,486	140,368	-1,404,410	127,503	1,541,722	89,851	-867,798
13: Georgia	195,368	3,215,193	-441,316	60,366	-602,312	56,831	630,483	46,313	-469,487
15: Hawaii	28,386	409,828	-11,468	6,964	-57,105	9,650	90,815	6,380	-45,178
16: Idaho	36,936	429,024	-19,863	10,215	-68,733	12,971	103,385	7,602	-54,515
17: Illinois	292,077	4,969,810	-688,183	81,047	-854,403	80,709	899,117	76,633	-732,897
18: Indiana	137,129	2,379,895	-218,312	36,756	-336,837	40,745	441,732	36,685	-323,207
19: Iowa	75,542	1,168,714	-109,946	19,236	-154,628	21,803	189,285	19,753	-144,604
20: Kansas	69,643	1,047,360	-134,289	18,728	-148,983	19,838	165,602	18,320	-150,908
21: Kentucky	84,638	1,375,797	-146,130	23,085	-210,298	25,540	247,963	21,770	-183,796
22: Louisiana	95,904	1,508,641	-247,032	28,717	-275,887	26,234	283,240	25,938	-254,385
23: Maine	37,943	477,666	-52,094	10,138	-70,116	11,213	76,165	8,590	-58,143
24: Maryland	125,858	1,968,119	-201,206	34,106	-324,920	39,203	388,436	31,096	-264,722
25: Massachusetts	167,027	2,897,571	-374,964	46,539	-470,214	47,473	513,304	43,086	-418,055
26: Michigan	224,134	3,775,505	-603,358	63,109	-615,743	60,112	636,153	62,401	-623,768
27: Minnesota	133,743	2,203,280	-212,916	35,636	-337,801	38,803	428,097	33,800	-303,211
28: Mississippi	55,025	831,653	-116,289	16,573	-147,733	15,814	148,244	14,007	-116,800
29: Missouri	139,990	2,254,447	-246,273	40,267	-347,114	40,656	399,659	35,226	-298,818
30: Montana	31,106	286,562	-24,079	8,295	-44,164	9,519	56,477	7,300	-36,392
31: Nebraska	46,831	700,777	-66,986	12,291	-96,559	13,482	126,054	12,131	-96,481
32: Nevada	49,335	901,037	-24,920	17,186	-167,355	15,489	251,789	10,000	-109,355
33: New Hampshire	36,632	537,326	-55,997	10,028	-78,974	10,961	91,106	8,945	-68,128
34: New Jersey	227,690	3,450,301	-544,437	69,030	-667,430	63,435	640,105	54,721	-517,112
35: New Mexico	41,033	519,873	-34,886	11,634	-96,621	13,453	124,334	9,409	-62,599
36: New York	472,438	6,792,985	-883,344	140,301	-1,133,999	128,945	1,251,834	110,519	-1,001,180
37: North Carolina	193,968	3,177,461	-409,426	55,675	-545,925	56,704	607,870	49,639	-471,372
38: North Dakota	19,527	241,946	-12,025	4,449	-34,598	6,205	46,115	4,404	-23,541
39: Ohio	253,864	4,571,983	-547,589	68,471	-707,628	72,197	817,679	70,925	-657,641

40: Oklahoma	79,852	1,132,295	-129,291	22,199	-197,571	23,292	229,284	19,393	-161,004
41: Oregon	96,309	1,267,350	-94,480	26,837	-207,884	31,035	270,273	21,784	-156,869
42: Pennsylvania	277,477	4,843,677	-584,357	70,490	-742,049	81,840	829,996	73,847	-672,304
44: Rhode Island	27,263	394,750	-43,040	6,936	-56,585	8,039	66,554	7,008	-53,010
45: South Carolina	91,863	1,459,806	-188,498	25,902	-239,912	27,445	261,125	23,802	-209,711
46: South Dakota	22,563	281,906	-18,917	5,789	-45,040	6,964	56,977	5,375	-30,854
47: Tennessee	121,215	2,172,179	-208,937	34,640	-359,904	37,480	444,879	30,700	-293,913
48: Texas	457,019	7,600,683	-1,017,054	140,520	-1,510,733	132,747	1,621,895	113,178	-1,128,216
49: Utah	56,836	826,000	-79,430	18,520	-169,513	17,491	203,259	11,834	-113,177
50: Vermont	20,046	251,767	-27,382	4,960	-34,107	5,802	40,634	5,250	-33,909
51: Virginia	169,537	2,788,453	-310,404	46,759	-463,430	52,395	555,848	42,860	-402,822
53: Washington	156,005	2,039,321	-158,071	46,328	-327,266	49,231	444,865	35,434	-275,670
54: West Virginia	37,669	529,560	-63,388	9,984	-75,347	11,388	81,807	9,645	-69,849
55: Wisconsin	132,915	2,270,708	-206,318	33,214	-298,373	39,392	396,284	35,872	-304,229
56: Wyoming	17,236	160,443	-2,507	4,796	-23,969	5,460	41,405	3,825	-19,944

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census

Table A10 Number of 2002 Establishments, Deaths, Expansions, and Contractions with Corresponding Four-year Change in Employment by Industry, Enterprise Receipts Size, Gender, and Race, 2002-2006 (Non-publicly Held Businesses Only)

Enterprise receipts size (\$1,000)	2002		Net change in employment	Deaths by 2006		Expansions by 2006		Contractions by 2006		Four-year percentage change in establishment due to:			Four-year percentage change in employment due to:				
	Establishments	Employment		Establishments	Net change in employment	Establishments	Net change in employment	Establishments	Net change in employment	Establishments	Net change in employment	Death	Expansion	Contraction	Death	Expansion	Contraction
Total	5,485,758	53,449,766	-4,988,473	1,624,156	-9,902,718	1,562,534	12,590,325	1,305,146	-7,676,080	29.6	28.5	23.8	-18.5	23.6	-14.4		
White	5,035,274	50,221,784	-4,590,425	1,469,825	-9,124,677	1,434,310	11,695,354	1,209,233	-7,161,102	29.2	28.5	24.0	-18.2	23.3	-14.3		
Black	95,330	737,023	-85,698	37,506	-196,318	24,764	229,311	18,882	-118,692	39.3	26.0	19.8	-26.6	31.1	-16.1		
Asian	320,527	2,176,260	-269,855	105,464	-517,130	92,621	584,383	69,375	-337,108	32.9	28.9	21.6	-23.8	26.9	-15.5		
Other	56,787	453,245	-54,911	19,195	-96,747	16,777	120,081	12,234	-78,245	33.8	29.5	21.5	-21.3	26.5	-17.3		
Hispanic	197,893	1,436,854	-117,455	67,048	-345,606	58,631	430,951	41,089	-202,800	33.9	29.6	20.8	-24.1	30.0	-14.1		
Non-Hispanic	5,287,865	52,012,912	-4,871,018	1,557,108	-9,557,112	1,503,903	12,159,374	1,264,057	-7,473,280	29.4	28.4	23.9	-18.4	23.4	-14.4		

Source: U.S. Small Business Administration, Office of Advocacy, from data provided by the U.S. Department of Commerce, Bureau of the Census