

# RESTAURANT START & GROWTH MAGAZINE

## UNIT START-UP AND FAILURE STUDY



**Dallas, Texas 6-Year Phone Book Study**  
1997 to 2002 Limited Letter Study: A, G, H, I, S, T

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## I. Executive Summary

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In summary, this study sought to determine start-up and failure rates of restaurants in the most competitive environment in the U.S.: Dallas, TX.

According to available data, there are in excess of 6,000 restaurants within a 30 minute drive of Central Dallas.

As a result of this competitive market, it was surmised that this locale would be the ideal environment to analyze restaurant unit life-cycles.

This project manually tabulated the telephone books issued by SBC for years 1997, 1998, 1999, 2000, 2001 and 2002. Specifically, the letter sections "A, G, H, I, S, T" were tabulated, representing 4,845 units total, or about 21% of all units in the target market.

Using a manual tabulation method of tracking each listing from year-to-year, it was possible to determine a restaurant or unit's life cycle. As the target units were non-fast food establishments, major chains were eliminated from the counts. However, due to the large number of franchise operations with unit counts ranging from 2 to 20, non-fast food franchise units are included within this tabulation.

In summary, the number of new restaurants starting-up each year averaged 13%. Inversely, the three-year average failure rate overall was 10% per year. However, large jumps in the failure rates were seen in 1998 and 2000 respectively.

According to the data, within the entire universe of restaurants, first year failures only account for 3% of all units within a given year. Conversely, the first year failure rate among start-ups averages 23% over four years. Lastly, of all failures, first year failures account for 28% of all failures.

One could say that there is a 1 in 4 chance that a new start-up will fail, and inversely, there is a 77% chance for first year success.

The detail for this data is presented in the following sections.

Hereby certified as accurate according to the methodology outlined within this report, and submitted for interpretation.

Sincerely,

William Cline  
President  
Cline Group



## II. Study Introduction and Objectives

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The purpose of this study was to establish a unit life-cycle rate among restaurants within the Dallas, Texas metro area.

By analyzing official phone books within the target market, three types of data were sought within this study:

1. Total Units Starting-Up Within a Given Year
2. Total Units Failing Within a Given Year
3. Life-Cycle of Restaurant Units Within the Given Time Period of Analysis

Given these objectives, the data and methodology is presented as outlined.



### III. Study Methodology

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As stated in the Executive Summary, this study utilized the following procedures and resources:

1. The Dallas, TX, SBC Yellow Pages phone book archives were copied for six specific letters: "A, G, H, I, S, T." These letters represent low-count letters (A) and high count letters (S), to offer a good cross-section of the alphabet.
2. The identified letters from years 1997, 1998, 1999, 2000, 2001 and 2002 were copied for analysis.
3. Display ads we not utilized for this accounting, only free listings for each SBC phone subscriber.
4. Each restaurant's name, address and phone number was manually compared and tracked through each year, starting in 1997, and ending in 2002. This determined successful units that stayed open during the target period of six years.
5. Each unit that failed or started-up within a given year was highlighted and manually counted. That unit was tracked across all the years of analysis to determine if and when the name no longer appeared within the future year's phone books.
6. Once a unit was found to have closed (the listing no longer appeared), the unit name was highlighted in a special color to identify the number of years it appeared in the phone various books.
7. Each phone book page was counted, looking for new units, 1st, 2nd, 3rd and 4th year failures, as well as units that sustained through all the six years.
8. Each year was properly credited with the various start-ups, as up to four years had to be analyzed to determine a single year's failure and start-up rate.
9. All the data was then entered into Excel for tabulation and analysis to create the presented charts and data.
10. A total of 4,845 units were manually counted for this tabulation and analysis. To ensure accuracy, each year's pages were counted twice, by two separate persons, meaning that each page was counted a minimum of four different times for accuracy.
11. Fast food units such as Arby's, Grandy's, Subway, Taco Bell, Sonic, Schlotzky's, and Taco Bueno were eliminated from the counts and tabulations.

Based on this methodology, the data is presented.



**IV. Statistical Tolerances of Survey Data**

In interpreting survey results it should be kept in mind that all surveys are subject to sampling error, that is, the extent to which the results may differ from those that would be obtained if the entire target population had been counted. The size of such sampling errors depends largely on the number of units counted.

The following table may be used to determine the allowances that should be made for the sampling error of a percentage. The computed tolerances have taken into account the effect of the sample design upon sampling error.

They may be interpreted as indicating the range (plus or minus the figure shown) within which the results of repeated samplings in the same period could be expected to vary, 90% of the time, assuming the same sampling procedure, the same survey execution, and the same count qualifiers were used.

**Recommended Allowances for Sampling Error of a Percentage In Percentage Points (at 90 in 100 confidence level for a sample size of 100) and based on a 881 Unit count (2002 Year):**

Percentages near 10.....	1.7%
Percentages near 20.....	2.2%
Percentages near 30.....	2.5%
Percentages near 40.....	2.7%
Percentages near 50.....	2.8%
Percentages near 60.....	2.7%
Percentages near 70.....	2.5%
Percentages near 80.....	2.2%
Percentages near 90.....	1.7%
Overall Average for All Samples .....	2.3%

The chances are 90 in 100 that the sampling error is not larger than the figures shown. The table should be used as follows for the total sample: If a reported percentage is 22, look at the row labeled "percentages near 20". The number at this point is 2.2, which means that the 22 percent obtained in the sample is subject to a sampling error of plus or minus 2.2 points. Another way of saying it is that very probably (90 times out of 100) the average of repeated sampling would be somewhere between 19.8 and 24.2 with the most likely figure of 22 obtained. All sampling error rates listed in this study are well within acceptable tolerances for a survey of this nature.



**V. Presentation of Raw Data**

The raw data reported is as follows:

Letter's Analyzed	Year	Coding Sheet Colors for Tabulations:		Blue - 1 yr	Green - 2 yr	Orange - 3 yr	Yellow - 4 yr	Grn Dot - 5 yr	Net Still	Open
		Total Units	Closure (unknown yrs)							
A, G, H, I, S, T	1997	732	74	74	n/a	n/a	n/a	n/a	n/a	658
A, G, H, I, S, T	1998	779	63	28	63	n/a	n/a	n/a	n/a	688
A, G, H, I, S, T	1999	814	39	23	9	39	n/a	n/a	n/a	743
A, G, H, I, S, T	2000	821	28	26	11	5	28	n/a	n/a	723
A, G, H, I, S, T	2001	831	32	16	13	7	10	32	n/a	753
A, G, H, I, S, T	2002	868	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Totals</b>		4,845	236	167	96	51	38	32		3,565
<b>Averages</b>		808	47	33	24	17	19	32		713

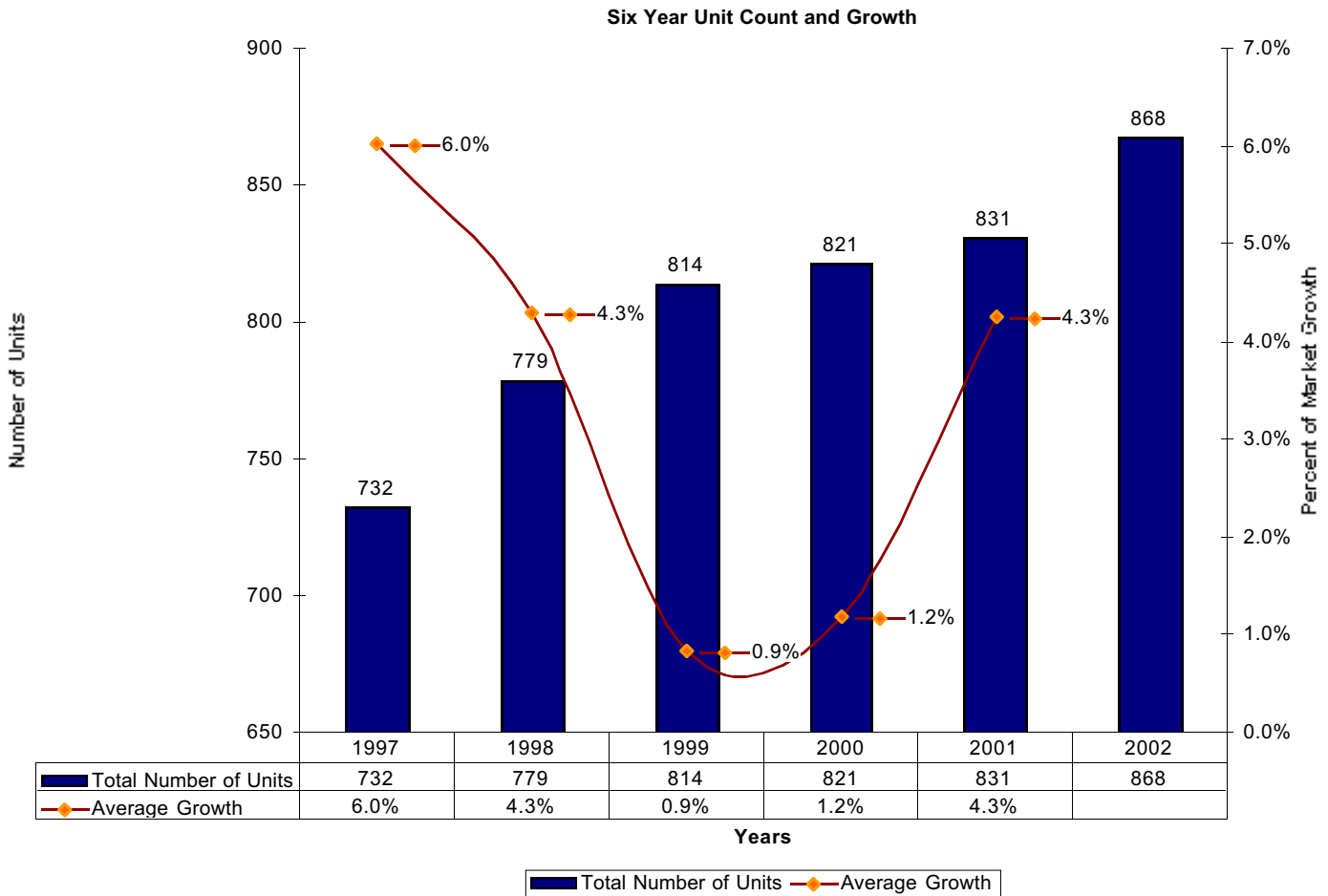
The Appendix Section of this report displays all the raw data sheets.



**VI. Total Number of Units By Year**

The total units reported are as follows:

Year	Total Number of Units	Average Growth
1997	732	n/a
1998	779	6.0%
1999	814	4.3%
2000	821	0.9%
2001	831	1.2%
2002	868	4.3%
<b>Total</b>	<b>4,845</b>	
<b>Average</b>	<b>808</b>	<b>3.3%</b>



**Conclusions:**

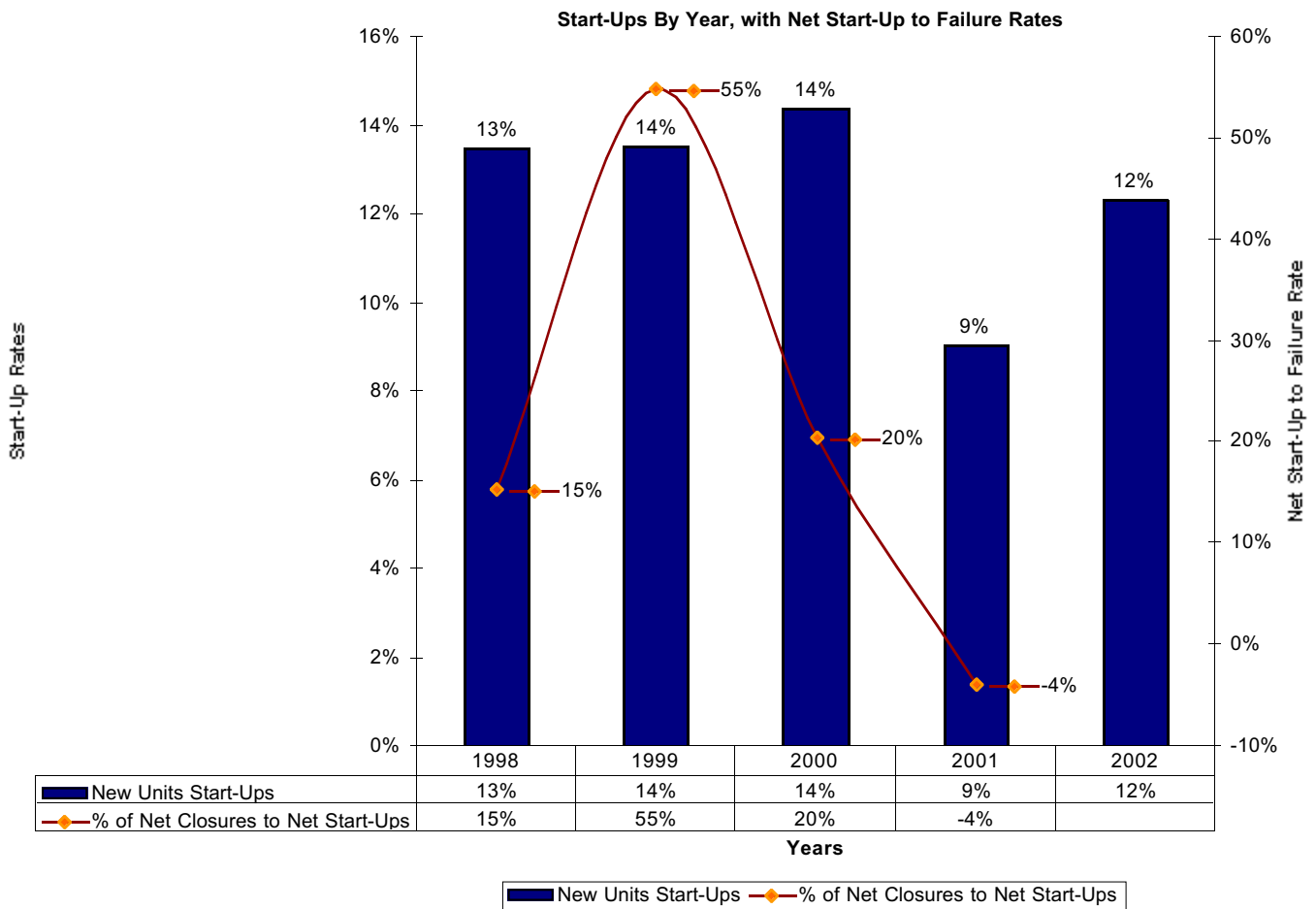
As reported, 1997 saw the least units and 2002 the most by almost 30% more at nearly 900 units. Growth rate from year-to-year varied, but averaged over 3% each year. This number is the gross number of units listed in each year's phone books.



**VII. New Units Start-Up By Year**

The total new units reported are as follows:

Year	New Units Start-Ups	% of Net Closures to Net Start-Ups	Notes
1997	n/a	n/a	
1998	13%	15%	(% of more Start-Ups Than Failures This year)
1999	14%	55%	(% of more Start-Ups Than Failures This year)
2000	14%	20%	(% of more Start-Ups Than Failures This year)
2001	9%	-4%	(% of more Start-Ups Than Failures This year)
2002	12%	n/a	



**Conclusions:**

As reported, 2001 saw the least units starting and 2000 the most. Also as identified, the net growth to closure rate for each year varies wildly - the line on the above chart shows peaks and valleys of the comparison of start-up to failures for a given year.



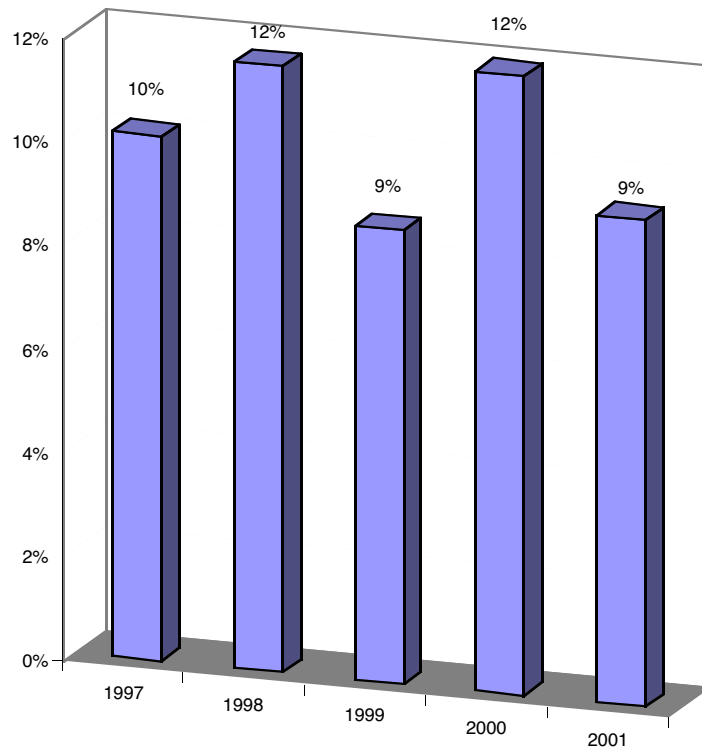
**VIII. Unit Failure Rates By Year**

**A. Overall Failure Rates By Year:**

Year	Overall Closure Rates
1997	10%
1998	12%
1999	9%
2000	12%
2001	9%
2002	n/a

Average 10%

Closure Rates By Year



	1997	1998	1999	2000	2001
Overall Closure Rates	10%	12%	9%	12%	9%

**Conclusions:**

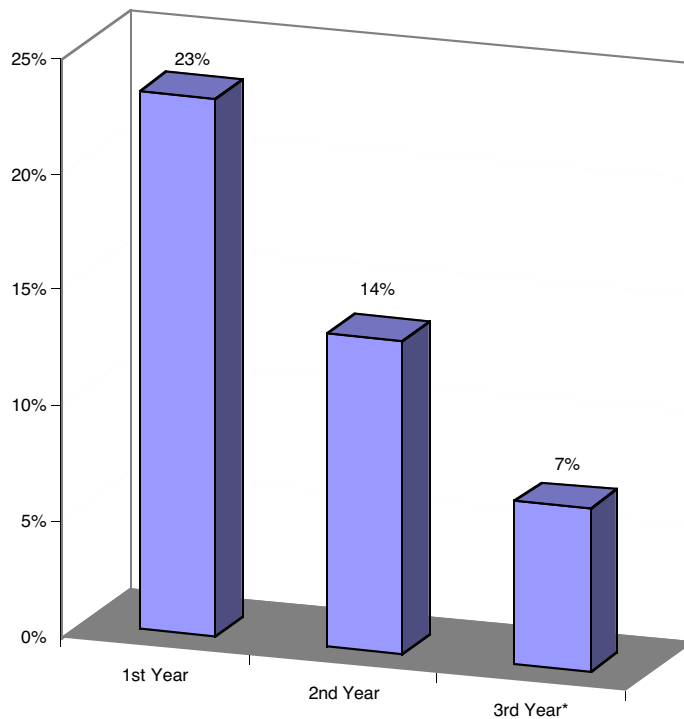
Years 1998 and 2000 both saw the largest closure rates at 12%, and inversely, 1999 and 2001 (and really 1997 with the error rate applied) might indicate an alternating yearly pattern in the peak closure rates. As indicated, the five-year average closure rate is 10%.



**B. New Start-Up Failure Rates By Length of Operation:**

Year	Failure Rate Of New Units
1st Year	23%
2nd Year	14%
3rd Year*	7%
4th Year	n/a
3-Yr Average	15%

**Failure Rates By Year**



	1st Year	2nd Year	3rd Year*
■ Failure Rate Of New Units	23%	14%	7%

**Conclusions:**

The above revised data shows the percentage of start-ups that fail within the first year of operation. The data for Year 3 and beyond cannot be relied on for accuracy, as the tabulations are based on a very small count of units: 12 for Year 3, and less for Year 4 (thus not reported). The Year 3 data should only be viewed as exploratory only.

Furthermore, of those units that will fail within a given year, there is a 28% chance the failure will be a first year start-up (probability).

Note: Mitigating factors affecting this data could be the limited letters analyzed or the geographic region of the county.



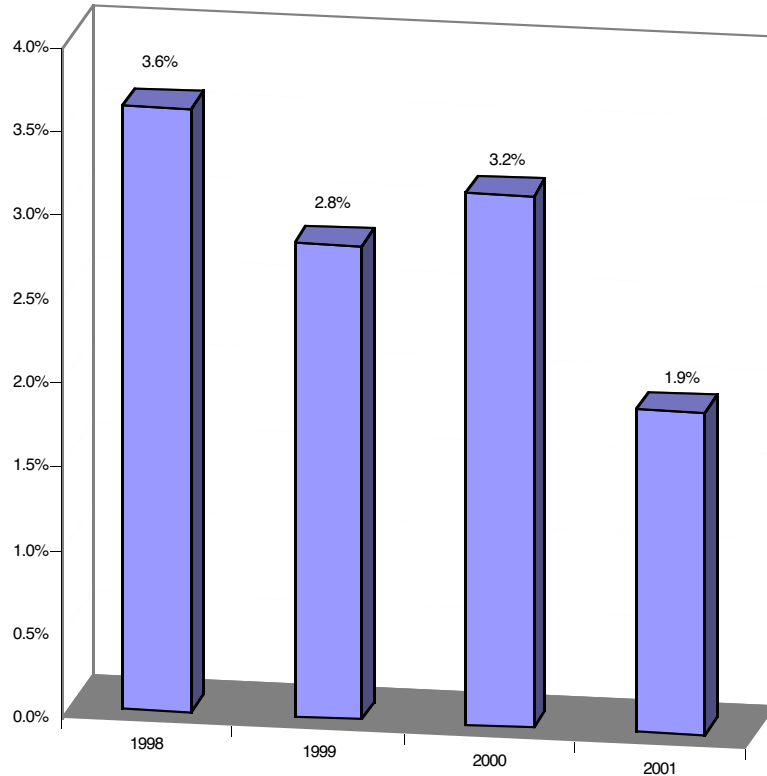
**B. Failure Rates By Length of Operation: (continued)**

As originally reported, the very low failure rates were reported when the entire universe of units were viewed within a given year.

The following data shows what was originally reported; of the entire universe of restaurants for a given year, first-year failures will only account for an average of 3% of all units in a given market.

Year	1st Year Failures As a Percentage of All Units
1997	n/a
1998	3.6%
1999	2.8%
2000	3.2%
2001	1.9%
2002	n/a
4- Year Average	2.9%

1st Year Failure Rates as part of The Entire Universe of Units By Year Reported



Year	1998	1999	2000	2001
	3.6%	2.8%	3.2%	1.9%



**IX. General Phone Book Data For Dallas, TX**

Based on a Dallas Metro query within InfoUSA.com's database, the following data was available:

Number of Leads: 4147 (business leads)

Lead Selection Criteria

Industry:

SIC CODE : 581208

Geography:

- CITY : ADDISON, TX
- CITY : CARROLLTON, TX
- CITY : CEDAR HILL, TX
- CITY : DALLAS, TX
- CITY : DUNCANVILLE, TX
- CITY : FARMERS BRANCH, TX
- CITY : GARLAND, TX
- CITY : IRVING, TX
- CITY : MESQUITE, TX
- CITY : PLANO, TX
- CITY : RICHARDSON, TX
- CITY : ROWLETT, TX

Area Code Tally

Area	Count
214	1689
469	27
806	2
817	1
972	2428

Location Employee Size Tally

Employee Size	Count
1-4	798
5-9	608
10-19	1385
20-49	978
50-99	260
100-249	93
250-499	5
500-999	3
1000-4999	5
5000-9999	2
10000+	6

Location Sales Volume Tally

Sales Volume	Count
LESS THAN \$500,000	2376
\$500,000 - 1 MILLION	716
\$1 - 2.5 MILLION	802
\$2.5 - 5 MILLION	173
\$5 - 10 MILLION	38
\$10 - 20 MILLION	6
\$20 - 50 MILLION	3
\$50 - 100 MILLION	1
\$100 - 500 MILLION	5
\$500 MILLION - \$1 BILLION	4
OVER \$1 BILLION	4

SIC Code Tally

SIC Code	SIC Description	Count
581208	RESTAURANTS	4147

**Conclusions:**

This data is for comparison only, and displays the total universe of units for a given year (2002). It should be noted that the region of coverage is slightly larger than the Dallas-proper phone book, thus more units are reported herein. Based on the geographic area, and the area code analysis above, it is estimated that the actual units within the target area for the Dallas phone book are within 9% of what is reported herein.



The below analysis is an extrapolation of the InfoUSA database, then compared against the total number represented by the six letters in this study.

Number of Rest. In Area Target InfoUSA)	4147
2002 Units Counted Herein	868
Number of Letters Analyzed	6
Average Units/Letter	145
Extrapolated Estimated Total Units in Target Area	3761
InfoUSA Extrapolated Total Units in Target Area	4147
Estimated Difference +/-	9%
% Represented of Actual Units in this 2002 Analysis	21%

As evident, it is surmised that this study represented within 9% of the total number calculated for all units in the target area. This data is only presented to illustrate that the collected data backs-in, so-to-speak, to data shown by an outside phone book database (InfoUSA).



## **X. Appendix A: Actual Phone Book Sheets**

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The actual phone book pages that were tabulated are included following this section. The marketing indicate as follows:

Pink = New Unit

Blue = 1 Yr. Failure

Green = 2 Yr. Failure

Orange = 3 Yr. Failure

Yellow = 4 Yr. Failure

Green Dot = 5 Yrs. Plus Failure

No Color = Remained Open Through the Six Years



## X. Appendix A: 1997

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The actual phone book pages that were tabulated are included following this section. The marketing indicate as follows:

Pink = New Unit

Blue = 1 Yr. Failure

Green = 2 Yr. Failure

Orange = 3 Yr. Failure

Yellow = 4 Yr. Failure

Green Dot = 5 Yrs. Plus Failure

No Color = Remained Open Through the Six Years



## X. Appendix A: 1998

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The actual phone book pages that were tabulated are included following this section. The marketing indicate as follows:

Pink = New Unit

Blue = 1 Yr. Failure

Green = 2 Yr. Failure

Orange = 3 Yr. Failure

Yellow = 4 Yr. Failure

Green Dot = 5 Yrs. Plus Failure

No Color = Remained Open Through the Six Years



## X. Appendix A: 1999

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The actual phone book pages that were tabulated are included following this section. The marketing indicate as follows:

Pink = New Unit

Blue = 1 Yr. Failure

Green = 2 Yr. Failure

Orange = 3 Yr. Failure

Yellow = 4 Yr. Failure

Green Dot = 5 Yrs. Plus Failure

No Color = Remained Open Through the Six Years



## X. Appendix A: 2000

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The actual phone book pages that were tabulated are included following this section. The marketing indicate as follows:

Pink = New Unit

Blue = 1 Yr. Failure

Green = 2 Yr. Failure

Orange = 3 Yr. Failure

Yellow = 4 Yr. Failure

Green Dot = 5 Yrs. Plus Failure

No Color = Remained Open Through the Six Years



## X. Appendix A: 2001

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The actual phone book pages that were tabulated are included following this section. The marketing indicate as follows:

Pink = New Unit

Blue = 1 Yr. Failure

Green = 2 Yr. Failure

Orange = 3 Yr. Failure

Yellow = 4 Yr. Failure

Green Dot = 5 Yrs. Plus Failure

No Color = Remained Open Through the Six Years



## X. Appendix A: 2002

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The actual phone book pages that were tabulated are included following this section. The marketing indicate as follows:

Pink = New Unit

Blue = 1 Yr. Failure

Green = 2 Yr. Failure

Orange = 3 Yr. Failure

Yellow = 4 Yr. Failure

Green Dot = 5 Yrs. Plus Failure

No Color = Remained Open Through the Six Years

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