

Humboldt County Entrepreneur Annual Survey Report, 2012

January 3, 2013

**By Erick Eschker, Ph.D.
Department of Economics
Humboldt State University**

Funding provided by the County of Humboldt Headwaters Fund, The North Coast Small Business Development Center, and Humboldt State University Departments of Economics and Psychology.



Investigators

Erick Eschker, Phd.

Professor of Economics and Director, Humboldt Economic Index

Gregg Gold, PhD.

Professor of Psychology

Erica Blake

BA in Economics from Humboldt State University

Erik Federas

Psychology Masters student at Humboldt State University

Esperanza Alcazar

Psychology Masters student at Humboldt State University

Acknowledgements

This project was generously funded by the County of Humboldt Headwaters Fund, The North Coast Small Business Development Center, and Humboldt State University Departments of Economics and Psychology. Dawn Elsbree, Headwaters Fund Coordinator and Michael Kraft, Executive Director of NCSBDC provided valuable assistance on the project. I appreciate the helpful suggestions from the Headwaters Board and other community members as we drafted the survey and prepared the report.

Dr. Gregg Gold designed the survey methodology and organized the student surveyors. Those students were Erica Blake, Erik Federas, and Esperanza Alcazar. These students also inputted the data and Erica Blake drafted the survey instrument.

The funding for the initial 2011 survey was provided by The Humboldt County Workforce Investment Board. We are especially grateful to Jacqueline Debets, Executive Director, for her support and feedback for this year's survey. We would also like to thank Jan Mueller from the Department of Economics and Val Arizzi in the Department of Psychology for their assistance with the project and the staff at the HSU Sponsored Programs Foundation for their help.

Finally, we give many thanks to the local entrepreneurs who were willing to confidentially share their sensitive business information. Without their continued willingness to share data, this project would not have been possible.

Table of Contents

Investigators.....2

Acknowledgements3

Table of Contents4

Policy Recommendation Summary5

Introduction.....6

Forecast7

Figure 1.7

Data8

Definitions of Success8

Figure 2.11

Factors that may influence Business Success 11

Figure 3.13

Determinants of Business Success 14

Table 1..... 15

Special Topic: Exports out of the County 17

Future Data Collection..... 18

Appendix: Survey Questions 19

Policy Recommendation Summary

The purpose of this on-going survey is to provide useful advice to business development agencies that help entrepreneurs. We statistically identify which factors are associated with business success rather than simply asking business owners what they think leads to success.

Based on our sample, we find that previous business owners, rather than those without experience, are more successful. Agencies trying to maximize business success should target experienced owners and facilitate transfers of the knowledge and experience from seasoned to new business owners. Business licensing aid may be particularly helpful to new businesses and should be a focus of development agencies. While licensing help does not appear to increase the chance of turning a profit in early years, licensing help is positively correlated with remaining open.

Advertising and marketing assistance seems to be associated with successful businesses, and this is also a big concern to new businesses. Helping firms market their product may help new firms. Development agencies should also focus on helping to fund new businesses and to help entrepreneurs manage their time better.

It may not be worth much effort for business development agencies to help new firms write a business plan or to encourage firms to export out of the county. These factors do not appear to be associated with the success of new firms.

Introduction

This 2012 report is the second from the Humboldt County Entrepreneur Annual Survey that was started in 2011. For a detailed description of the initial survey construction and characteristics of new businesses and entrepreneurs in Humboldt County, see the 2011 report "Humboldt County Entrepreneur Annual Survey: Identifying Key Determinants of Small Business Success." That report also references relevant literature on entrepreneurship.

The purpose of this on-going survey is to identify characteristics associated with successful new businesses in Humboldt County and to provide helpful guidance to business owners, economic development agencies, and policy makers.

The initial 2011 report was finished in the summer of 2011 and preliminary findings were presented at The Redwood Region Economic Summit at Humboldt State University on June 10. We received feedback at the summit and from others both on and off campus including Dawn Elsbree and Board members of the Headwaters Fund Board, Maggie Gainer, Michael Kraft of North Coast Small Business Development Center, and Jacqueline Debets of the Humboldt Workforce Investment Board.

The 2012 survey was much shorter than the 2011 survey because we did not need to collect information that hadn't changed, such as owner demographic data and initial start-up conditions of the business. The appendix contains a sample survey.

In what follows, we first present a forecast from business owners. Next, we describe the data and methodology. We then give multiple definitions of business success and suggest various factors that may influence business success. Next, we determine which factors are statistically correlated with business success. Finally, we take a special look at firms that have sales outside of the county.

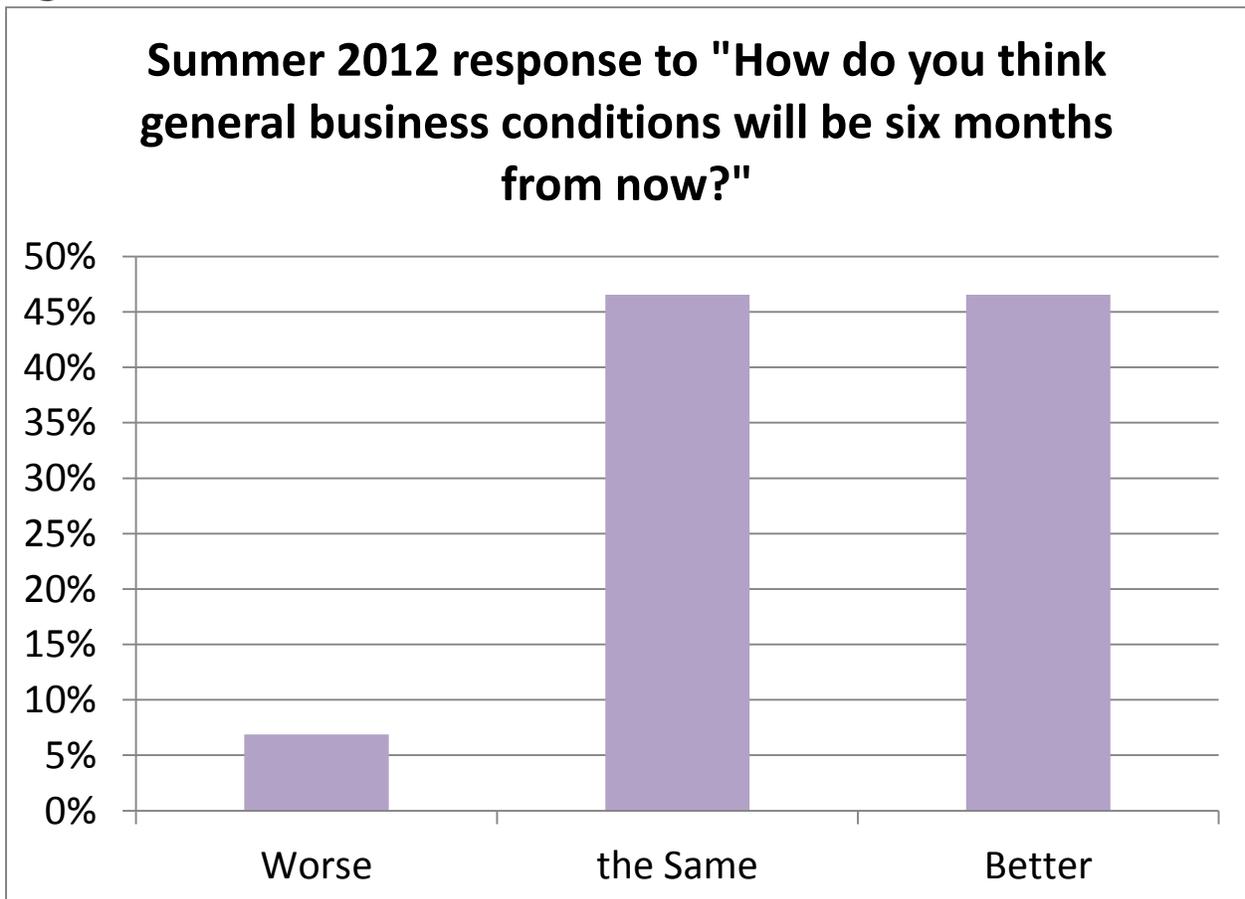
We hope that we will be able to continue the survey in 2013 and beyond. Tracking the same cohort over time will yield a rich data set that will help us

better understand the determinants of entrepreneurial success in Humboldt County.

Forecast

We asked owners "Do you think that six months from now general business conditions will be better for you than they are now, about the same, or worse?" Of the 131 people who responded, only 9 thought that conditions would be worse. The remaining were split exactly evenly between those who thought conditions would be better and those who thought conditions would remain the same. Given these responses, we characterize the short-run outlook for future economic conditions in Humboldt County as being somewhat favorable.

Figure 1.



Data

We track the cohort of new businesses that started between 2008 and 2011 in Humboldt County. We call this the "2010 Cohort" of businesses. Our initial list of businesses was those that filed a fictitious business name with the Humboldt County Recorder in 2010. However, not all businesses that filed in 2010 were started in 2010. Some business owners delayed filing a FBN until after creating their business and some records were renewed FBNs that had expired for businesses started many years earlier. Additionally, we included firms that said they began operation in the first quarter of 2011 even though they filed a FBN in 2010. We had 159 survey responses from this new business cohort in the 2011 survey sample and 83 in 2012. Thus, we had a very good repeat response rate of 52 percent from 2011 to 2012.

In late spring and summer of 2012 we sent out a survey to the businesses that had returned completed surveys in 2011. We included a small monetary enticement in each envelope to increase the response rate at a lower cost than paying for the time it would take student assistants to conduct in-person interviews. Each business was sent an envelope containing a cover letter explaining the research project and intended use of results, a survey, a self-addressed and stamped envelope, as well as the \$2 monetary compensation. We requested return address service from the Post Office, which meant that any undeliverable letters were returned to us and efforts were made to find a correct address. After waiting a short period from the initial mailing, businesses that we had not received a return envelope from were sent a second envelope with all the same items as the first except for the monetary compensation.

Definitions of Success

We define business success five ways. First, did the business continue to exist in 2012? Second, did the business have a positive profit? Third, did the

business hire more employees? Fourth, did the business open another branch or expand its facilities? And fifth, did the business report growth. Successful businesses may answer yes to one or more of these questions.

Remained Open for Business

Eleven businesses reported closing from 2011 to 2012 and two replied that they planned to close the business soon. Two other owners said that the business had been put on hold. Among reasons given by the closed businesses, one cited a job opportunity, one responded with death of owner, two cited family issues, and two retired. Two indicated burdensome governmental regulation. Only two responded that the economy was poor or that they couldn't earn a profit.

The thirteen firms that closed or planned to be closed are about 16 percent of the firms that responded in 2012 and are about 8 percent of the initial 159 firms that responded in 2011. Of course, we expect that some businesses who responded in 2011 probably closed and did not reply to our survey, so the 8 percent likely understates the degree of business failing. In other words, about one in twelve new firms from 2010 closed or are closing within two years, and the actual fraction is probably greater.

Made a Profit

Fifty-five percent, or 46, of our eighty-three 2010 Cohort businesses answered "yes" to the question "Did your business make a profit last year?" Last year, 54 or thirty-three percent of the 159 businesses that responded replied "yes". This apparent increase profitability is encouraging. However, we caution that the increase in the percent may be due to less-profitable firms going out of business or not responding to our survey.

Hired more employees

Fourteen, or 17 percent, of firms in our 2010 Cohort reported increasing the number of employees. Among firms that increased employees, the range

was 1 to 4 workers added and the median was 1. Among all firms, the range was -2 to 4 with a median change of 0.

Expanded facilities

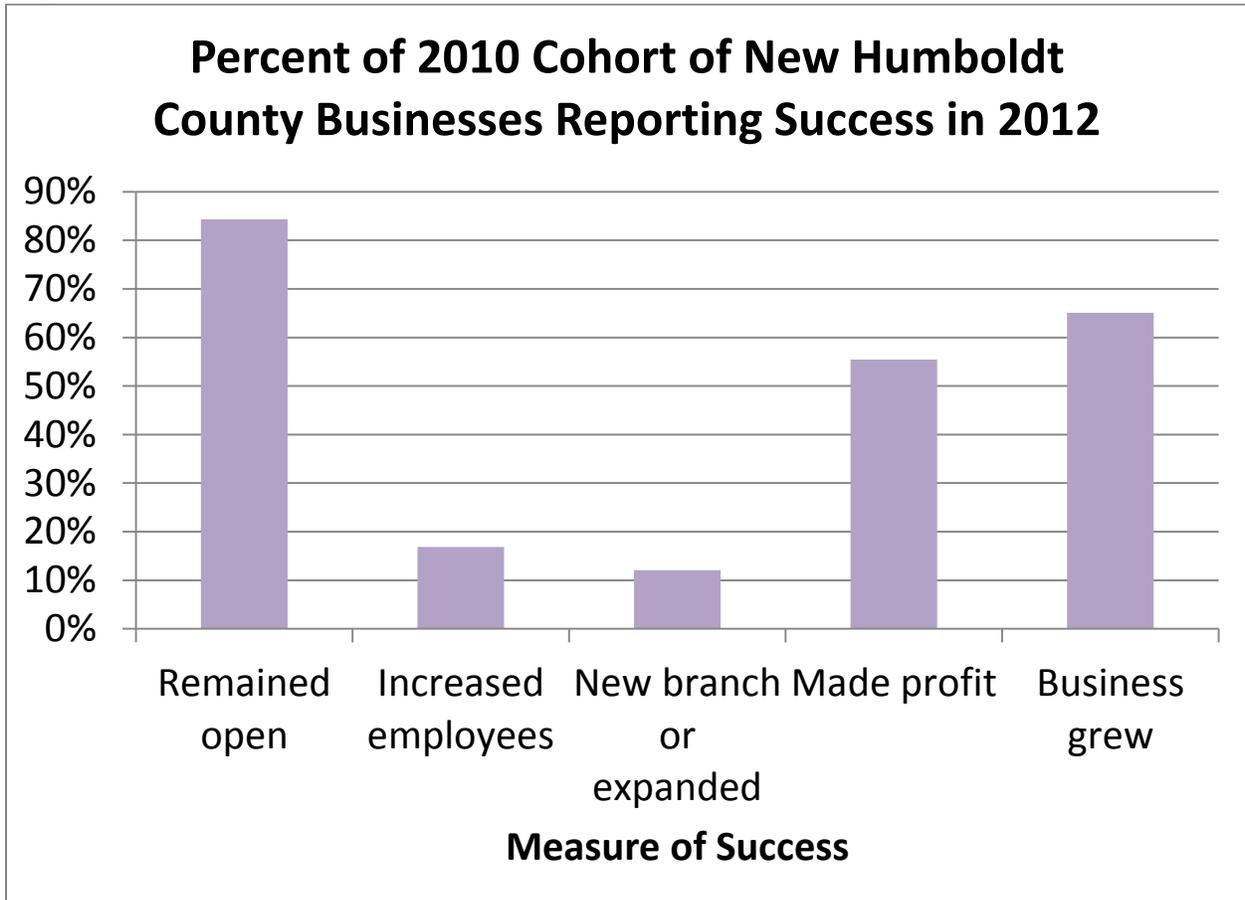
Ten, or 12 percent, of the 2010 Cohort reported opening a new branch or store or expanding its facilities over the last year.

Experienced Growth

We also asked the more general “Has your business grown or declined over the last year?” and 54 of the 83 owners, or 65 percent, indicated growth. We did not define business “growth” for this question, and it was meant to get an overall idea of whether or not owners thought business activity, such as revenue, clients, or sales, was picking up.

The percent of businesses that experienced success in 2012 according to each of our five measures is presented in the figure below.

Figure 2.



To summarize our measures of business success, it appears that most firms survived from 2011 to 2012, but a number of firms did not reply to our survey which makes it difficult to say how many with confidence. Slightly over half of firms that responded made a profit over the last year and enjoyed business growth. A much smaller percent of firms hired more employees or opened a new branch or expanded facilities over the past year.

Factors that may influence Business Success

We next ask which factors are correlated with business success? The goal is to pinpoint specific characteristics or actions that businesses and business development agencies can take to improve chances of success. Of course

correlation does not imply causation, which means that we cannot be sure that a factor that is associated with business success will lead to business success. For example, time challenges may lead to poor decisions and less business success, but less successful firms may demand more time from the owner who is trying to turn things around. Despite this familiar caveat, we take the important first step of determining whether there are significant differences between successful and unsuccessful businesses.

We must also caution that the results below are from our survey of Humboldt County entrepreneurs that started a business in 2010. The results are also based on the first few years of our businesses and during recovery from a very large recession. We cannot say for sure, therefore, that these results will hold generally or that they will continue to hold for these businesses in the future. That is why continuing this survey and collecting a long time span of data is very important.

We chose our factors so that our results could be most useful to economic development agencies that are trying to identify the characteristics of successful businesses and trying to decide which development assistance is most helpful. Recall that these businesses were started around 2010 and so are in their second year of existence as of this survey.

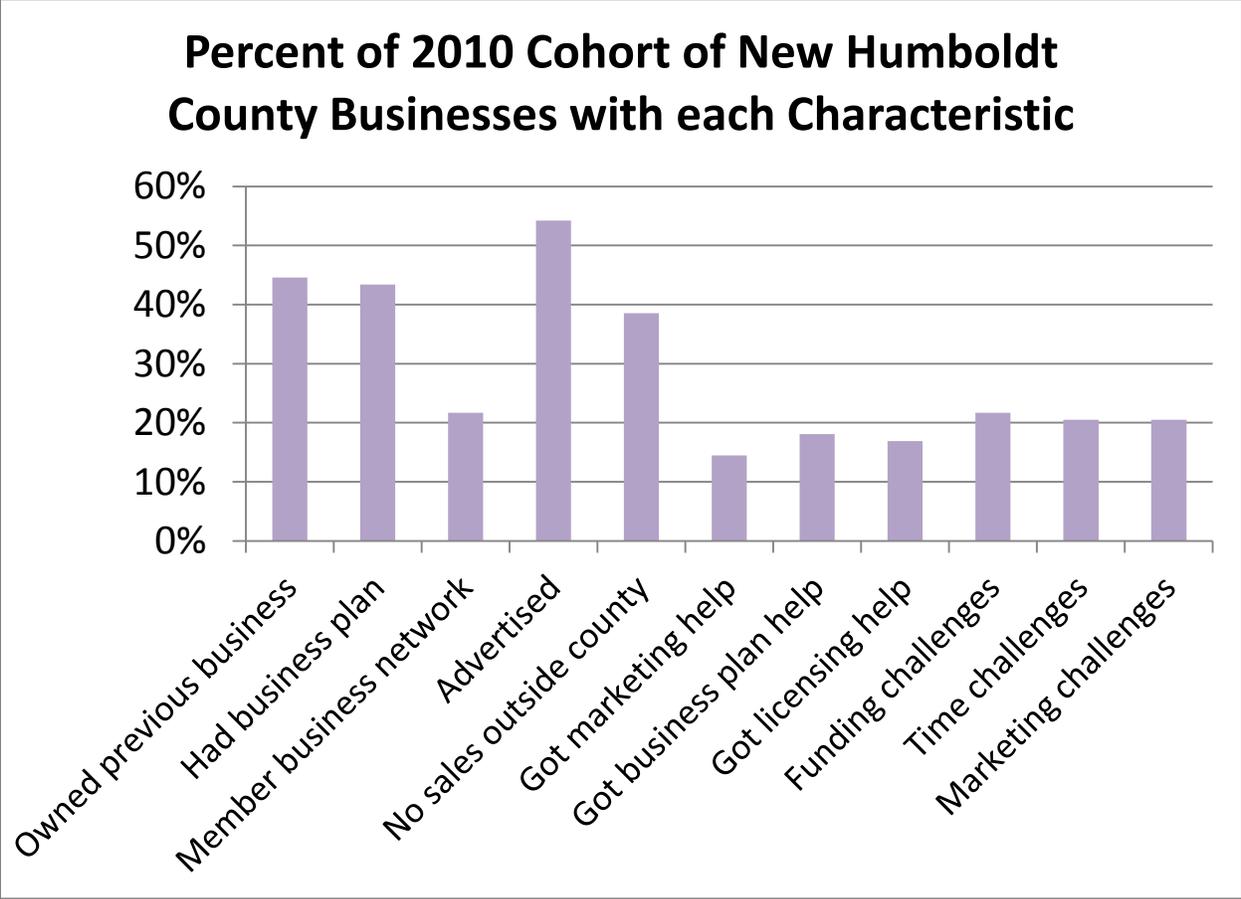
The factors we consider are whether the owner or firm:

- 1) owned a previous business (2011 survey question #2),
- 2) had a business plan to start the business (2011 survey question #6),
- 3) is a member of a business networking group in 2012 (2011 survey question #15),
- 4) advertised at start-up (2011 survey question #19),
- 5) had no customers outside of Humboldt County in 2012 (2011 survey question #29),
- 6) received marketing assistance at start-up (2011 survey question #17),
- 7) received business plan writing assistance at start-up (2011 survey question #17),
- 8) received licensing assistance at start-up (2011 survey question #17),
- 9) reported funding challenges at start-up (2011 survey question #31),
- 10) reported time management challenges at start-up (2011 survey question #31), or

11) reported marketing challenges at start-up (2011 survey question #31).

The first six are characteristics of the firm or owner. The next three are types of assistance that the firm received from business development organizations in the first year. We choose these three since they are the most often reported form of assistance, and therefore will generate enough observations to perform statistical significance tests. The same is true for the last factors, which are the top three challenges that businesses reported in starting their business. The percent of each firm in our survey with these characteristics is shown in the figure below.

Figure 3.



Determinants of Business Success

We calculate the Phi coefficient of association for these measures of success and determining factors. Our measures of business success and explanatory factors are binary variables that take the value of either yes or no. The Phi coefficient is the same as the Pearson Correlation coefficient in the 2x2 case, which we calculate using Excel 2010. A "+" coefficient indicates a positive relationship between the measure and the factor, while a "-" coefficient indicates a negative relationship. For example, having previously owned a business is positively correlated with being profitable in 2012.

We then perform a Chi-squared test to determine whether the observed number of firms when measured along two dimensions and in each of the four categories is equal to the expected number of firms. The table below reports the p-values for our measures of business success and the possible explanatory factors. A p-value under 0.10 indicates a statistically significant difference between expected and observed values at the ten percent level. These are bolded in the table below. The more common five percent significance level is given by a p-value under 0.05. These too are bolded. For example, if we look jointly at whether the firm made a profit in 2012 and whether the owner had a previous business, there are four possibilities. The firm can be profitable and the owner can either have a previous business or not, and the firm cannot be profitable and the owner can either have a previous business or not. The p-value is 0.06, which means that given our assumptions, only six percent of the time would we expect to see the observed positive correlation between previous experience and turning a profit.

Both the direction of correlation and being statistically significant are important. For example, having owned a previous business is positively correlated with being profitable, and this result is statistically significant with a p-value of 0.06. Thus we can say with confidence that having previous business experience tends to be associated with running a profit. On the other hand, having a business plan is negatively correlated with being profitable. But since the p-value is greater than 0.10 and this result is not statistically significant, we have no confidence that there is any correlation at all between having a business plan and being profitable. Our discussion therefore focuses on the bolded factors below.

Table 1.
Phi Coefficient Sign and Chi-squared Test p-values,
N=83

	Profit in 2012?	Employees 2011-12?	Open in 2012?	Expanded 2011-12?
Previously owned a business?	+ 0.06	+ 0.02	+ 0.67	+ 0.08
Had business plan?	- 0.53	- 0.95	+ 0.77	- 0.88
Member of business networking groups in 2012?	+ 0.74	+ 0.30	+ 0.88	- 0.52
Advertised at start-up?	+ 0.74	+ 0.17	+ 0.02	+ 0.31
No sales outside of county in 2012?	- 0.43	- 0.40	+ 0.53	- 0.20
Received marketing assistance at start-up?	+ 0.04	+ 0.42	+ 0.45	+ 0.60
Received business plan writing assistance at start-up?	+ 0.33	+ 0.72	+ 0.78	+ 0.30
Received licensing assistance at start-up?	- 0.03	- 0.29	+ 0.08	- 0.13
Faced funding challenges at start-up?	- 0.60	+ 0.49	- 0.39	- 0.08
Faced time challenges at start- up?	+ 0.75	- 0.53	- 0.08	- 0.97
Faced marketing challenges at start-up?	- 0.19	- 0.17	+ 0.62	- 0.38

This table shows the direction of correlation and p-values for measures of business success and possible determinants of success from businesses that started around 2010. Statistically significant correlations at the 10 percent level are indicated in bold.

Source: Humboldt County Entrepreneur Survey.

The table above shows that six factors are associated with greater business success. Two of the six are statistically associated with more than one measure, while four of the six find association with only one measure of business success.

An owner who owned a previous business is positively correlated with three of the four measures of business success. Those three are profitability, increased number of employees, and facility expansion. This does not necessarily mean that having previous experience *leads to* more business success, as noted earlier. But if this interpretation is true, then less experienced entrepreneurs may wish to partner with those who have gone through the process of starting a business already. This may improve the odds of success. Economic development agencies can focus efforts on sharing business advice with new entrepreneurs or perhaps pairing new entrepreneurs with experienced mentors. In fact, 10 of the 83 firms in our sample, or 12 percent, reported in 2011 that the biggest challenge to their new business was obtaining advice about their industry.

Business licensing results were mixed. Entrepreneurs that received business licensing assistance at start-up were *less* likely to be profitable in 2012. However, they were more likely to still be open in 2012. This finding may be because firms that require more licensing help may take longer to become profitable. Economic development agencies may provide valuable assistance for firms by helping to understand and complete the licensing process.

Firms that advertised at start-up were more likely to still be open by 2012. Firms that received marketing assistance at start-up were more likely to have a positive profit in 2012. Firms that faced funding challenges at start up were less likely to still be open by 2012. Finally, firms that had time challenges at start-up were less likely to still be open by 2012.

The other five factors were not significantly correlated with any of our measures of business success. Thus business development agencies may wish to cut back resources devoted to writing a business plan or helping firms export out of the county. Being a member of business network group also is not associated with business success. In last year's report, however, we found evidence that networking is associated with success.

One important question is which local business development organizations provide helpful assistance? Owners were asked in 2011 to list specific organizations that they had gone to for business help. Responses covered a variety of local organizations. However, only one organization was large enough to statistically determine if it affected success, and we found that it did not have any noticeable positive or negative effect on business success. We choose not to report the name of that organization.

We considered our fifth measure of success, whether or not firms reported “growth”, but none of our explanatory factors were significantly correlated with growth. The closest was advertising in 2011, with a p-value of 0.12. Recall that this definition of success was not pre-defined for the respondent, and it is possible that owners had different concepts in mind when answering this question. This may lead to no strong statistical correlation between our explanatory factors and this measure of success.

Special Topic: Exports out of the County

Demand for goods produced by the county can come from outside of the county. Trade is a key engine of growth, and local businesses that sell to those outside of the county are an important part of trade. Forty-four percent, or 32 of businesses that responded, have no sales outside of the county. Eighteen percent have less than 10 percent of their sales outside of the county while 14 percent have between eleven and fifty percent of sales outside of the county. Twenty-four percent of companies who answered that question had over half of their sales outside of Humboldt County.

We also asked for the dollar value of sales outside of the county. For the sixteen firms that listed a positive amount, the range was between \$350 and \$400,000 with the median amount \$5,400. Thirty-one percent, or five businesses, had sales over \$10,000 outside of the county.

What would increase sales outside of the county? The sixteen firms that had over half of their sales from outside of the county is a small sample, but we can look at their responses to relevant questions. We asked “what were the biggest challenges that this business faced in the last year?” Among the eleven businesses with over 50 percent of sales outside of the county that

answered this question, 4 mentioned cash flow and money issues, 4 mentioned marketing or advertising difficulty, and 2 mentioned production difficulties.

In the 2011 survey the businesses with over 50 percent sales outside of the county answered the question "What were the biggest challenges that you faced in starting this business?" The most common responses were difficulty in learning the industry or business, trouble advertising, and a lack of time after working in another job.

Over the past year, the 13 businesses with over fifty percent sales outside of the county sought business advice from a variety of sources, with friends, family, and the Internet being the three most cited sources. Other business owners and business development agencies were used sometimes, and one person sought advice from Humboldt State University.

Finally, we asked why they think their business has grown or declined over the past year. For those who export over 50 percent and who reported a decline, the most common reason given is that they are busy elsewhere and lack time. For those who reported growth, the most common reasons are increased customers from advertising, including word of mouth and online social media.

Future Data Collection

This report summarizes and analyzes the second year of our Humboldt Entrepreneur Survey. With two years of data, we are able to better determine which factors are associated with the success of new businesses. The findings are specific to our sample of firms and to Humboldt County, but they provide guidance to business development organizations as they focus efforts to aid new businesses. We expect to continue this as an annual survey of the 2010 cohort of entrepreneurs in the future. Data collected over more years will allow us to more precisely pinpoint which factors are associated with business success and will allow business development agencies to better target their support for businesses.

Appendix: Survey Questions

1. If your business has closed, then why?
2. How many people own this business? _____
3. How did you fund the START-UP of your business? (Check all that apply)
 - Bank Business Loan
 - Family and/or Friends
 - Personal Loan
 - Credit Card
 - Economic Development Agency
 - Personal Savings
 - Home Equity
 - Other _____
4. Not including owners, how many people work for your business? _____ People
5. How has the number of employees changed since one year ago? (Check one and fill in the blank)
 - Increased by _____ employees
 - Decreased by _____ employees
 - No change in the number of employees
6. How many employees were replaced in the last year? _____ People
7. Over the past three months, did the average employee compensation that you pay rise, stay the same, or fall?
 - Rise
 - Stay the same
 - Fall
8. Did this business open another branch or store or did it expand facilities over the last year?
 - Yes
 - No
9. Did you open a new business, other than this one, over the last year?
 - Yes
 - No
10. Did you advertise in the last year?
 - Yes
 - No
11. Did you trade goods or services with any other businesses in the last year (no money exchanged)?
 - Yes
 - No
12. Are you a member of any business networking groups?
 - Yes
 - No
13. List organizations or groups in your community that you belong to or went to for business help in the last year (such as business development organizations, government agencies, service clubs, social groups, etc.)
14. Which, if any, forms of assistance did you received from a business development organization in the last year?
 - Technical assistance
 - Hiring or Human Resources Support
 - Writing business plan
 - Accounting or bookkeeping
 - Loan and Financing Counseling
 - Tax assistance

- Marketing
- Business licensing
- Other: _____

15. Whom did you go to for business advice in the last year? (Check all that apply)

- Family
- Friends
- Bank / Credit Union
- Internet
- Newspaper
- Business Development Agency
- Humboldt State University
- Other Business Owners
- Other:

16. How did you fund your business over the last year? (Check all that apply)

- Bank Business Loan
- Family and/or Friends
- Personal Loan
- Credit Card
- Economic Development agency
- Personal Savings
- Home Equity
- Other: _____

17. What were revenues/sales last year? \$ _____

18. Did your business make a profit last year?

- Yes
- No

19. What was the amount of profit? \$ _____

20. Has your business grown or declined over the last year? Please state why you think this happened.

- Grown
- Declined

21. What are total dollar sales to people *outside* of Humboldt County?

\$ _____

22. What percent of your business sales are to people *outside* of Humboldt County? (Check one)

- 0%
- 1%-10%
- 11%-50%
- 51%-100%

23. What were the biggest challenges that this business faced in the last year?

24. Do you think that six months from now general business conditions will be better for you than they are now, about the same, or worse?

- Better
- About the same
- Worse