

The Green Industry of Idaho in 2004

Final Report

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Introduction

In 2000, the Social Science Research Unit (SSRU) at the University of Idaho conducted a survey of businesses in the nursery, landscape, and floral industries of Idaho. Together, these businesses make up the horticultural industry (or “Green Industry”) of Idaho. The survey was designed to measure the economic importance and contribution of the Green Industry within Idaho’s economy. In that study, using a sample frame made up of known businesses in Idaho (1,208 businesses and individuals), it was determined that Idaho’s Green Industry added an estimated \$662 million in total sales to the state economy in 1999. The sub-industry having the largest single contribution to the total was determined to be businesses involved in landscape maintenance, landscape contracting, and landscape architecture. The total sales from that industry were estimated to be over \$161 million. In addition, the Green Industry of Idaho contributed an estimated 12,911 jobs to the state economy.

In 2005, the SSRU was again contracted by the Idaho State Nursery and Florists Advisory Committee to conduct a similar mail survey. The purpose of this study is to determine if the size or scope of the Green Industry in Idaho has changed during the past five years. The survey has been modified from the 2000 instrument to ensure calculation of the economic impact of the Green Industry in Idaho (Appendix A). This report introduces the preliminary findings of the survey, including the estimates for the total amount of sales and the total number of jobs contributed by the Green Industry to the State of Idaho.

Methodology

In order to create a thorough list of Green Industry businesses to survey, a list of 2,289 businesses and individuals was compiled from Idaho Nursery and Landscape Association (INLA) member lists, Department of Agriculture licensee lists, and local area phone directories. This compiled list was cross-checked for duplicates and businesses not actually located in Idaho, as well as individuals who have retired or never were in the horticulture industry. Thus the actual sample size is 2,175. Phone and E-mail attempts were made to locate more of the golf courses in the state; these attempts were unsuccessful.

To increase the survey response rate, a preliminary postcard was sent on October 11, 2005 to all 2,175 potential respondents prior to sending the survey (Appendix B). Two hundred fifty seven (257) surveys were returned as non-deliverable; new addresses were found for 57 businesses and the sample frame was updated with the new addresses.

On October 25, 2005, the SSRU mailed 1,975 surveys, letters, and return envelopes using SSRU letterhead (Appendix C). Reminder postcards were mailed November 1, 2005 (Appendix D). A second survey, letter, and return envelope were sent November 16, 2005 to those individuals who had not returned the first survey or otherwise contacted the SSRU (Appendix E). A total of 1,526 surveys were sent in the second mailing.

From December 2-19, 2005, after adequate time for surveys to be sent back, all non-deliverable respondents (220) were called. Twenty-five new addresses were found and surveys were sent. Thirty-six individuals were found to be ineligible. In addition, 1,127 non-respondents were called. These follow-up calls resulted in 30 surveys being completed over the phone. In addition, surveys

were sent again to respondents who had incorrect addresses in the database or who had misplaced the original surveys. Many individuals contacted were no longer in business or had never been in the horticulture business; some non-respondents were simply not able to be reached.

Of those businesses and individuals that did not complete the survey, 700 were determined to be ineligible because they had retired, were not in the horticulture business, had moved out of the area, or were deceased or ill. A total of 793 potential respondents did not respond to the letters or postcards and 59 households declined to participate in the study. A total of 623 of the 1,476 potential eligible respondents completed the survey. The final sample size was 1,475. The final response rate for the survey entitled “The Green Industry of Idaho 2005” was 42%.

It is important to note that the results of this study are indicative of the businesses which *responded* to the survey. While the results of this study are indicative of the industry as whole, it is possible the businesses in different industry sectors had different response rates. Given the nature of Green Industry businesses, (many operations conduct businesses across different industry sectors), it is very difficult to determine differences in non-response among sectors from our sample frame. If the response rates did vary by industry sector, the reported proportions of the different sectors would be somewhat weighted to the industries with higher response rates, as would any analyses which relies on these proportions, such as our estimate of total jobs in each sector and total sales by each sector.

Data were analyzed using SPSS¹ and SAS² statistical software packages. Both raw frequencies and frequencies by industry sector were tabulated for all questions. The total number of jobs was estimated using the Survey Means procedure in SAS and weighting by the number of responses.

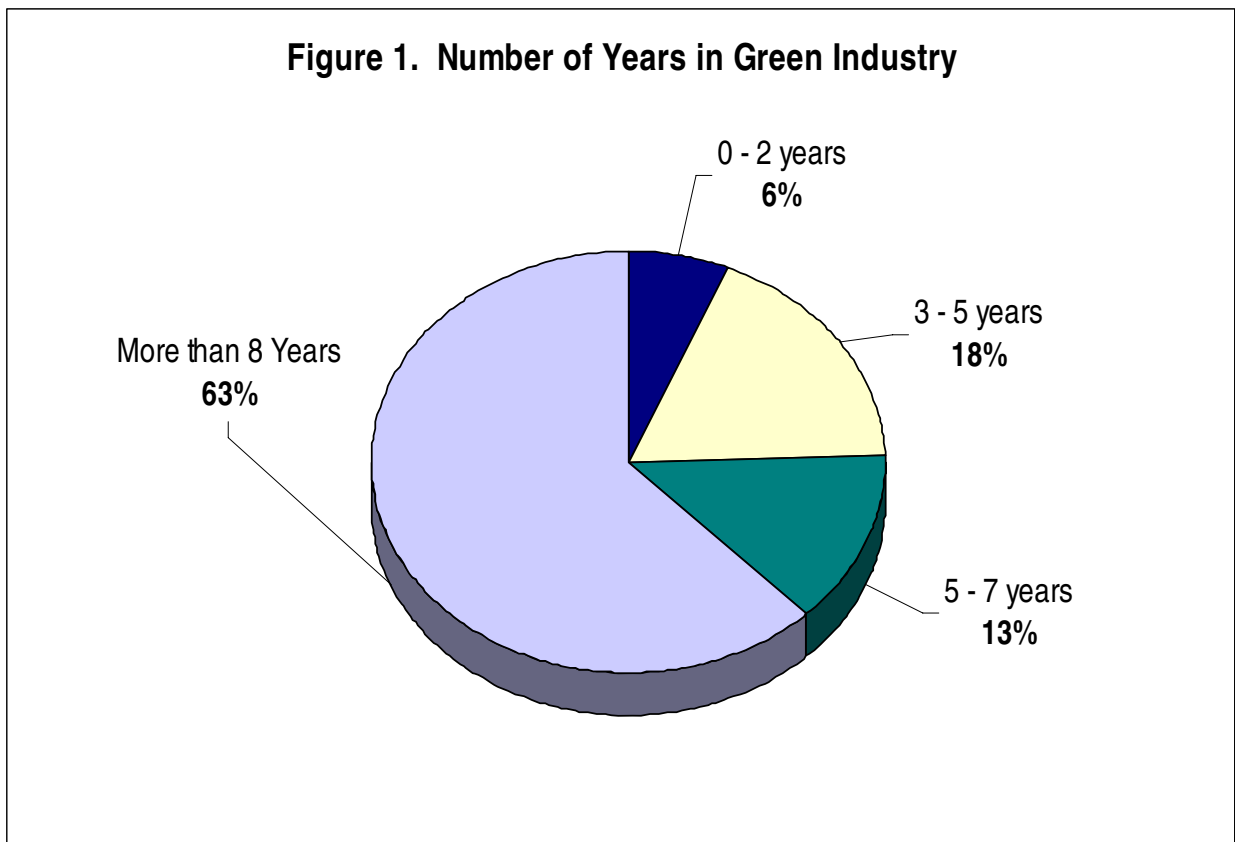
¹ SPSS, Version 14.0. 2005. SPSS, Inc.

² SAS, Version 9.1.3. 2005. SAS Institute, Inc.

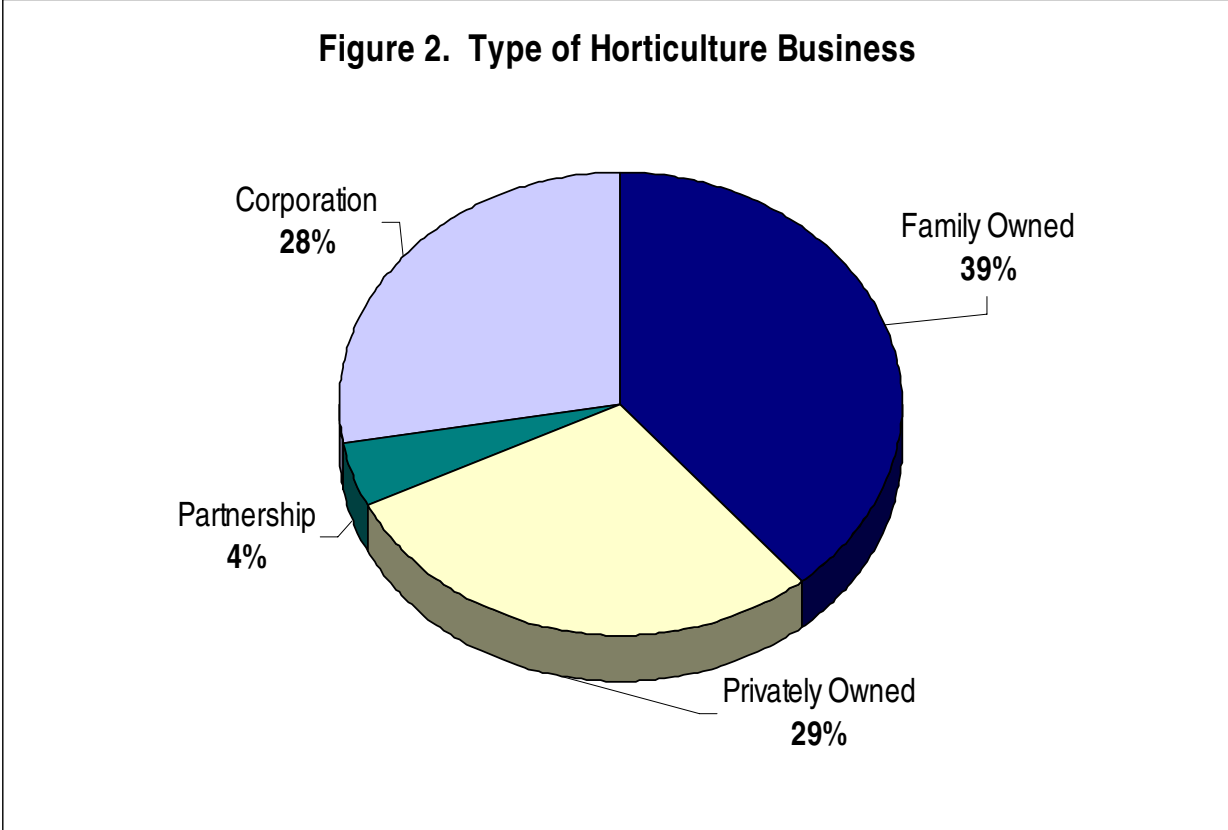
Results

Demographic Profile of Businesses

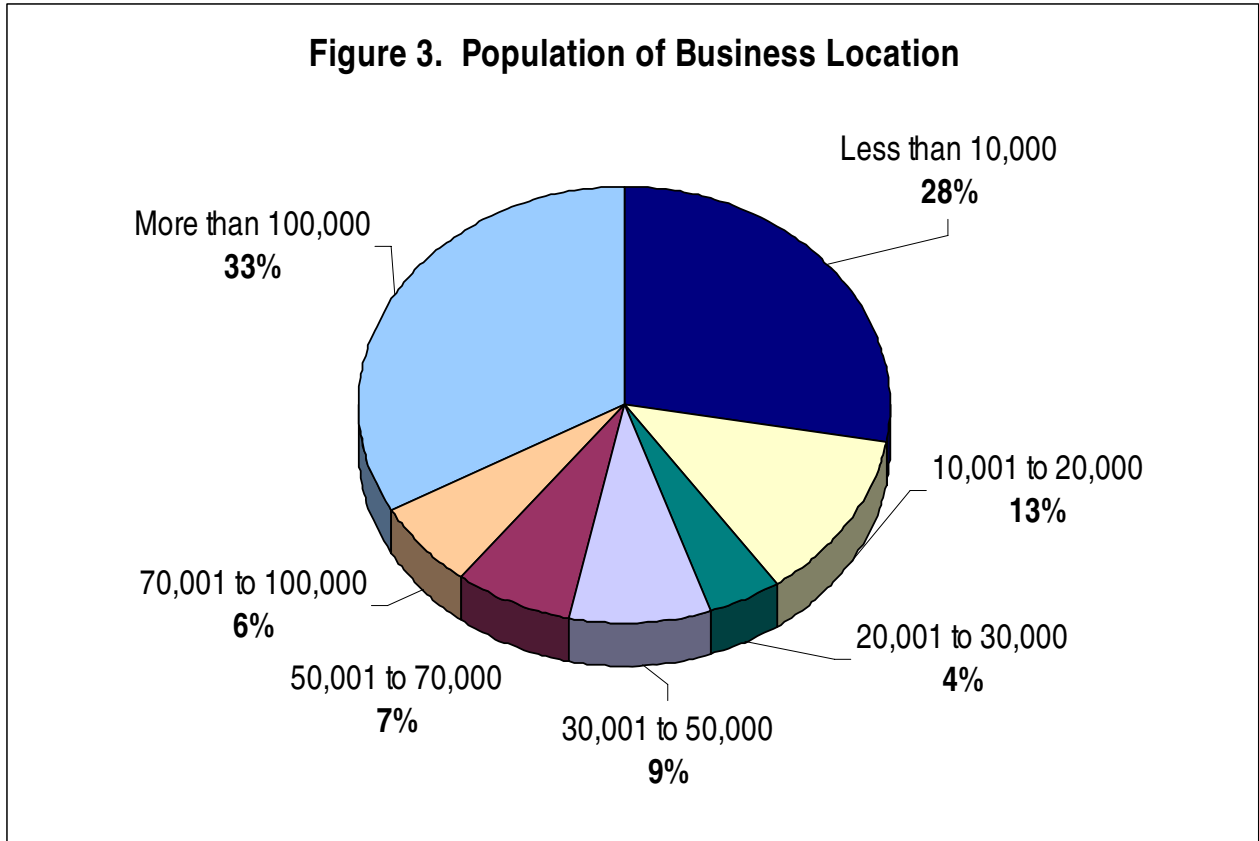
In order to determine how the number and type of businesses in the Green Industry has changed in the past five years, the survey includes basic questions about the type, location, and length of operation for each business. Almost two-thirds (63%) of the businesses who replied to the survey have been in business for more than eight years, and 76% have been in business for more than five years, indicating some stability in the industry (Figure 1).



A large portion of Idaho’s Green Industry businesses are family-owned (39%). Approximately equal numbers of businesses are privately-owned or corporations (29% and 28%, respectively), while a relatively small proportion (4%) are partnerships (Figure 2).



One-third (33%) of horticulture businesses are located in areas with more than 100,000 people (i.e., Treasure Valley). However, almost an equal percentage of reporting businesses (28%) are located in rural areas or small towns with less than 10,000 people (Figure 3), suggesting that the Green Industry cuts across a wide geographical spectrum of Idaho. Ada County respondents alone are 34% of the sample, with Canyon County representing another 10% of the sample. Other counties with a relatively large percentage of respondents are Kootenai County, Blaine County, and Boundary County, with 5%, 5%, and 4% of the sample, respectively. The average number of locations for businesses is 1.3, indicating that most businesses only have one to a few locations.



Green Industry Sectors

The Green Industry is a composite of many smaller industries, including retail and wholesale nurseries and suppliers, landscape and irrigation contractors, landscape maintenance and lawn care, landscape architects, arborist and tree care specialists, sod growers, pesticide applicators, and golf courses, among others. In Idaho, the largest sector of the Green Industry is the category defined here to include landscape maintenance, landscape and irrigation contracting, pesticide application, and landscape architecture. This sector makes up nearly half of the industry (49%). The second largest sector is comprised of wholesale nurseries, growers, and suppliers, who represent 20% of Idaho's Green Industry. Retail nurseries and garden centers (including chain and hardware stores) make up 14% of the industry (Figure 4).

A very important consideration when examining the Green Industry is that many businesses in the industry derive part of their total sales from more than one industry sector. 63% of respondents state that their business provides multiple services. The industry sector that has the highest percentage of participating businesses is landscape contracting (40%), followed by landscape maintenance and lawn care (33%) and irrigation contractors (27%, Table 1). Thus, the importance of a particular industry sector should be thought of as both a function of the percentage of businesses for which that sector is the **primary** source of sales (as shown in Figure 4) and the percentage of businesses which derive **any portion** of their sales from that sector (Table 1). For example, while only 14% of businesses describe their primary operation as a retail nursery or garden center (Figure 4), 24% of businesses report they obtain part or all of their sales from retail nursery or garden center sales and services (Table 1).

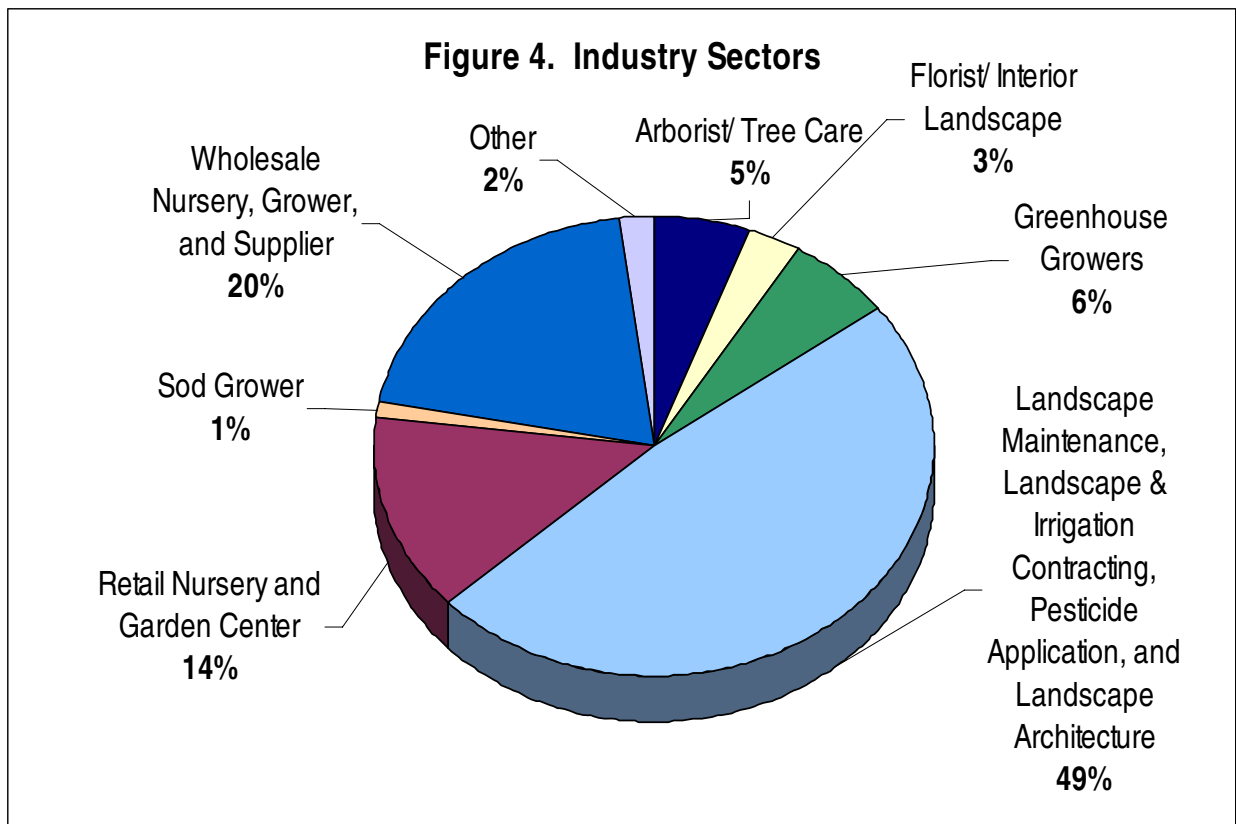
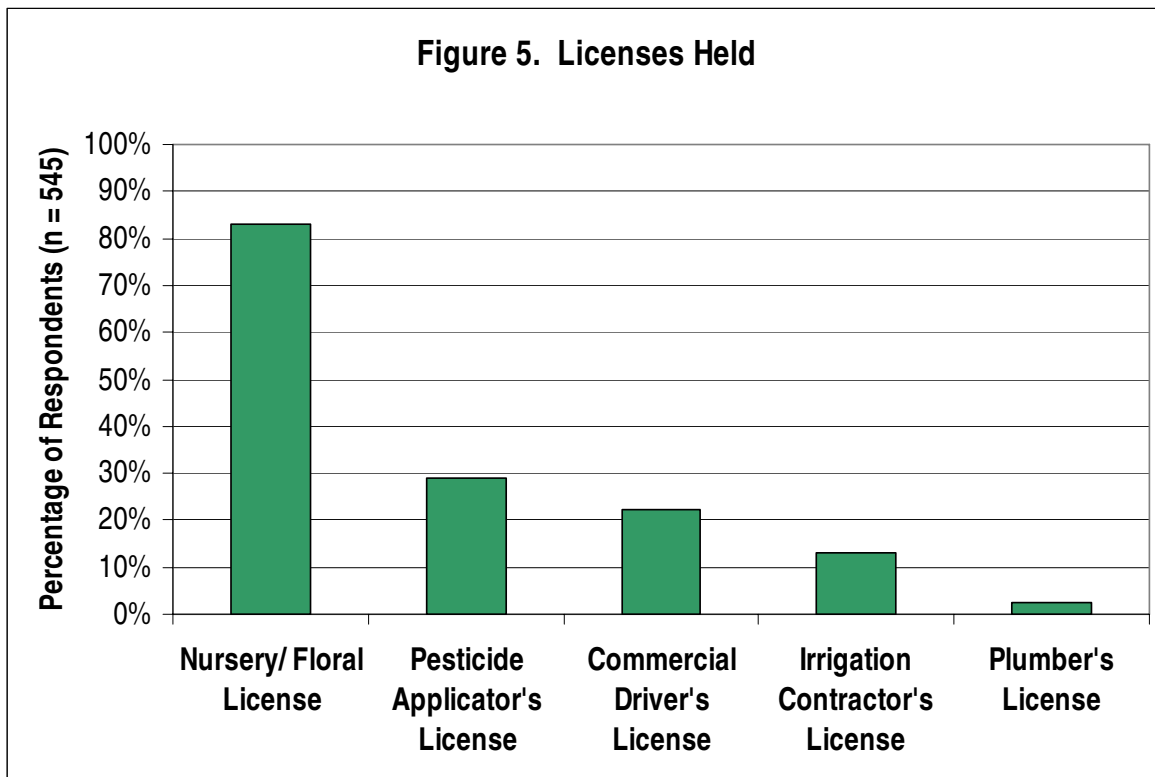


Table 1. Participation in Green Industry Sectors

<i>Industry Sector</i>	<i>Percent of Participating Businesses</i>
Arborist	13.5%
Chain Stores	1.3%
Florist/ Interior Landscape	7.2%
Golf Course Management	2.3%
Greenhouse Grower	12.9%
Irrigation Contractor	27.0%
Landscape Architect	6.1%
Landscape Contractor	39.5%
Landscape Maintenance/ Lawn Care	33.4%
Pesticide Application	12.7%
Retail Nursery/ Garden Center	24.1%
Sod Grower	2.1%
Wholesale Nursery/ Grower	25.6%
Wholesale Supplier	6.4%
Other	12.5%

The fact that so many businesses participate in different segments of the Green Industry is also reflected in the licenses held by businesses. Most responding businesses have a nursery and floral license (83%). The second most common type of license is a pesticide applicator license (29%), followed by a commercial driver's license (20%, Figure 5).



Economic Results

Economic data is reported for both the industry as a whole and for individual industry segments. Industry sectors are grouped as in Figure 4, with a large category for landscape maintenance, landscape & irrigation contracting, pesticide applicators, and landscape architecture. Sample sizes for some industry sectors were quite small; these industries (including sod growers, golf courses, association management, and farmer’s markets) are grouped together as ‘other businesses’. Thus, the industry sectors for which economic data are reported are: (1) arborist and tree care specialists (2) florists, (3) greenhouse growers, (4) landscape maintenance, landscape contracting, landscape and irrigation contracting, & landscape architecture (“landscape maintenance, etc.”), (5) retail nurseries & garden centers (“retail nurseries, etc.”), (6) wholesale nurseries & suppliers (“wholesale nurseries, etc.”), and (7) other businesses.

Across the industry as a whole, respondents report that 49% of total sales are a result of products, and 50% of total sales are a result of services. However, within industry sectors, those percentages are quite different, with some industry sectors relying almost exclusively on products, and others obtaining most of their sales from services. For example, greenhouse growers report that 92% of their sales derive from products, and landscape architects and arborists report that nearly 86% of their sales are from services (Table 2).

Table 2. Percent of Sales from Products and Services by Industry Sector

<i>Industry Sector</i>	<i>Percentage of Total Sales from Products</i>	<i>Percentage of Total Sales from Services</i>
<i>Arborists</i>	14.4%	85.0%
<i>Florists</i>	72.5%	26.2%
<i>Greenhouse Growers</i>	92.2%	6.2%
<i>Landscape Maintenance, etc.</i>	19.7%	78.4%
<i>Retail Nurseries, etc.</i>	86.0%	9.7%
<i>Wholesale Nurseries, etc.</i>	83.3%	9.7%
<i>Other Businesses</i>	66.4%	36.1%

In order to determine not only the Green Industry’s economic contribution to the State of Idaho, but also to other states, respondents were asked to list the states and countries in which products and services were both sold and purchased. Nearly 98% of Green Industry businesses in Idaho report that products and services are sold in Idaho. About 10% of businesses also report selling to Washington, Oregon, Montana, Utah, and Wyoming (Table 3). Across the entire industry, 91% of businesses buy products and services from Idaho, thus also contributing to the overall state economy by supporting other Idaho industries. In addition, 38% of responding businesses buy products or services from Oregon, and 35% buy products or services from Washington. It is also very important to note that Idaho’s Green Industry buys and sells products from nearly every state in the nation and several other countries (see Appendix F for a list of these states and countries).

Table 3. States in Which Products and Services Are Sold and Purchased

<i>State</i>	<i>Products and Services SOLD</i>	<i>Products and Services PURCHASED</i>
<i>Idaho</i>	97.5%	90.9%
<i>Washington</i>	11.7%	34.5%
<i>Oregon</i>	10.2%	37.9%
<i>Montana</i>	9.7%	10.0%
<i>Utah</i>	11.7%	15.8%
<i>Wyoming</i>	10.7%	2.3%
<i>Canada</i>	2.0%	8.5%
<i>Other</i>	8.6%	21.5%

When data are analyzed by industry sector, some differences become apparent. Although all industry segments appear equally likely to sell within Idaho, wholesale nurseries and suppliers are more likely to sell out of state than most other industry segments (Figure 6). Similarly, florists and retail nurseries are more likely to purchase goods and services from other states. Washington and Oregon remain the most common states from which goods and services are purchased (Figure 7).

Figure 6. States in Which Products or Services are Sold

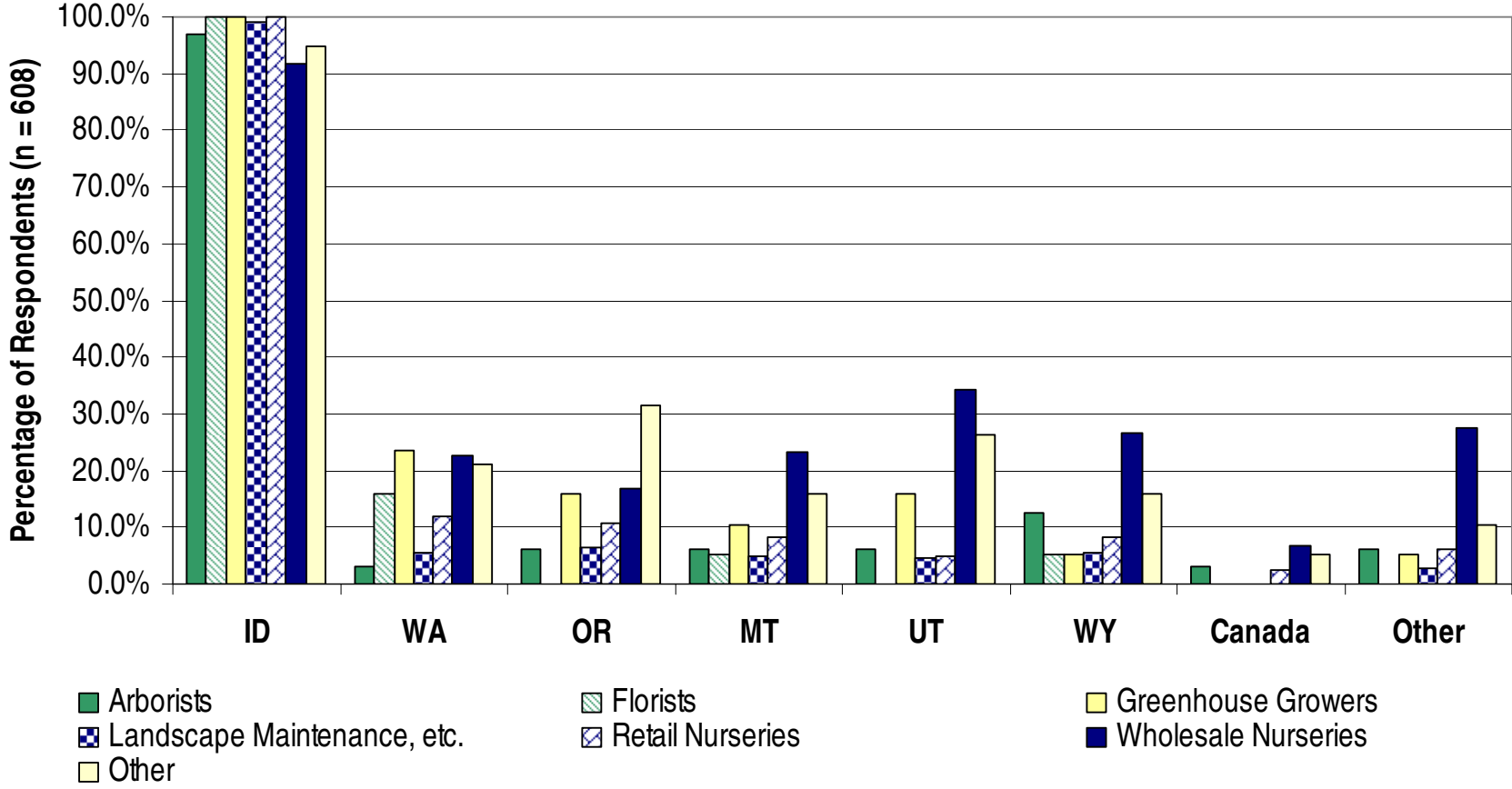
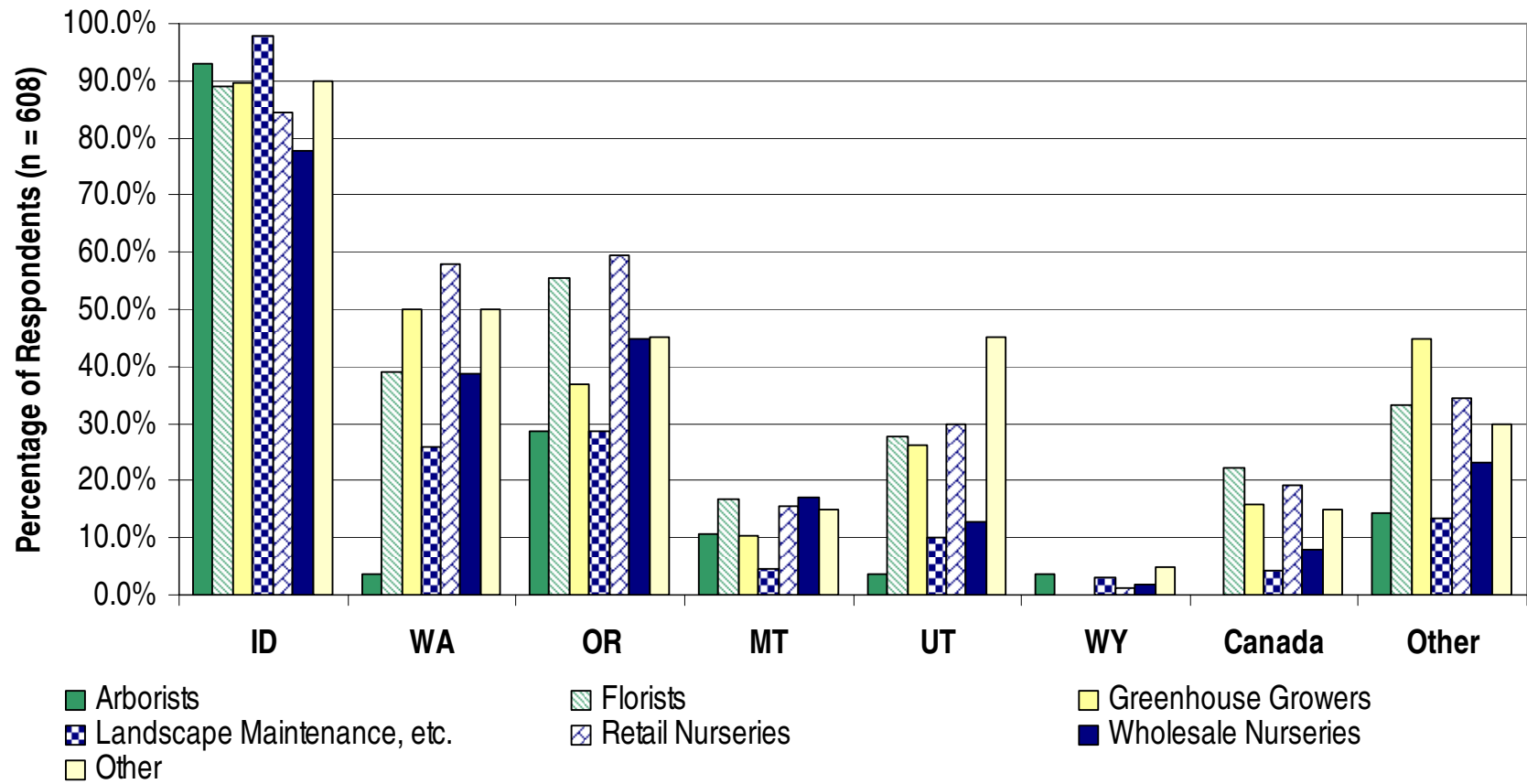


Figure 7. States in Which Products or Services are Purchased



A critical aspect to examining the economic importance of an industry to the state is to determine what percentage of goods and services are sold within state, and what percentage is sold out of state. On average across the entire Green Industry, businesses report that 89% of their total sales of products and services were sold within Idaho, and 71% of products and services purchased by Green Industry businesses were purchased from other businesses in Idaho. Thus, the Green Industry not only has a direct positive impact on the state economy due to sales taxes generated from their own products, but also a supplementary positive effect due to sales tax revenue generated by purchasing goods and supplies from other Idaho industries. When analyzed by industry sector, results are very similar. With the exception of wholesale nurseries, all sectors sell over 75% of their goods and services within Idaho. Similarly, most industry sectors purchase over 50% of goods and services used for their business within Idaho. The industry sector composed of landscape maintenance, landscape & irrigation contracting, pesticide applicators, and landscape architecture purchases over 86% of the goods and services needed for their business from other Idaho businesses (Table 4).

Table 4. Percent of Sales and Purchases from Idaho by Industry Sector

<i>Industry Sector</i>	<i>Percentage of Sales within Idaho</i>	<i>Percentage of Purchases from Idaho</i>
<i>Arborists</i>	92.4%	84.9%
<i>Florists</i>	89.8%	59.1%
<i>Greenhouse Growers</i>	89.2%	37.4%
<i>Landscape Maintenance, Contractors, etc.</i>	96.5%	86.5%
<i>Retail Nurseries, etc.</i>	96.4%	37.5%
<i>Wholesale Nurseries, etc.</i>	67.4%	63.8%
<i>Other Businesses</i>	79.1%	63.8%

The average number of people employed at each business during peak season during 2004 was 9.8, with a median of 4.0, indicating that most Green Industry businesses employ a few individuals, but some employ many more. Seasonal employees are the most numerous, with an average of 6.0 per business across the whole industry. The average number of year-round full-time employees per business is 2.8, and the average number of year-round part time employees per business is 1.4 across the whole industry.

The number and type of individuals employed by each sector of the industry varies widely. The ‘other businesses’ category has the largest average number of year-round full-time employees and seasonal employees, but it should be noted that this average is based on a small number of respondents (n = 20). The ‘other businesses’ category in 2004 has a fewer number of respondents than it did in 1999, in part because the survey had been redesigned in order to give a detailed description about each industry sector in order to assist respondents in correctly categorizing their business based on products or services offered, rather than just listing the sector names as the 1999 survey did. In 2004 (this study) the ‘other’ category is made up in large part by golf courses, which may employ a large number of employees, not all of which are directly involved in Green Industry related occupations (e.g. teaching golf lessons). Wholesale nurseries employ an average of 3.4 year-round full-time employees and an average of 6.7 seasonal employees, making it the second largest industry sector employer on a per-business basis (Table 5).

Table 5. Full-time, Part-time, and Seasonal Employees by Industry Sector

<i>Industry Sector</i>	<i>Average Year-Round Full-Time Employees per Business</i>	<i>Average Year-Round Part-Time Employees per Business</i>	<i>Average Seasonal Employees per Business</i>
<i>Arborists</i>	1.3	0.4	1.2
<i>Florists</i>	2.1	2.2	1.0
<i>Greenhouse Growers</i>	1.4	0.5	5.4
<i>Landscape Maintenance, etc.</i>	2.8	1.3	6.1
<i>Retail Nurseries, etc.</i>	3.3	2.3	5.6
<i>Wholesale Nurseries, etc.</i>	3.4	1.3	6.7
<i>Other Businesses</i>	4.2	1.2	17.0

The survey also asked businesses to group their employees by type (e.g. laborers/ sales staff, supervisors/ crew leaders, management, and other). Across the entire Green Industry, businesses employ an average of 7.3 laborers and sales staff, 1.2 supervisors and crew leaders, 1.1 managers, and 0.3 individuals in other positions. Within sectors, wholesale nurseries & suppliers employ an average of 8.4 laborers and sales staff; retail nurseries and landscape maintenance & contractors employ an average of 7.5 and 7.1 laborers and sales staff per business, respectively. Most industry sectors employ an average of 1 or more supervisors or crew leaders per business, with the exception of florists and greenhouse growers (Table 6).

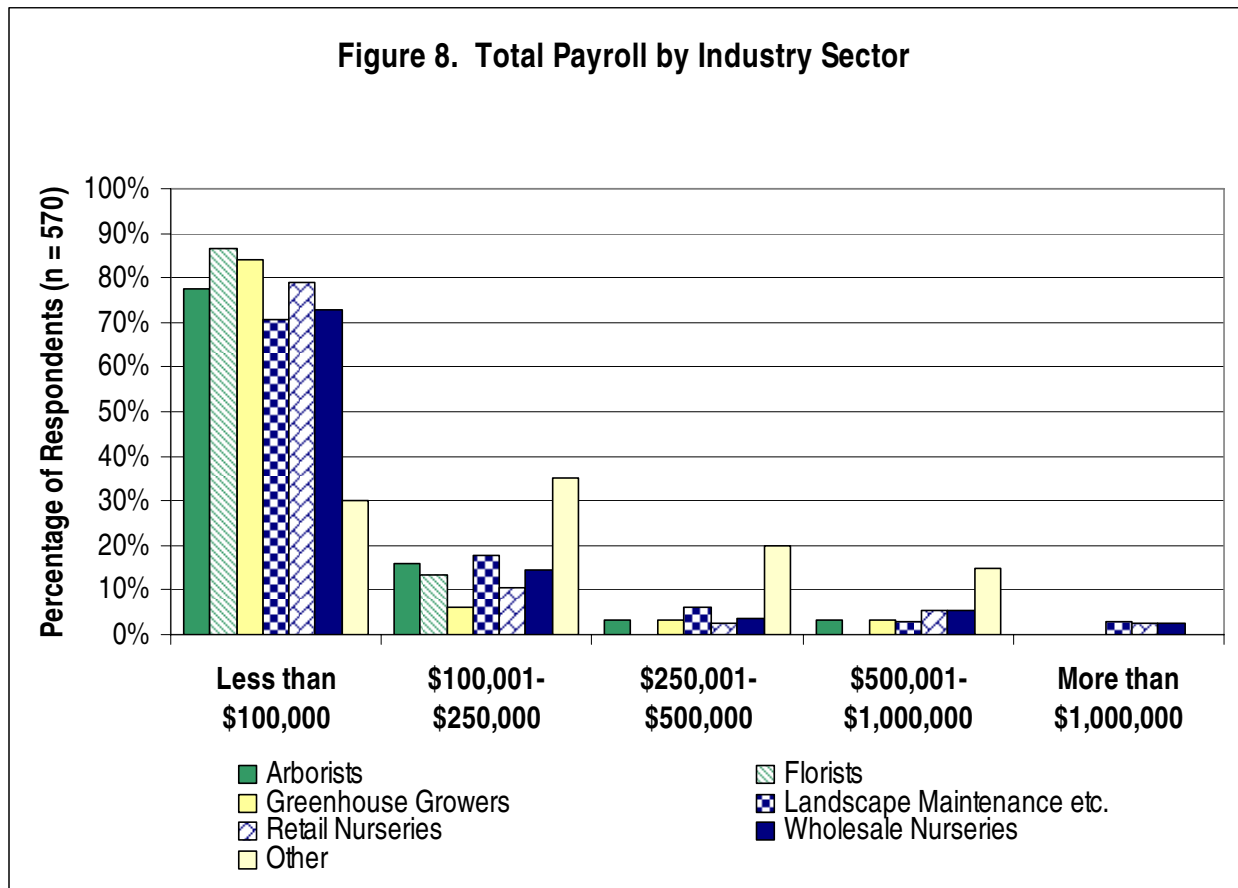
Table 6. Employee Type by Industry Sector

<i>Industry Sector</i>	<i>Average Laborers & Sales Staff per Business</i>	<i>Average Supervisors & Crew Leaders per Business</i>	<i>Average Managers per Business</i>	<i>Average Other Employees per Business</i>
<i>Arborists</i>	1.9	1.2	0.6	0.3
<i>Florists</i>	3.9	0.1	0.9	0.1
<i>Greenhouse Growers</i>	5.9	0.7	0.6	0.2
<i>Landscape Maintenance, etc.</i>	7.1	1.3	1.1	0.3
<i>Retail Nurseries, etc.</i>	7.5	1.1	1.2	0.3
<i>Wholesale Nurseries, etc.</i>	8.4	1.1	1.1	0.5
<i>Other Businesses</i>	18.7	1.8	2.1	0.1

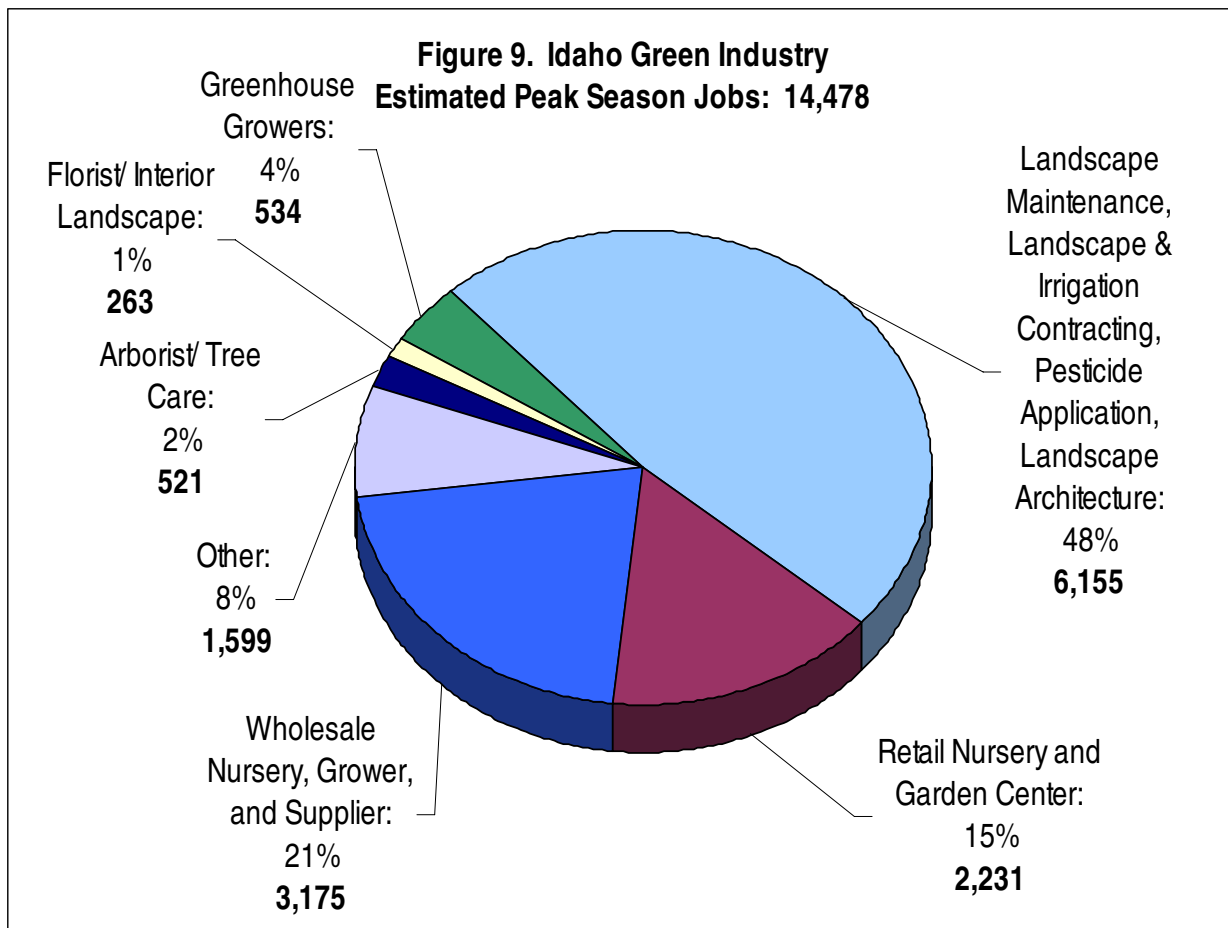
The total payroll is another indicator of the economic contribution of an industry. Most businesses (73%) in Idaho's Green Industry report a total payroll of less than \$100,000, however a sizeable number (16%) report a total payroll of between \$100,001 and \$250,000. These numbers reflect the fact that many of the employees hired by Green Industry businesses are seasonal employees, and businesses typically have fewer year-round employees. It is important to note that all Green Industry employees also contribute to Idaho's state economy, in the form of income taxes and because their income allows them to buy additional goods and services (such as homes, cars, food, and clothes), which in turn generate sales tax revenue and support other industries in Idaho. Industry sectors are also very similar in their total payrolls (Figure 8). Businesses in the 'other' category (including golf courses and chain stores) tend to be a bit larger, but again these numbers are based on relatively few observations.

Table 7. Total Payroll of Green Industry in 2004

<i>Total Payroll</i>	<i>Percentage of Businesses</i>
<i>Less than \$100,000</i>	72.5%
<i>\$100,001 to \$250,000</i>	16.0%
<i>\$250,001 to \$500,000</i>	5.1%
<i>\$500,001 to \$1,000,000</i>	4.0%
<i>More than \$1,000,000</i>	2.3%



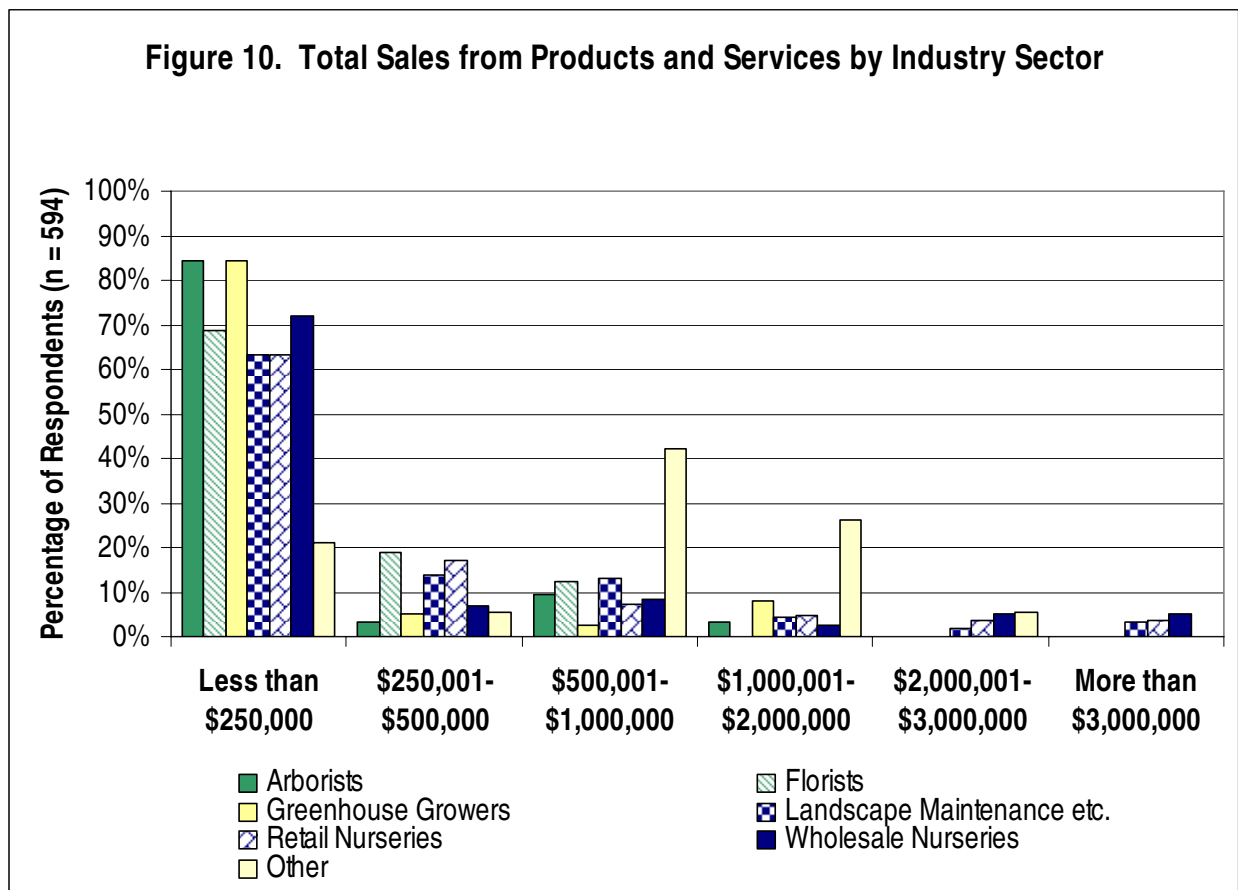
The estimate for the total number of jobs generated by Idaho's Green Industry during the peak season of 2004 was 14,478. In 1999, the number of jobs generated by the Green Industry was 12,911. Thus, the industry has experienced approximately 12% growth in peak season jobs over the past five years. Nearly half of these jobs are in the sector which includes landscape maintenance, landscape & irrigation contracting, pesticide applicators, and landscape architecture. In 1999, this sector of the industry contributed an estimated 1,992 jobs; this number grew to an estimated 6,155 in 2004, indicating that this particular sector has seen substantial growth during the intervening five year period. Wholesale nurseries have also experienced job growth: in 1999, this sector supplied an estimated 2,171 jobs, but in 2004 it supplied an estimated 3,175 jobs. Other sectors, such as retail nurseries and garden centers, have remained stable. In 1999, retail nurseries supplied 2,051 jobs, compared with 2,231 jobs in 2004. Some sectors are estimated to have experienced some job loss, including florists and interior landscape, which in 2004 contributed 263 jobs to the state, compared with 522 in 1999 (Figure 9). As a whole, these results indicate that the Green Industry of Idaho has grown and created new jobs in the last five years, but the industry has also experienced some changes in the nature and location of those jobs.



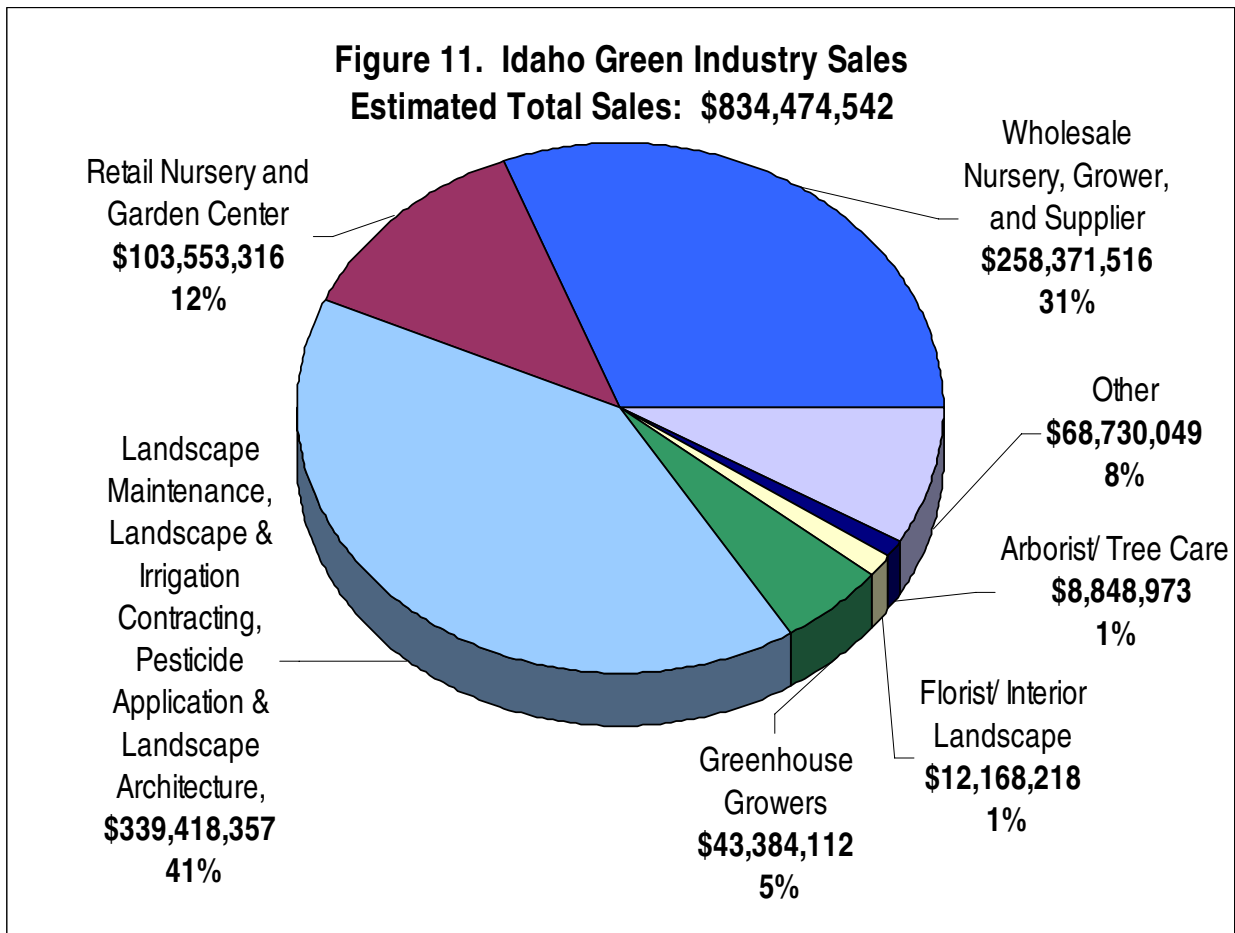
The total amount of money generated by the sale of products and services is perhaps one of the best indicators of the size of the industry. When asked to categorize their total sales in 2004, nearly a quarter (23%) of reporting Green Industry businesses list total sales between \$250,001 and \$1,000,000, representing a substantial contribution to the economy. Over 10% report sales of more than \$1,000,000. The remainder of the businesses (66%) report total sales of less than \$250,000, but given the sheer number of Green Industry businesses in the state, their combined contribution is vitally important (Table 8). Again, industry segments are quite similar in their total sales and services (Figure 10).

Table 8. Total Green Industry Sales of Products and Services

<i>Total Sales</i>	<i>Percentage of Businesses</i>
<i>Less than \$250,000</i>	66.3%
<i>\$250,001 to \$500,000</i>	11.6%
<i>\$500,001 to \$1,000,000</i>	11.5%
<i>\$1,000,001 to \$2,000,000</i>	4.9%
<i>\$2,000,001 to \$3,000,000</i>	2.5%
<i>More than \$3,000,000</i>	3.0%



In 2004, the estimated total sales generated by Idaho's Green Industry were \$834,474,542. In 1999, the total sales were estimated to be \$662,214,478. Thus, sales industry-wide have increased by about 26%. Among industry sectors, wholesale nurseries and growers have seen the largest growth in sales. In 1999, total sales from this sector were \$58,087,524, but this sector's estimated sales in 2004 are \$258,371,516. The sector containing landscape maintenance, landscape & irrigation contracting, pesticide applicators, and landscape architecture has also seen substantial growth, with sales increasing from \$206,595,845 in 1999 to \$339,418,357 in 2004. Retail nurseries and garden centers have increased sales from a 1999 estimate of \$75,139,674 to a 2004 estimate of \$101,553,316. Despite a decrease in the number of jobs, greenhouse growers experienced increased sales: from \$23,059,021 in 1999 to \$43,384,112 in 2004. Sales from florists remained relatively stable, with a 2004 estimate of \$12,168,218, compared to the 1999 estimate of \$15,919,259. Arborists have seen a decrease in sales, with a 2004 estimated total sales of \$8,848,973 as compared to \$21,687,023 in 1999.



Advertising Methods

In order to determine how businesses in the Green Industry of Idaho advertise their services, data were collected on the proportion of businesses which used different advertising methods. Local newspapers and telephones are the most common methods of advertising. The fact that local newspapers are a preferred advertising method reflects the high percentage of sales and services for Green Industry businesses which are generated within Idaho. Mail orders, billboards, the internet, and television are less commonly used forms of advertising. Nearly 39% of businesses report other forms of advertising (Table 9). Of those other forms listed, word-of-mouth, signs, and farmer's markets are the most commonly used forms of advertising. Additional methods can be found in Appendix F.

Table 9 . Advertising methods

<i>Method</i>	<i>Percent of Participating Businesses</i>
<i>Trade magazines</i>	8.4%
<i>Local newspapers</i>	35.9%
<i>Websites</i>	19.7%
<i>E-mail</i>	12.3%
<i>Telephone</i>	37.3%
<i>Catalog</i>	7.7%
<i>Mail order</i>	1.9%
<i>Internet</i>	6.7%
<i>Television</i>	7.9%
<i>Radio</i>	13.2%
<i>Billboards</i>	4.6%
<i>Direct mail</i>	17.9%
<i>Trade shows</i>	16.7%
<i>Other</i>	39.0%

Summary

This study provides critical data demonstrating the importance of Idaho's Green Industry on the state's economy as well as basic information about the nature and scope of the industry. In addition, this study also highlights the relative importance of different sectors of the Green Industry, and the individual contribution of each sector. Several key findings from this study are:

- Over 75% of the reporting Green Industry businesses have been in business for five or more years, indicating the Green Industry is a stable component of the Idaho economy;
- While 33% of reporting businesses are located in areas with a population of over 100,000, nearly 45% of the businesses are located in areas with populations of 20,000 or fewer residents, indicating the Green Industry contributes substantially to both Idaho's urban and rural economies;
- Landscape maintenance, landscape & irrigation contracting, pesticide applicators and/ or landscape architects make up nearly half of the reporting Green Industry businesses; wholesale nurseries make up an additional 20% of reporting businesses;
- In 2004, the Green Industry contributed 14,478 total peak season jobs to the Idaho state economy, representing 12% growth from 1999;
- Total Green Industry sales from products and services in 2004 was \$834,474,542, which is an increase from 2000 sales;
- Over 80% of reporting businesses hold a nursery or floral license;
- Across the entire industry, businesses report that 89% of their products and services are sold within Idaho; 71% of goods and services purchased by Green Industry businesses are obtained from other Idaho businesses, thus contributing directly to the Idaho state economy;
- Local advertising is the most common form of advertising for the Green Industry, which reiterates the importance of the sale of products and services to Idaho residents.

Thus, this study was not only able to accomplish its goal of assessing the contribution of Idaho's Green Industry to the Idaho State economy, but also is also useful in examining the individual contribution of different industry sections. In conclusion, the Green Industry continues to grow and expand, and plays a vital role in the State of Idaho.

Appendix A

Final Survey Instrument

The purpose of this survey is to learn about Idaho's Green Industry and how it contributes to the economy and environment of the state. The information you provide is confidential and will only be used to determine the net contribution made by Idaho's green industry.

Q1. How many years have you owned or operated a business that is part of Idaho's Green Industry? (Please check ONE answer).

- a. 0-2 years
- b. 3-5 years
- c. 5-7 years
- d. MORE than 8 years
- e. DO NOT own or operate a Green Industry business

Q2. Which of the following categories BEST describes your business? (Please check ONE answer).

- a. Family owned business
- b. Private owned business
- c. Partnership
- d. Corporation

Q3. How many locations does your business have?

_____Number of locations

- Q4. Which of the following categories BEST describes your Green Industry business? (check **ONE** category for your business).
- a. **Landscape Maintenance/ Lawn Care** (examples include: lawn mowing, trimming/edging, flower and shrub bed maintenance, fertilizing, snow removal, vegetation management, power raking).
 - b. **Landscape Contractor** (grading, bed construction, installation of plant material, hardscapes, decks/fences, designing (but not LA), renovation/rebuild, pond installation, hydro-seeding).
 - c. **Irrigation Contractor** (designing (but not LA), sprinkler installation, repairing).
 - d. **General Pesticide Applicator** (residential and commercial yard spraying, dormant spraying, weed spraying, insect and disease control, bird control, rodent control, commodity and space fumigation, termite control).
 - e. **Landscape Architect, Arborist/ Tree Care Provider** (pruning, trimming, hazard fuel treatment, hazard tree and other removal, transplanting/ moving of trees, appraisals).
 - f. **Retail Nursery/ Garden Center**
 - g. **Florist/ Interior Landscape**
 - h. **Greenhouse Grower** (anyone growing produce, nursery/floral stock inside a greenhouse).
 - i. **Wholesale Nursery/ Grower** (anyone growing or re-wholesaling (broker) all nursery stock/plant material grown in containers or in the field).
 - j. **Sod Grower**
 - k. **Wholesale Supplier** (hardgoods, equipment, seed, greenhouses/ structures, soil amendments/bark/mulch, etc.).
 - l. **Golf Course Management**
 - m. **Chain Stores**
 - n. **Other** please list: _____

Q5. Did you have any of the following State of Idaho Licenses in 2004? (Please check ALL that apply).

- a. Nursery and floral license
- b. Pesticide applicator license
- c. Irrigation contractors license
- d. Plumbers license
- e. Commercial Drivers license

Q6. Categorize your business based on the largest grossing (= 1) category down to the smallest grossing (= 14) category if more than one category was chosen in Question 5)

- a. Landscape Maintenance/Lawn Care
- b. Landscape Contractor
- c. Irrigation Contractor
- d. General Pesticide Applicator
- e. Landscape Architect, Arborist/Tree Care Provider
- f. Retail Nursery/Garden Center
- g. Florist/Interior Landscape
- h. Greenhouse Grower
- i. Wholesale Nursery/Grower
- j. Sod Grower
- k. Wholesale Supplier
- l. Golf Course Management
- m. Chain Stores
- n. Other

Please answer the following questions based on the Largest Grossing category of your Green Industry Business.

Q7. What percentage of your **total sales** came from products and services in each of the following categories in 2004? Please write the percentage of your operation for each valid category so that it totals 100%.

a.	Landscape Maintenance/Lawn Care	_____	%
b.	Landscape Contractor	_____	%
c.	Irrigation Contractor	_____	%
d.	General Pesticide Applicator	_____	%
e.	Landscape Architect, Arborist/Tree Care Provider	_____	%
f.	Retail Nursery/Garden Center	_____	%
g.	Florist/Interior Landscape	_____	%
h.	Greenhouse Grower	_____	%
i.	Wholesale Nursery/Grower	_____	%
j.	Sod Grower	_____	%
k.	Wholesale Supplier	_____	%
l.	Golf Course Management	_____	%
m.	Chain Stores	_____	%
n.	Other _____	_____	%
TOTAL		100%	

Q8. What percentage of your **total sales** came from the sales of Products in 2004?

_____ Percentage (%) from of total of sales from **Products** in 2004

Q9. What percentage of your **total sales** came from the sale of Services in 2004?

_____ Percentage (%) from **Services** in 2004

Q10. What did you pay in Idaho sales tax in 2004? *(This information is confidential and will only be used to determine the net contribution made by Idaho's Green Industry to the state's economy).*

_____ Idaho sales tax dollars paid in 2004

Q11. In which of the following states / countries did you SELL Products or Services in 2004? (Please check ALL that apply).

- a. Idaho
- b. Washington
- c. Oregon
- d. Montana
- e. Utah
- f. Wyoming
- g. Canada
- h. Other state / countries: Please list: _____

Q12. What percentage of your total sales of Products or Services went to out-of-state customers during 2004? (Please base the percentage on actual dollars earned from sales of Products or Services).

_____ Percentage of sales out-of-state in 2004

Q13. In which of the following states / countries did you BUY Products or Services in 2004? (Check ALL that apply)

- a. Idaho
- b. Washington
- c. Oregon
- d. Montana
- e. Utah
- f. Wyoming
- g. Canada
- h. Other state / countries Please list: _____

Q14. What percentage of the Products or Services you purchased for your business in 2004 were from out-of-state or out-of-country suppliers? (Base the percentage on actual dollars spent for products or services).

_____ Percentage of purchase from out-of-state in 2004

Q15. Which of the following categories best describes your total sales of Products and Services in 2004? Please check ONE.

- a. Less than \$250,000
- b. \$250,001-500,000
- c. \$500,001-1,000,000
- d. \$1,000,001-2,000,000
- e. \$2,000,001-3,000,000
- f. Above \$3,000,000

Q16. What was the total number of people employed during your business's peak season in 2004? (Include yourself, family members, and all full-time, part-time, and seasonal workers).

Total number employees in 2004

Q17. How many of your employees are in each of the following categories?

- a. Year round full-time
- b. Year round part-time
- c. Number of Seasonal employees

Q18. Give the number of people you employee in each of the following categories in 2004.

- a. Laborer/Sales staff
- b. Supervisors/Crew leaders
- c. Management
- d. Other (Please list titles) _____

Q19. Which category best represents what your total payroll, including costs of benefits, for your employees was 2004? (Include yourself, family members, and all full-time, part-time, and seasonal workers).

- a. Less than \$100,000
- b. \$100,001 to \$250,000
- c. \$250,001 to \$500,000
- d. \$500,001 to \$1,000,000
- e. More than \$1,000,000

Q20. What is the estimated taxes paid by your green industry business or operation In 2004

- a. Payroll
- b. Income
- c. Sales
- d. Property and personal property

Q21. What advertising methods do you use in your operation?
(Check all that apply)

- a. Trade magazines
- b. Local newspaper(s)
- c. Website
- d. Email
- e. Telephone
- f. Catalog
- g. Mail order
- h. Internet
- i. Television
- j. Radio
- k. Billboards
- l. Direct Mail
- m. Trade Shows
- n. Other (please LIST): _____

Q22. What county is your operation in? _____

Q23. Which of the following population categories best represents where your operation is:

- a. ___ Less than 10,000
- b. ___ 10,001 to 20,000
- c. ___ 20,001 to 30,000
- d. ___ 30,001 to 50,000
- e. ___ 50,001 to 70,000
- f. ___ 70,001 to 100,000
- g. ___ More than 100,000

Thank you for taking the time to answer this questionnaire.

Please return the questionnaire in the self-addressed and stamped envelop provided.

Thank you for participating in this survey. Is there anything else you would like to add?

Appendix B

Preliminary Postcard

The Green Industry of Idaho

October 2005

In about two weeks a questionnaire will be mailed to you concerning Idaho's Green Industry. The purpose of this study is to gather information to determine the economic impact *The Green Industry* has on Idaho's economy. A similar study was conducted five years ago and provided valuable information about this growing industry.

The University of Idaho's Social Science Research Unit (SSRU) is conducting the study. If you have any questions concerning this study or are no longer a part of The Green Industry please call the SSRU's toll-free telephone number at 1-877-542-3019 and talk to one of the staff members.

Sincerely,

Rodger Erstad
2005 INLA President

Appendix C

First Letter

October 25, 2005

John Sample
100 Main Street
Springfield, Idaho 83000

Dear John Sample,

The Green Industry is an important part of Idaho's economy. In 1999 an independent study conducted by the University of Idaho's *Social Science Research Unit* (SSRU) revealed that Idaho's Green Industry plays a vital role in the state's economy. The survey determined that this industry had total sales of more than \$662 million dollars. The Industry supported 13,000 jobs with a payroll totaling over \$188 million.

Your completing the survey enclosed will provide information to help define the industry's production, sales and service for 2004. Information collected will be strictly confidential. The questionnaire has an identification number for mailing purposes only. This number is only used to verify that you completed the survey. Your name or other identifying information will never be linked to the information you provide.

Why should you participate? Industry information is one of the best tools for influencing news media and legislation, leveraging grants, garnering research projects and attracting students and employees. The *Idaho Nursery and Landscape Association* (INLA) is steadily letting legislators, regulators, university administrators, grant agencies, lending institutions, and potential collaborators know that this industry is comprised of hundreds of businesses employing thousands of people, paying millions in salaries, benefits, and taxes.

Please completed this survey from the SSRU and return it in the stamped self-addressed envelope enclosed. You are an important part of this industry and your cooperation is needed. If you have any questions or are no longer a member of the Green Industry please call the SSRU's toll-free telephone number (877) 542-3019 and talk to one of the staff.

Sincerely,

Rodger Erstad
2005 INLA President

Appendix D

Reminder Postcard

The Green Industry of Idaho

November 2005

Last week a questionnaire seeking information for The Green Industry was mailed to you.

If you have already completed and returned the questionnaire to us, please accept our sincere thanks. If not, please do so today. It is extremely important that your information be included in the study representing your contribution to the horticulture industry in Idaho.

If you have any questions, are no longer a part of the Green Industry, did not receive a questionnaire or it was misplaced, please call toll-free at 887-854-9386 and we will get another one in the mail to you today.

Sincerely,

Rodger Erstad
2005 INLA President

Appendix E

Second Letter

November 17, 2005

John Sample
100 Main Street
Springfield, Idaho 83000

Dear John Sample,

About three weeks ago you received a questionnaire seeking your contributions to the economic impact of the horticulture industry in Idaho. As of today your questionnaire has not been received by University of Idaho's *Social Science Research Unit* (SSRU).

I am writing to you again because it is very important that each questionnaire is completed and returned, in order to assess the true economic importance of Idaho's Green Industry on the Idaho State economy. Even if your business is small or part of a larger enterprise, we still need to hear from you.

By completing the survey enclosed, you will provide information to help define Idaho's green industry's production, sales, and service for 2004. Information collected will be strictly confidential. The questionnaire has an identification number for mailing purposes only. This number is only used to verify that you completed the survey. Your name or other identifying information will **never** be linked to the information you provide.

The study is being conducted by the University of Idaho's Social Science Research Unit (SSRU). If your questionnaire has been misplaced, a replacement is enclosed. If you have questions about the survey, please call the SSRU at their toll-free number (1-877-542-3019) and staff will assist you. Your cooperation is greatly appreciated.

Sincerely,

Rodger Erstad
2005 INLA President

PS. If your business is not part of the horticulture industry, please return the questionnaire with that notation or call the Social Science Research Unit, toll-free at 1-877-542-3019.

Appendix F

Raw Frequencies for Qualitative Questions

Question	Responses	Frequency	Percent	Other Responses
Q1: Number of Years in Business	0-2 years	39	6.3%	
	3-5 years	110	17.7%	
	5-7 years	81	13.0%	
	MORE than 8 years	377	60.5%	
	DO NOT own or operate business	1	0.2%	
	Missing	15	2.4%	
Q2: Type of Business	Family owned business	238	38.2%	
	Private owned business	177	28.4%	
	Partnership	27	4.3%	
	Cooperative	170	27.3%	
	Missing	11	1.8%	
Q4: Nature of Business	Arborist	34	5.5%	Association management (1) Farmer's market (3)
	Chain stores	2	0.3%	
	Florist/ Interior landscape	19	3.1%	
	Golf course management	8	1.3%	
	Greenhouse grower	38	6.1%	
	Irrigation contractor	41	6.6%	
	Landscape architect	8	1.3%	
	Landscape contractor	136	21.8%	
	Landscape maintenance/ Lawn care	97	15.6%	
	Pesticide applicator	20	3.2%	
	Retail nursery/ Garden center	84	13.5%	
	Sod grower	8	1.3%	
	Wholesale nursery/ Grower	108	17.3%	
	Wholesale supplier	16	2.6%	
	Other	4	1.0%	
Missing	0	0.0%		
Q5: Licenses Held	Nursery and floral license	454	72.9%	
	Pesticide applicator's license	159	25.5%	
	Irrigation contractor's license	72	11.6%	
	Plumber's license	13	2.1%	
	Commercial driver's license	122	19.6%	
	Missing	77	12.4%	

Question	Responses	Frequency	Percent	Other Responses
Q11: States in Which Products or Services Were SOLD	Idaho	593	95.2%	Alaska (2)
	Washington	71	11.4%	Arizona (2)
	Oregon	62	10.0%	California (10)
	Montana	59	9.5%	Colorado (27)
	Utah	71	11.4%	Connecticut (1)
	Wyoming	65	10.4%	Florida (3)
	Canada	12	1.9%	Georgia (1)
	Other	52	8.3%	Hawaii (1)
	Missing	15	2.4%	Illinois (2)
				Indiana (1)
			Michigan (1)	
			Minnesota (1)	
			Missouri (2)	
			Nebraska (3)	
			Nevada (19)	
			New Mexico (3)	
			New York (4)	
			North Dakota (1)	
			Ohio (1)	
			Rhode Island (1)	
			South Dakota (2)	
			Tennessee (1)	
			Texas (2)	
			Vermont (1)	
			Europe (1)	

Question	Responses	Frequency	Percent	Other Responses
Q13: States in Which Products or Services Were PURCHASED	Idaho	546	87.6%	Alabama (2)
	Washington	207	33.2%	Arizona (4)
	Oregon	228	36.6%	Arkansas (1)
	Montana	60	9.6%	California (54)
	Utah	95	15.2%	Colorado (12)
	Wyoming	14	2.3%	Connecticut (2)
	Canada	51	8.2%	Florida (8)
	Other	129	20.7%	Georgia (1)
	Missing	22	3.5%	Hawaii (1)
				Illinois (10)
				Iowa (2)
				Indiana (1)
				Kansas (2)
				Maine (2)
				Massachusetts (1)
				Michigan (6)
				Minnesota (12)
				Missouri (2)
				New Jersey (3)
				New York (7)
				Nebraska (3)
				Nevada (2)
				New Mexico (2)
				North Carolina (2)
				North Dakota (2)
				Ohio (4)
				Oklahoma (1)
				Pennsylvania (3)
				South Carolina (2)
				South Dakota (1)
				Tennessee (2)
				Texas (7)
				Wisconsin (4)
				China (1)
				Columbia (3)
				Ecuador (2)
				U.K. (1)
				Holland (2)
				Mexico (2)

Question	Responses	Frequency	Percent	Other Responses
Q15: Total Sales of Products and Services	Less than \$250,000	394	63.3%	
	\$250,001-\$500,000	69	11.1%	
	\$500,001-\$1,000,000	68	10.9%	
	\$1,000,001-\$2,000,000	29	4.7%	
	\$2,000,001-\$3,000,000	15	2.4%	
	Above \$3,000,000	18	2.9%	
	Missing	30	4.8%	
Q19: Estimated Total Payroll	Less than \$100,000	413	66.3%	
	\$100,001-\$250,000	91	14.6%	
	\$250,001-\$500,000	29	4.7%	
	\$500,001-\$1,000,000	23	3.7%	
	More than \$1,000,000	13	2.1%	
	Missing	54	8.2%	
Q21: Advertising Methods	Trade magazines	48	7.7%	Availability listings (1)
	Local newspapers	204	32.7%	Brochures (1)
	Website	112	18.0%	Business cards (5)
	E-mail	70	11.2%	Calendar (1)
	Telephone	212	34.1%	Company trucks (1)
	Catalog	44	7.1%	Doorknob hangers (3)
	Mail order	11	1.8%	Farmer's market (10)
	Internet	38	6.1%	Fliers (11)
	Television	45	7.2%	Idaho Dept. of Labor (1)
	Radio	75	12.1%	Networking (6)
	Billboards	26	4.2%	Newsletter (1)
	Direct mail	104	16.7%	Signs (11)
	Trade shows	95	15.2%	Volunteer work (1)
	Other	222	35.6%	Word of mouth (14)
	Missing	53	8.5%	Yellow pages (7)
Q23: Population Size	Less than 10,000	173	27.8%	
	10,001-20,000	78	12.5%	
	20,001-20,000	27	4.3%	
	30,001-20,000	53	8.5%	
	50,001-20,000	46	7.4%	
	70,001-20,000	40	6.3%	
	More than 100,000	205	32.9%	
	Missing	1	0.2%	

Appendix G

Raw Means for Quantitative Questions

Question	N	Mean	Median
Q3: Number of Locations	607	1.3	1.0
Q7: Percentage of Total Sales from Products & Services			
Landscape Maintenance/ Lawn Care	621	14.6%	0.0%
Landscape Contractor	621	18.0%	0.0%
Irrigation Contractor	621	8.6%	0.0%
General Pesticide Applicator	621	3.7%	0.0%
Landscape Architect, Arborist/ Tree Care	621	7.1%	0.0%
Retail Nursery/ Garden Center	621	13.0%	0.0%
Florist/ Interior Landscape	621	2.8%	0.0%
Greenhouse Grower	621	6.5%	0.0%
Wholesale Nursery/ Grower	621	16.4%	0.0%
Sod Grower	621	1.1%	0.0%
Wholesale Supplier	621	2.1%	0.0%
Golf Course Management	621	1.3%	0.0%
Chain Stores	621	0.3%	0.0%
Other	621	4.3%	0.0%
Q8: Percentage of Total Sales from Products in 2004			
	587	48.5%	40.0%
Q9: Percentage of Total Sales from Services in 2004			
	572	50.4%	50.0%

Question	N	Mean	Median
Q10: Idaho Sales Tax in 2004	360	\$11,892.45	\$606.60
Q12: Percentage of Total Sales to Out-of-State Customers	573	10.7%	0.0%
Q14: Percentage of Total Purchases from Out-of-State Suppliers	557	29.4%	10.0%
Q16: Total Number of Employees in Peak Season of 2004	600	9.8	4.0
Q18: Number of Employees in 2004			
Year-round full time	585	2.8	1.0
Year-round part time	585	1.4	0.0
Number of seasonal employees	585	6.0	2.0
Q19: Employee Categories			
Laborer/ Sales staff	577	7.3	3.0
Supervisors/ Crew leaders	577	1.2	0.0
Management	577	1.1	0.0
Other (please list)	577	0.3	0.0
Q20: Estimated Taxes in 2004			
Payroll	279	\$19,529.13	\$4,000.00
Income	265	\$12,194.32	\$1,178.00
Sales	279	\$13,081.65	\$666.89
Property and personal property	269	\$2,931.66	\$1,000.00