



DATA REPORT 23-004

*2022 Idaho Green Industry*  
**Survey of Commercial  
Stakeholders  
Technical Report**

Fall 2022

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# Project Profile

<b>Title:</b>	2022 Idaho Green Industry Survey of Commercial Stakeholders Technical Report
<b>Objectives:</b>	The Social and Economic Sciences Research Center at Washington State University assisted the Idaho Nursery and Landscape Association with administering a survey of Idaho green industry businesses in the fall of 2022. This survey was similar to one conducted by the University of Idaho in 2000 and again in 2005. The primary objective of the survey was to estimate the economic impact green industry businesses have within Idaho and to compare the results in 2022 to those in 2005.
<b>Methods:</b>	A survey of 78 questions was formatted as an online web survey and a paper mail-back survey. Letters were mailed to 1,797 green industry businesses in Idaho with instructions for completing the survey. Surveying of these businesses continued through January 2023.
<b>Results:</b>	For this study, 367 completed or partially completed the survey out of 1,721 eligible businesses resulting in an 22.1% response rate.
<b>Timeframe:</b>	Summer – Fall 2022
<b>Contract with:</b>	Ann Bates Executive Assistant / Education Coordinator Idaho Nursery and Landscape Association (INLA)
<b>Project Director:</b> <b>Project Manager:</b>	Rose Krebill-Prather Thom Allen
<b>SESRC Acronym:</b>	INLA22
<b>Data Report #:</b>	23-004

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# 1.

## The Survey

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### Introduction

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The Social and Economic Sciences Research Center at Washington State University assisted the Idaho Nursery and Landscape Association with administering a survey of Idaho green industry businesses in the fall of 2022. This survey was similar to one conducted by the University of Idaho in 2000 and again in 2005.

The primary objective of the survey was to estimate the economic impact green industry businesses have within Idaho and to compare the results in 2022 to those in 2005. This report provides a broad analysis of the survey results and an executive summary. A separate report (**SESRC Report #22-056**) provides details on how the data were collected.

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### Methods

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The population for this study included green industry businesses in the state of Idaho in 2022. Green industry businesses include horticulture industry comprised of wholesale nursery, growers and suppliers; retail nursery/garden centers including home stores with lawn/garden departments; landscape construction/maintenance and lawncare providers; greenhouse growers and sod growers; arborist, tree care, florist and interior landscape providers; pesticide applicators and irrigation contractors.

Project researchers compiled a list of all Idaho businesses likely to fall within the parameters of this green industry definition. The list was comprised of two sources: a list of 1,717 Idaho businesses with plant nursery licenses received from the Idaho State Department of Agriculture from a 2020 public information request, and a list of 87 members of the Idaho Nursery and Landscape Association. Duplicate cases were identified and removed. This list includes both specialty and general product and services organizations.

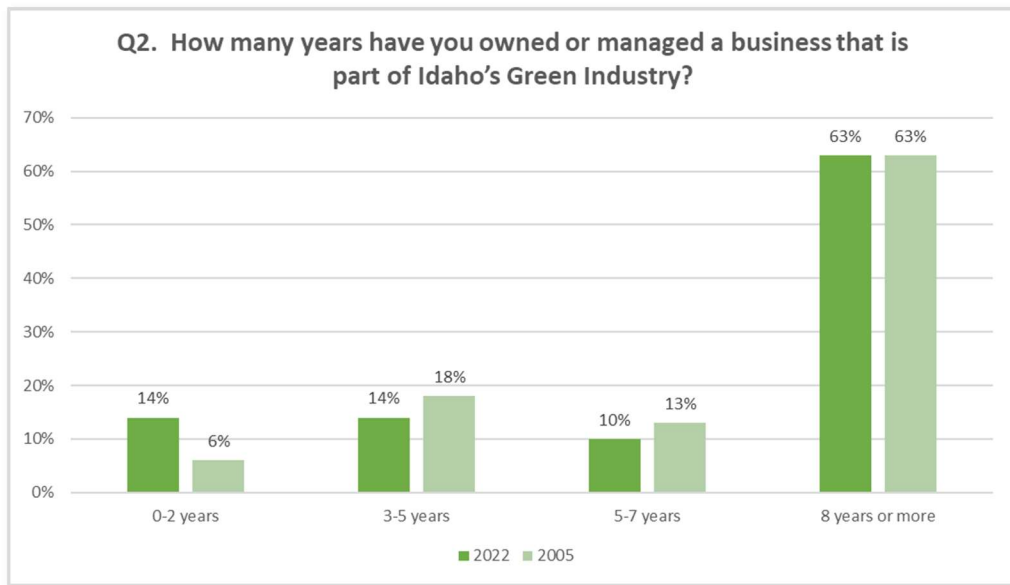
# 2.

## Results

### Demographic Profile

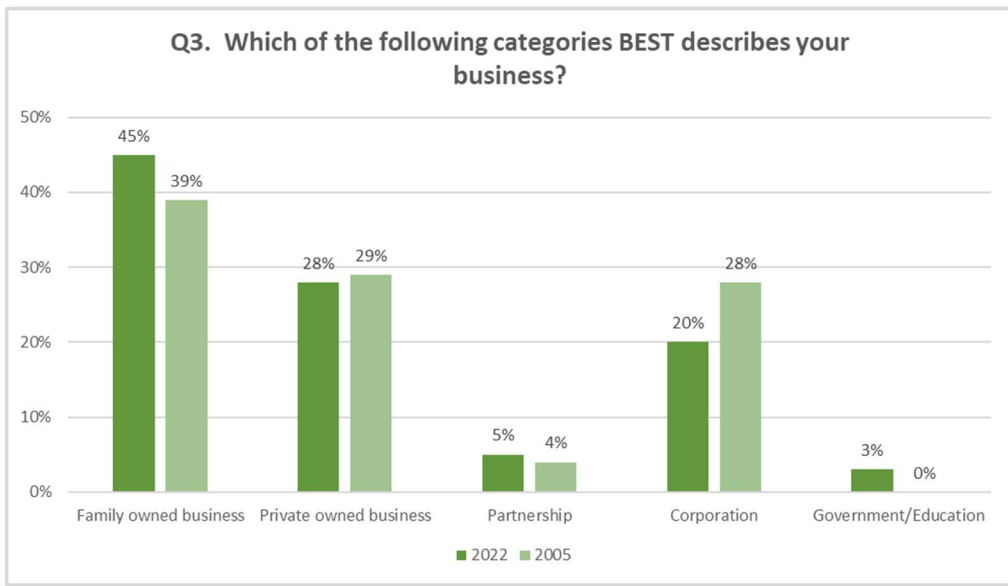
The survey asked owners and managers of Idaho Green Industry businesses a series of questions to develop a profile of the commercial enterprises making up this sector of the state’s economy. Results of the 2022 survey could also be compared with those from the previous survey conducted in 2005, allowing researchers to observe the levels of change in the industry over the past seventeen years.

Idaho’s Green Industry management personnel remain a fairly stable aspect of the industry. Nearly two-thirds of managers interviewed (62%) reported working as an industry manager for eight or more years, matching the statistic reported in the 2005 survey. In 2022, however, there was a sizeable increase in the number of new managers who had been in the position for no more than two years (15%) compared to 2005 (6%).



II. Results

Nearly half (45%) of survey respondents in 2022 were managers of family-owned Green Industry businesses, slightly more than those surveyed in 2005 (39%). More than one-quarter (28%) of the businesses surveyed in 2022 were of privately owned (non-family) businesses and very few (5%) were partnerships. These figures were comparable to those reported in 2005. There were, however, less corporations surveyed in 2022 (20%) as compared to 2005 when nearly a third of respondents (28%) were managers at Idaho Green Industry corporations.



II. Results

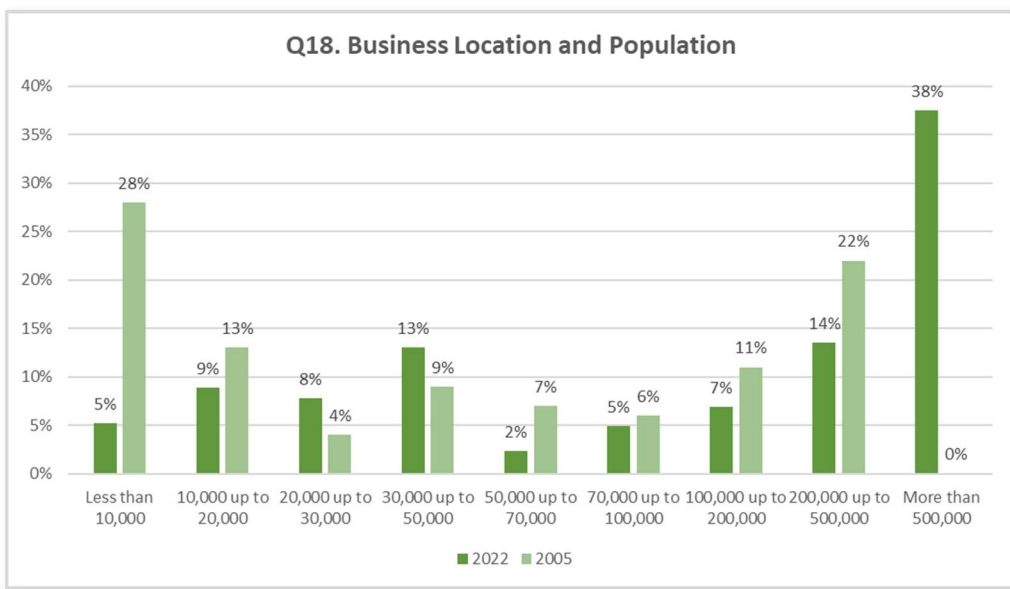
Nearly all businesses surveyed in 2022 had only a single location (86%) and one-tenth of the businesses reported having between 2 and 10 locations. Of note, four businesses reported having no locations, an indication that the business is run entirely online, and two businesses reported having 2,500 or more locations, indicating large national chain stores.





II. Results

The population of Idaho has grown significantly in the past seventeen years (35% increase), making a comparison of population size by the county of operation across the two surveys difficult. It is interesting to note, however, that in 2022, more than one-third (38%) of the businesses surveyed operated in areas with a population base of more than 500,000 people. In 2005, Idaho's most populated county did not even have a population of 500,000. In contrast, nearly a third of businesses surveyed in 2005 (28%) operated in areas with less than 10,000 people, but in 2022 only 5% of businesses surveyed operated in these less-populated areas of the state.



II. Results

The population of Idaho grew 38% from 2004 to 2021. While four counties lost between 0.9% to 20.6% of their population, each with populations of less than 8000 in 2021, the remaining 40 counties experienced growth ranging from 1.3% to 79.8%. However, in the four most populous Idaho counties, those with more than 100,000 population, the growth rates were 45% or higher: Ada, 57%; Canyon, 55%; Kootenai, 50%; and Bonneville, 45%. Population growth in these four counties alone represent the addition of 378,040 people in the state between 2004 and 2021. Coinciding with this population growth in the more urban counties is an increase in the proportion of green industry businesses that are in counties with 500,000 or more, 0% in 2004 to 38% in 2021. Higher rates of population growth in the more urban areas of Idaho suggest that the demand for green industry goods and services has also increased.

**Table A. Growth rate in Idaho Counties and Statewide: 2004 to 2021**

Code	County Size in 2021	Number of counties	Average growth rate
9	Less than 10,000	15	3.60%
8	10,000 up to 20,000	11	19.95%
7	20,000 up to 30,000	6	19.48%
6	30,000 up to 50,000	5	24.18%
5	50,000 up to 70,000	1	79.83%
4	70,000 up to 100,000	2	26.17%
3	100,000 up to 200,000	2	47.43%
2	200,000 up to 500,000	1	55.13%
1	More than 500,000	1	56.97%
	<b>STATEWIDE</b>	<b>44</b>	<b>37.99%</b>

While the population of the state has certainly seen tremendous growth over the past seventeen years, it is interesting to note that the more populous counties have grown at a faster rate than the less populous ones. We also see that green industry businesses have also migrated from the less populated counties to the more populated ones during this time.



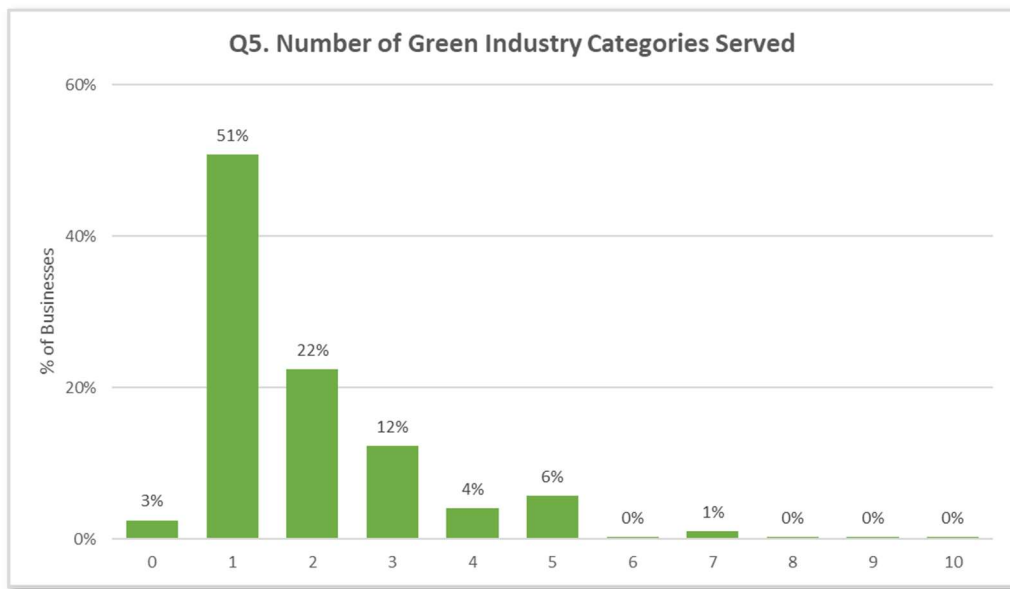
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## Industry Sectors

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Idaho's Green Industry includes commercial operations offering many types of horticultural products and services. By Green Industry we mean the horticulture industry comprised of wholesale nursery, growers and suppliers; retail nursery/garden centers including home stores with lawn/garden departments; landscape construction/maintenance and lawncare providers; greenhouse growers and sod growers; arborist, tree care, florist and interior landscape providers; pesticide applicators and irrigation contractors.

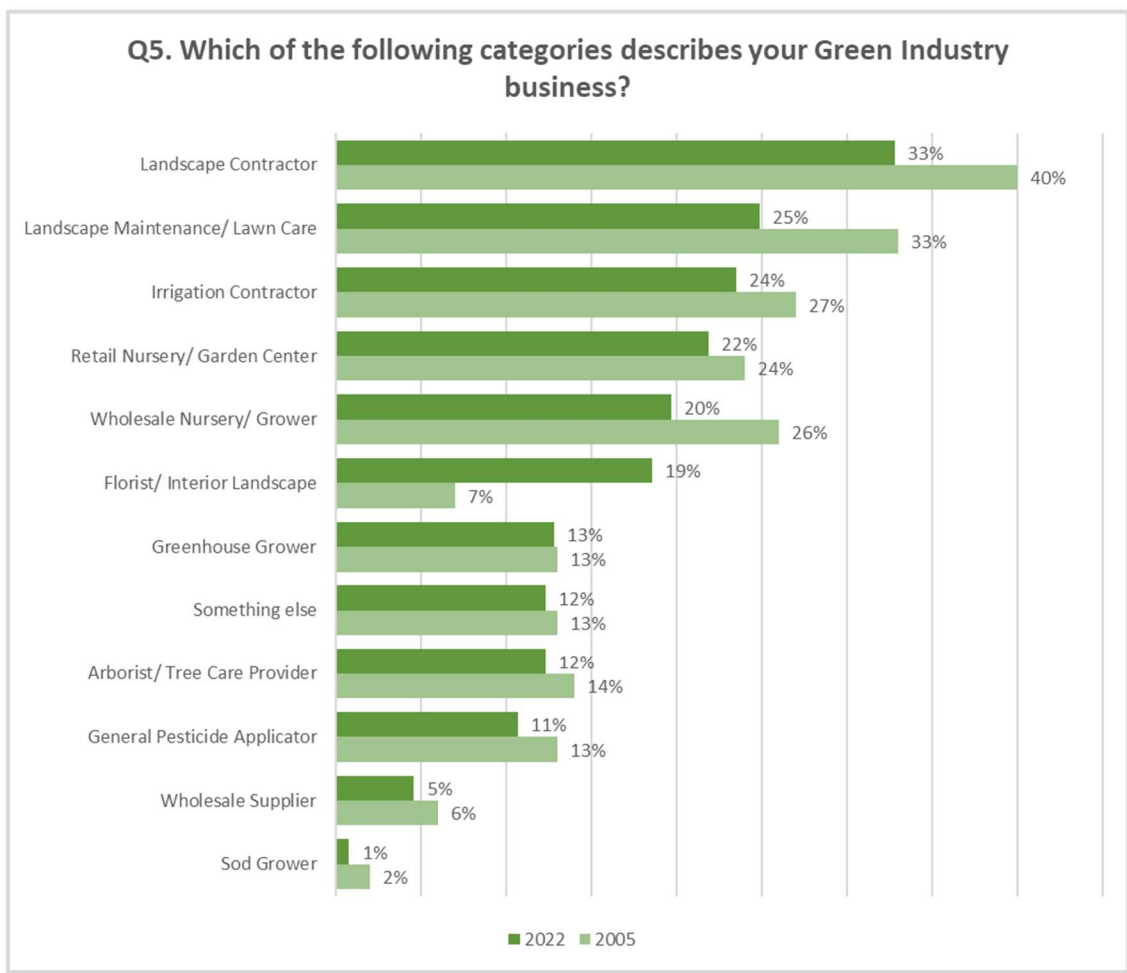
The 2022 survey allowed respondents to indicate which Green Industry sectors describe their business. Half (51%) of the businesses surveyed selected only one sector, while the other half (46%) indicated more than one sector applied to their business.



II. Results

The types of Green Industry businesses represented by survey respondents were strikingly similar between 2005 and 2022. One third (33%) of survey respondents in 2022 were landscape contractors and slightly more (40%) were of this type in 2005. By contrast, sod growers had the fewest respondents in the survey with only 1% in 2022 and 2% in 2005.

One notable difference was the number of florists and interior landscapers in the survey with 19% of respondents in 2022 reporting engaged in this activity while on 7% did so in 2005.

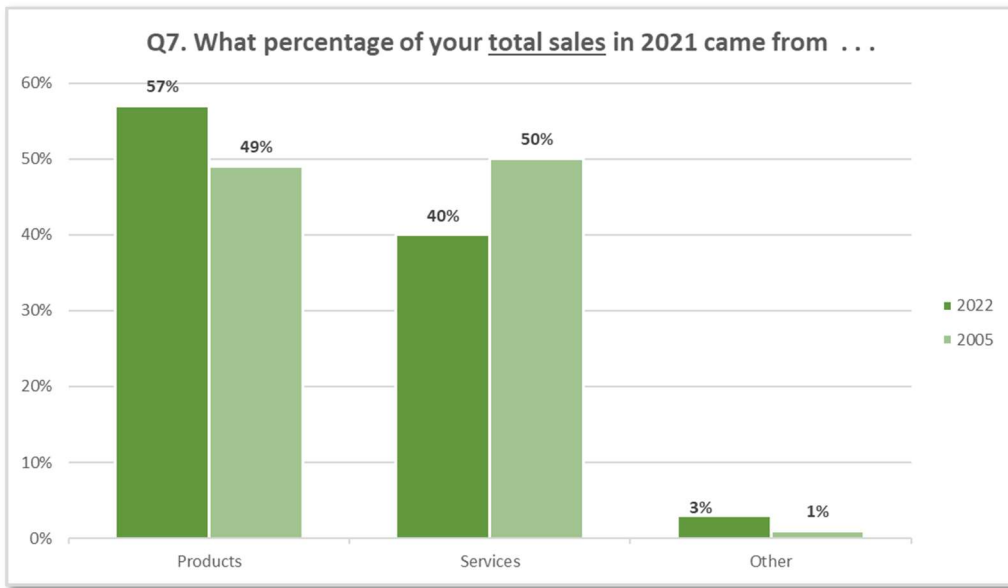


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## Economic Profile

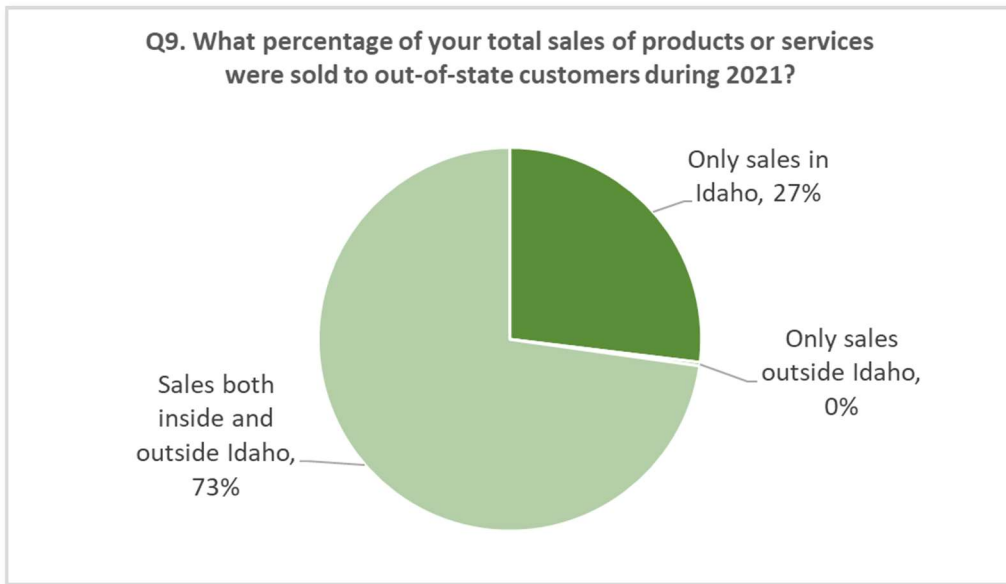
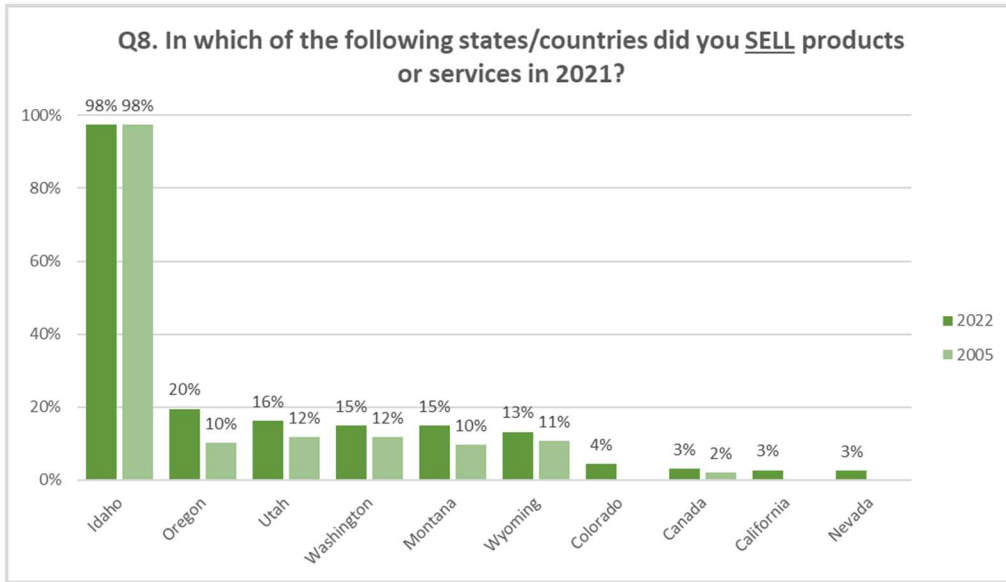
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In 2022 survey respondents reported more than half of total sales (57%) came from the sale of products while less than half (40%) were derived from services. This was notably different from the 2005 survey which showed sales were roughly split between both products and sales. A small percentage in both surveys reported no sales for the year.



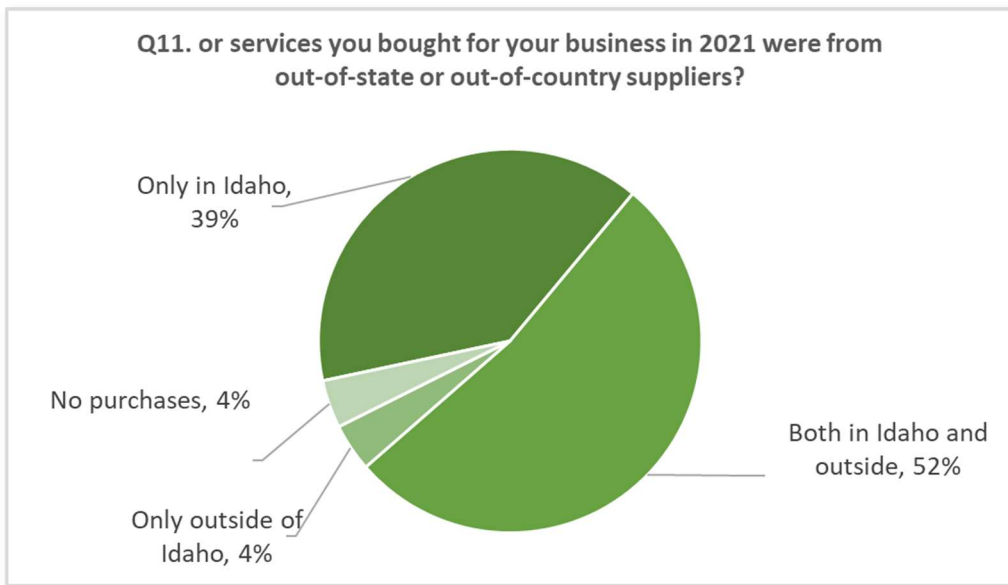
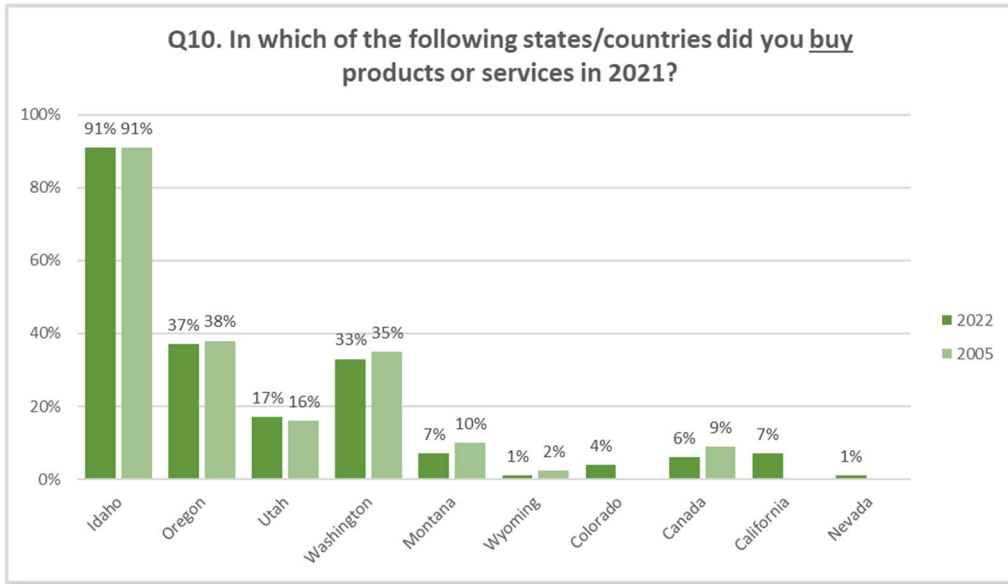
II. Results

Nearly all Idaho Green Industry businesses surveyed in 2021 and 2005 sold products and services within the state. A small percentage (2%) made no sales, at all. Three quarters of the businesses surveyed in 2022 (73%) sold products or services across multiple states including Oregon (20%), Utah (18%), Washington (15%), Montana (15%), Wyoming (13%), Colorado (4%) and California and Nevada (both 3%).



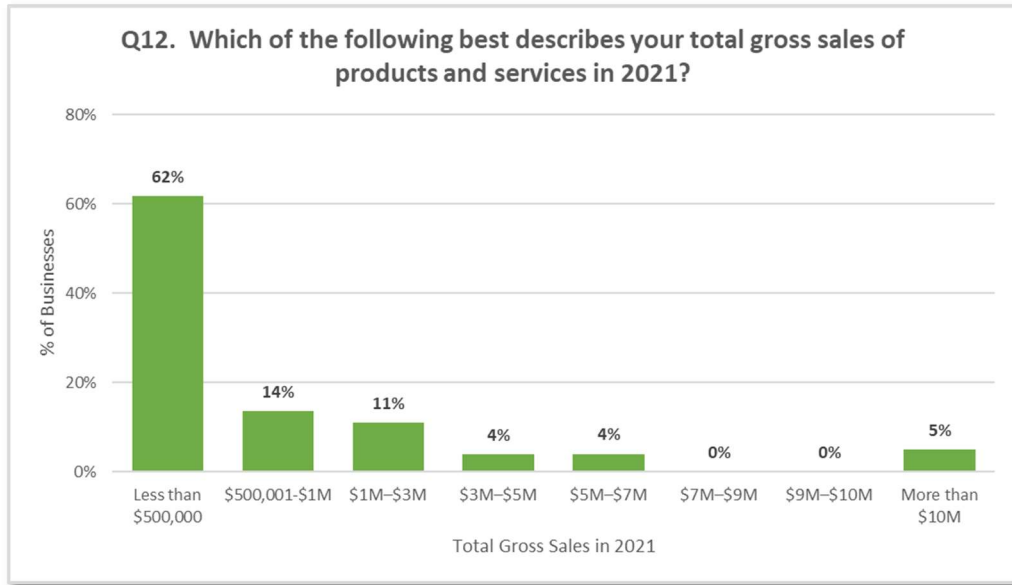
II. Results

Nearly all Green Industry businesses surveyed in 2021 (91%) reported purchasing products or services within the state of Idaho, with a small percentage reporting making no purchases at all that year (4%). Half of the 2021 respondents (52%) said they made purchases both within and outside the state while a smaller percentage (4%) said they only made purchases outside the state.



II. Results

Nearly two-thirds of survey respondents reported their Green Industry gross sales as less than \$500,000 in 2021 indicating that a most of the industry surveyed were small businesses. On the other end of the scale, 5% of the businesses surveyed in 2021 reported total sales of more than \$10 million.

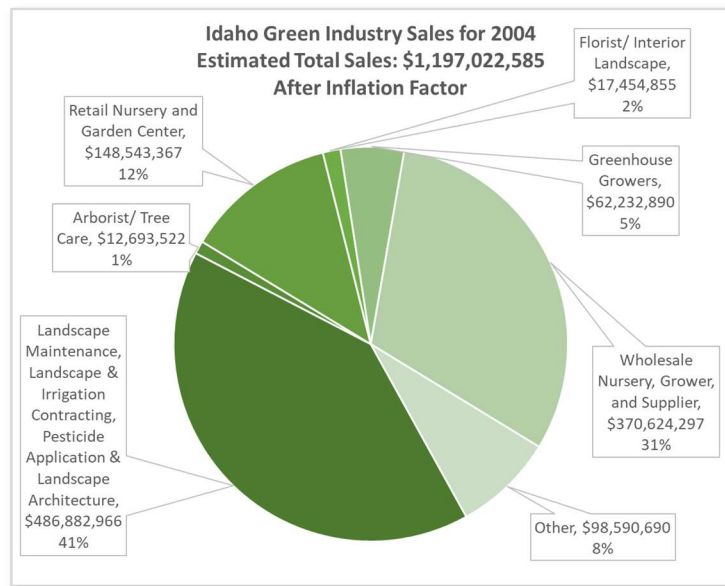
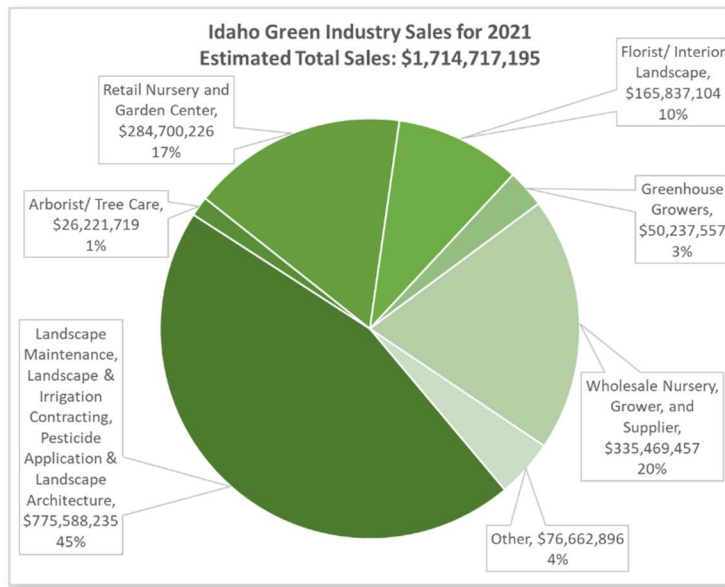


It is assumed the list of businesses surveyed in 2021 was a complete list of green industry businesses operating within the state of Idaho at the time. This allows for statewide estimates of total green industry gross sales (For more information about the analytic procedures used to derive the estimates, please see Appendix A). According to the survey, it is estimated green industry businesses in Idaho added \$1,714,717,195 to the state’s economy in 2021. This represents a 43% increase in total sales over the past 17 years. After adjusting for inflation, the 2005 survey estimated total gross sales at \$1,197,022,585 for Idaho green industry businesses.

Landscape architecture and maintenance, including irrigation and pesticide application, continues to produce the most sales representing 41% of all green industry sales within the state. The wholesale nursery, growers and supplies subsection of the industry saw a decrease in sales over this time period dropping from 31% of the industry gross sales down to 20%. Florists and interior landscapers, on the other hand, saw a significant increase in the share of total sales, increasing from just 2% of state totals in 2005 to 10% of the total gross sales in 2021.



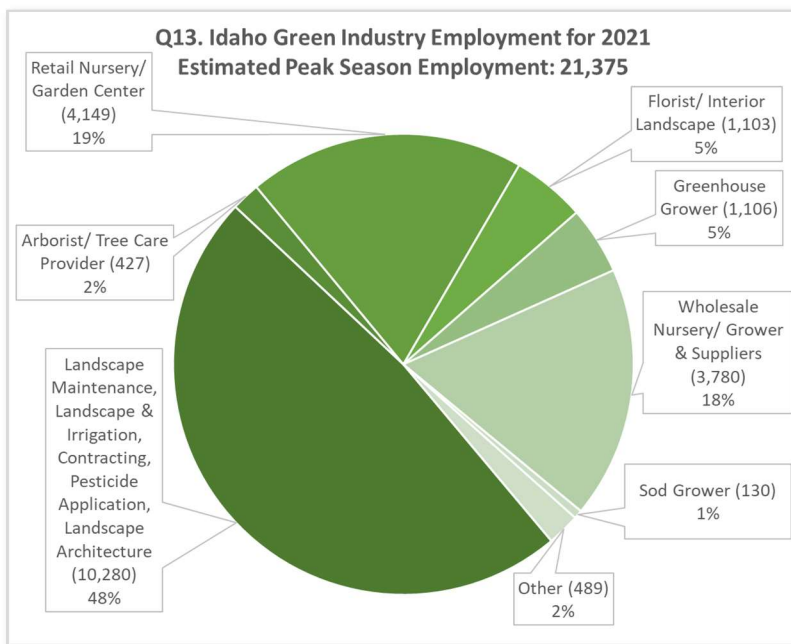
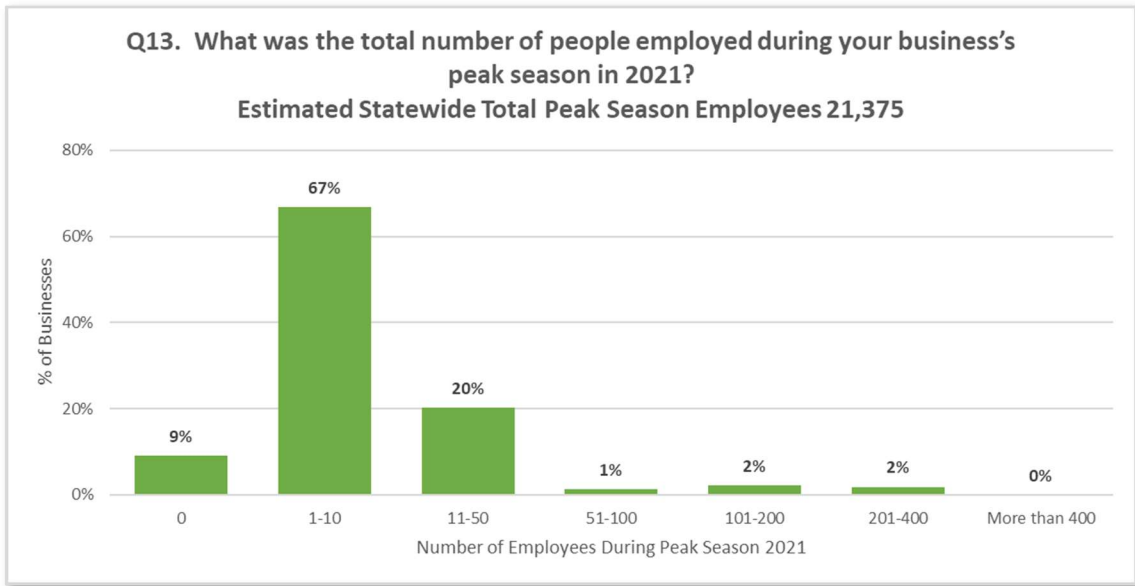
II. Results



II. Results

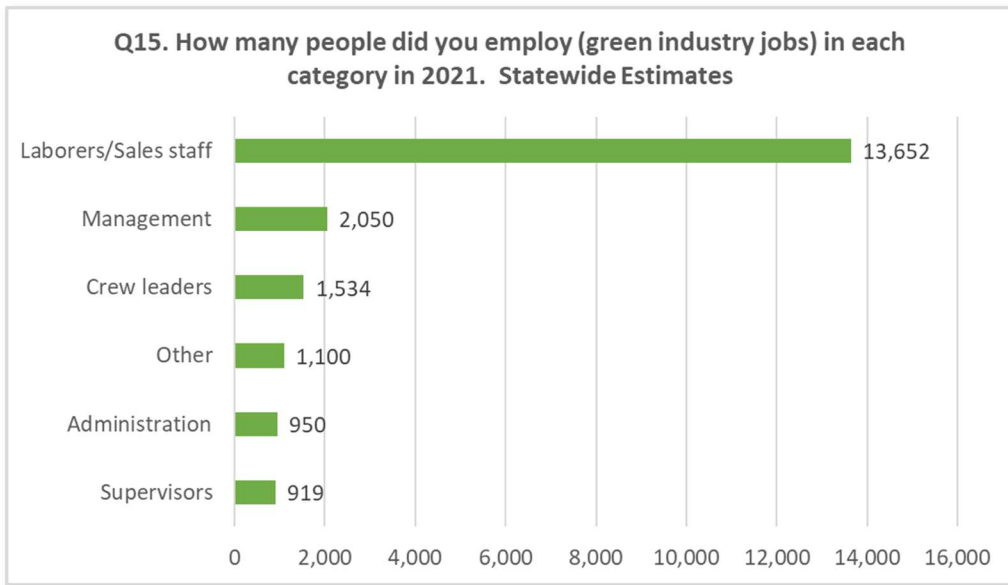
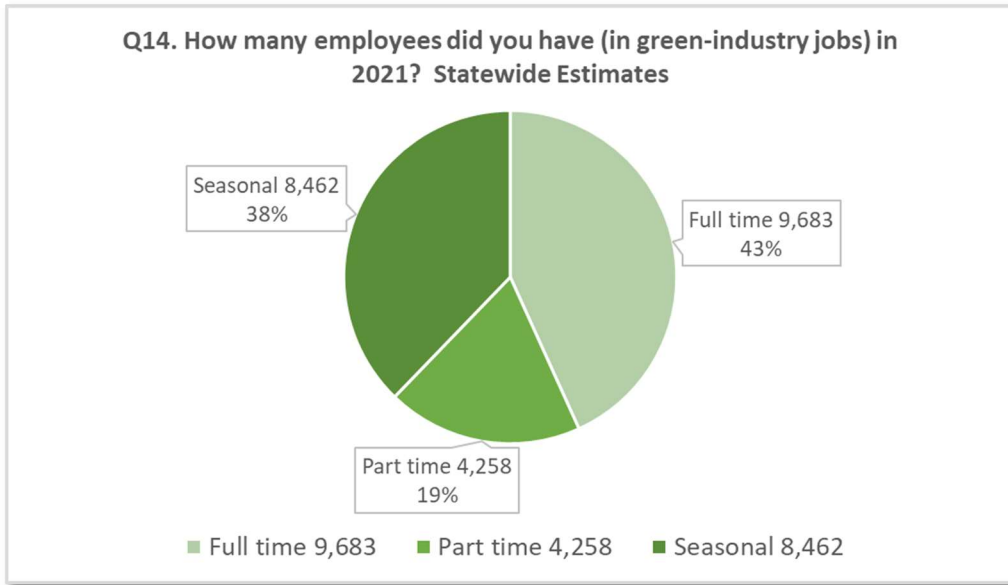
**Jobs Profile**

Two-thirds of respondents (67%) reported employing between 1 and 10 employees during the peak business season in 2021 with an estimated 21,375 employees across the Green Industry sector during peak season. This is a 47% increase in peak season employment over the past 17 years.



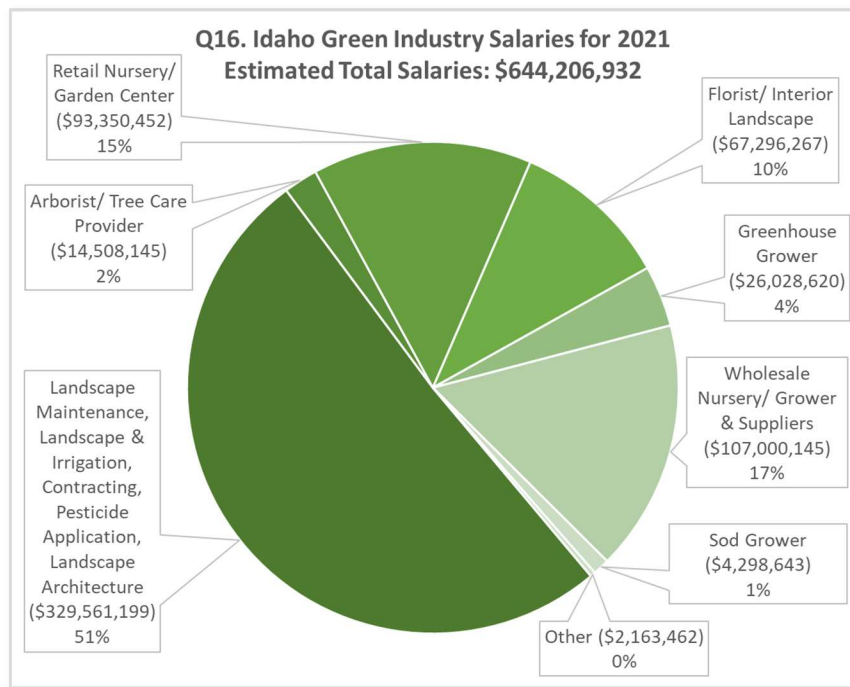
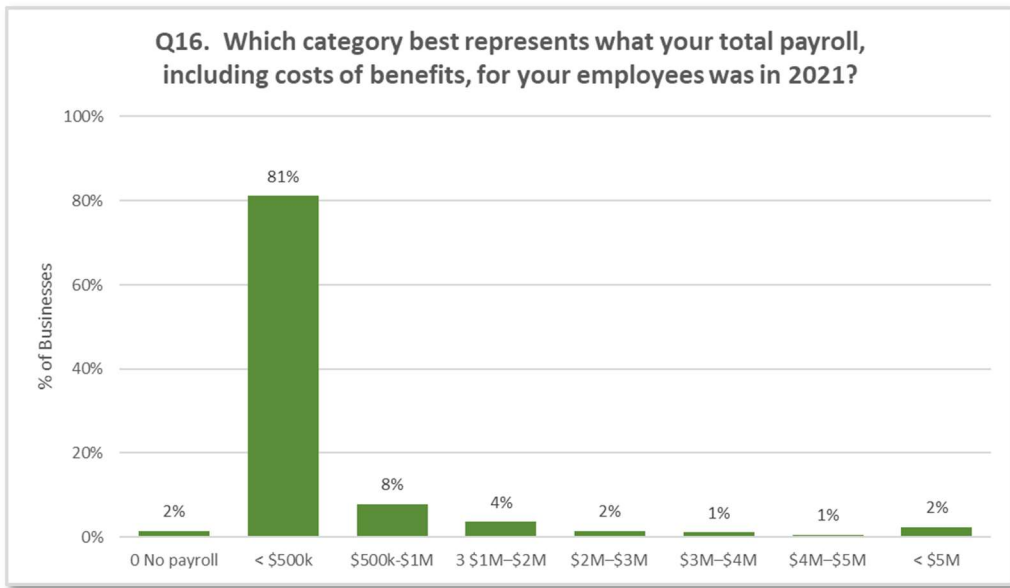
II. Results

Estimations from the survey data in 2021 suggests the Green Industry of Idaho employs over 9,000 full-time employees, over 8,000 seasonal employees and over 4,000 part-time employees. Most of those employees were laborer and sales staff (13,652).



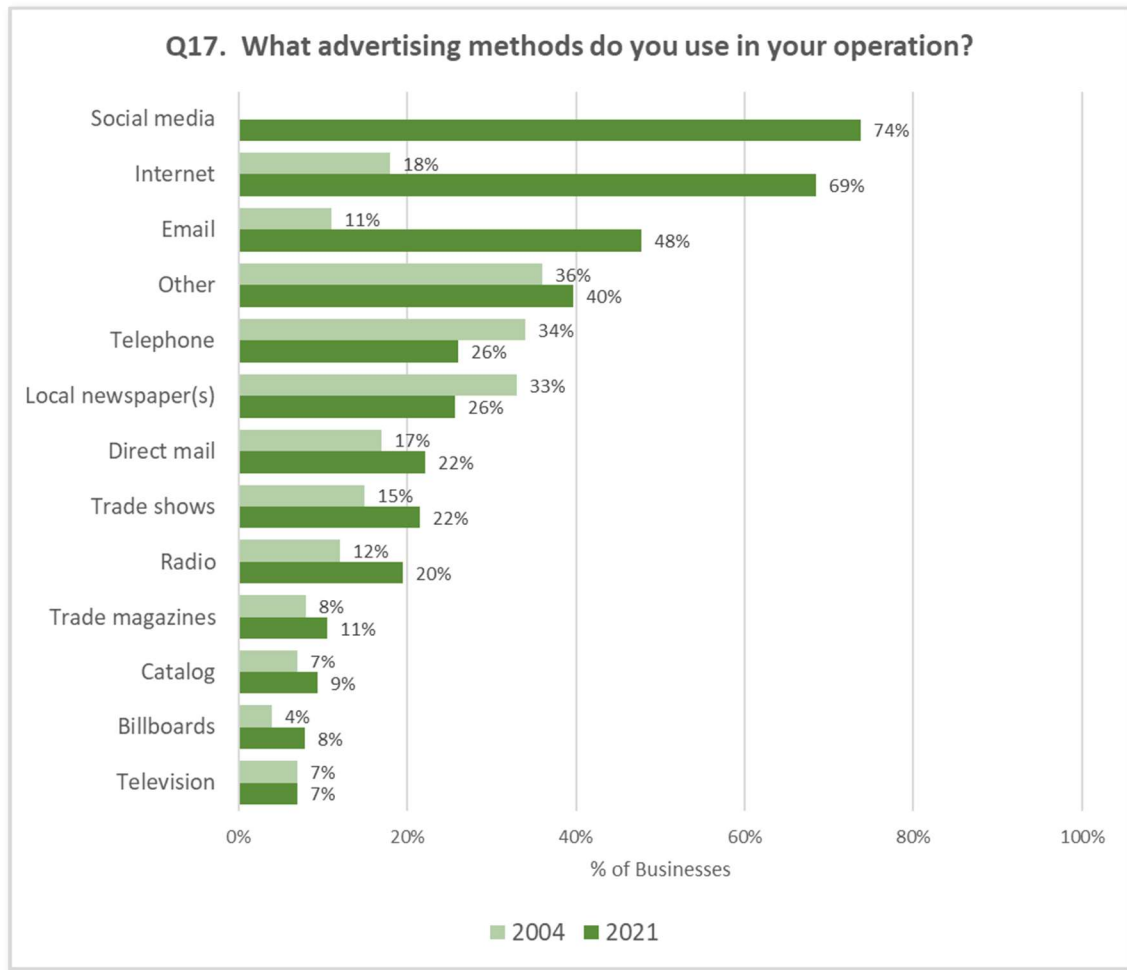
II. Results

Most survey respondents (81%) reported their annual payroll for 2021 was under \$500,000. One in five (18%) reported annual payrolls more than \$500,000 with several indicating payroll greater than \$5 million. It is estimated that the Idaho Green Industry contributed \$644,206,932 in wages and salaries in 2021.



## Advertising

Internet mediums are the preferred methods for Idaho green industry advertising in 2021, with three-quarters (74%) of businesses using social media to advertise, nearly as many (69%) using other internet mediums (such as websites) and half (48%) utilizing email advertisements. Trade magazines (11%), catalogs (9%), billboards (8%) and television (7%) were the least used advertising mediums for Idaho green industry businesses in 2021.



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## Executive Summary

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- In 2005, this survey was administered to 1,475 businesses in the state of Idaho meeting the criteria for an active green-industry or horticultural services operation. The survey in 2022 was administered to 1,721 businesses, suggesting 17% growth in Idaho green-industry operations.
- In 2021, the survey revealed a sizeable difference in business managers with just up to two years of experience (14%) over the 2005 survey results (6%). This increase in new green industry management may suggest an increase in new green industry businesses over the past several years.
- Nearly half of Idaho green industry businesses in the 2022 survey were family-owned businesses, an 8% increase over the results in 2005.
- About half of Idaho green industry businesses are active in more than one subsector of the horticulture industry. Landscape contractors, maintenance and irrigation contractors comprise the largest horticulture subsectors in the state.
- More than half (57%) of Idaho's green industry commerce comes from the sale of products and less than half (40%) involves horticulture services.
- Nearly all (98%) of Idaho green industry businesses sell products or services in the state of Idaho and three-quarters (74%) also do business out of state.
- Nine in ten (91%) of Idaho green industry businesses make purchases within the state and a little more than half (56%) make purchases outside the state of Idaho.
- It is estimated that the Idaho Green Industry contributed \$644,206,932 in wages and salaries in 2021.
- Idaho's Green Industry added an estimated \$1,714,717,195 to the state's economy in 2021, a 43% increase in sales over the 2005 survey results after adjusting for inflation.
- An estimated 21,375 employees worked in Idaho green-industry jobs during the peak season in 2021, a 47% increase over the 2005 survey results.
- Idaho green industry businesses increasingly operate in urban areas of the state, with over half of those surveyed being in the state's two most populous counties, Ada and Canyon counties. These two counties have seen an average annual population growth rate of 57%. Only 5% of green industry businesses currently operate in the 14 least populated counties in the state, where 28% of the state's green industry operated from these counties in 2005. The move from rural to urban regions in the state, combined with the population growth in these urban areas and the significant increase in green-industry operations in the state help to explain the industry's growth in sales and employment.

# 3.

## Instruments

### Web Survey Screenshots



WASHINGTON STATE UNIVERSITY  
Social and Economic  
Sciences Research Center



2022 Idaho Green Industry  
Survey of Commercial Stakeholders

#### Green Industry of Idaho Survey

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

Your answers matter to us.

This survey is completely voluntary and confidential. If you have any questions about the survey or about your participation, please contact the Social and Economic Sciences Research Center (SESRC) at Washington State University at 1-800-833-0867 or email [ted@wsu.edu](mailto:ted@wsu.edu).

Sincerely,

Rose Krebill-Prather  
Principal Investigator  
Social and Economic Sciences Research Center Washington State University

Please, enter your Access Code listed in  
the message we sent to you

Submit Access Code



III. Survey Instruments

Question 1 of 18

**Do you own or manage a Green Industry business?** *By Green Industry we mean the horticulture industry comprised of wholesale nursery, growers and suppliers; retail nursery/garden centers including home stores with lawn/garden departments; landscape construction/maintenance and lawncare providers; greenhouse growers and sod growers; arborist, tree care, florist and interior landscape providers; pesticide applicators and irrigation contractors.*

- Yes
- No
- Don't know

<< Back | Next >>

**Branch:** Go to Q2 if Q1 = "Yes" or "Don't know", otherwise, go to next screen and end survey.

**Thank you for your time, but the remaining questions are for Idaho businesses selling nursery/horticulture products and services.**

<< Return to survey | End survey >>

Question 2 of 18

**How many years have you owned or managed a business that is part of Idaho's Green Industry?**

- 0-2 years
- 3-5 years
- 5-7 years
- 8 years or more

<< Back | Next >>

Question 3 of 18

**Which of the following categories BEST describes your business?**

- Family owned business
- Privately owned business
- Partnership
- Corporation
- Something else (please specify):

<< Back | Next >>



III. Survey Instruments

Question 4 of 18

**How many locations does your business have?**

Number of locations

<< Back | Next >>

Question 5 of 18

**Which of the following categories describes your Green Industry business?**

- Landscape Maintenance/ Lawn Care** (examples include: lawn mowing, trimming/edging, flower and shrub bed maintenance, fertilizing, snow removal)
- Landscape Contractor** (grading, bed construction, installation of plant material, hardscapes, decks/fences, designing, renovation/rebuild, pond installation, hydro-seeding)
- Irrigation Contractor** (designing, sprinkler installation, repairing)
- General Pesticide Applicator** (residential and commercial yard spraying, dormant spraying, weed spraying, insect and disease control)
- Arborist/ Tree Care Provider** (pruning, trimming, hazard tree and other removal, transplanting/ moving of trees, appraisals)
- Retail Nursery/ Garden Center** (home stores with lawn and garden departments)
- Florist/ Interior Landscape**
- Greenhouse Grower** (nursery/floral stock inside a greenhouse)
- Wholesale Nursery/ Grower** (anyone growing or re-wholesaling (broker) all nursery stock/plant material grown in containers or in the field)
- Sod Grower**
- Wholesale Supplier** (hardgoods, hardscapes, seed, greenhouses/ structures, soil amendments, bark, mulch, horticultural inputs, irrigation, etc.)
- Something else** (please specify):

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III. Survey Instruments

Question 6 of 18

**What percentage of your total sales came from products and services in each of the following categories in 2021?** (Please type the percentage of your operation for each valid category so that it totals 100%)

- % Landscape Maintenance/ Lawn Care
- % Landscape Contractor
- % Irrigation Contractor
- % General Pesticide Applicator
- % Arborist/ Tree Care Provider
- % Retail Nursery/ Garden Center
- % Florist/ Interior Landscape
- % Greenhouse Grower
- % Wholesale Nursery/ Grower
- % Sod Grower
- % Wholesale Supplier
- % Something else (please specify):

0%

<< Back | Next >>

Question 7 of 18

**What percentage of your total sales came from the sales of products in 2021 and what percentage came from services?**

- % of total sales from products
- % of total sales from services

<< Back | Next >>

Question 8 of 18

**In which of the following states/countries did you SELL products or services in 2021?**  
 To help us track which states nursery products/services are going to, please answer yes or no for each one listed below.

	Yes	No
Idaho	<input type="radio"/>	<input type="radio"/>
Washington	<input type="radio"/>	<input type="radio"/>
Oregon	<input type="radio"/>	<input type="radio"/>
Montana	<input type="radio"/>	<input type="radio"/>
Utah	<input type="radio"/>	<input type="radio"/>
Wyoming	<input type="radio"/>	<input type="radio"/>
Canada	<input type="radio"/>	<input type="radio"/>
Other state (please list): <input type="text"/>	<input type="radio"/>	<input type="radio"/>
Other countries (please list): <input type="text"/>	<input type="radio"/>	<input type="radio"/>

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III. Survey Instruments

Question 9 of 18

**What percentage of your total sales of products or services were sold to out-of-state customers during 2021?** (Please base the percentage on actual dollars earned from sales of Products or Services)

% of total sales from out of state/country

<< Back | Next >>

Question 10 of 18

**In which of the following states/countries did you BUY products or services in 2021?**

To help us track which states nursery products/services are being purchased from, please answer yes or no for each one listed below.

	Yes	No
Idaho	<input type="radio"/>	<input type="radio"/>
Washington	<input type="radio"/>	<input type="radio"/>
Oregon	<input type="radio"/>	<input type="radio"/>
Montana	<input type="radio"/>	<input type="radio"/>
Utah	<input type="radio"/>	<input type="radio"/>
Wyoming	<input type="radio"/>	<input type="radio"/>
Canada	<input type="radio"/>	<input type="radio"/>
Other state (please list): <input type="text"/>	<input type="radio"/>	<input type="radio"/>
Other countries (please list): <input type="text"/>	<input type="radio"/>	<input type="radio"/>

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Question 11 of 18

**What percentage of the products or services you bought for your business in 2021 were from out-of-state or out-of-country suppliers?** (Base the percentage on actual dollars spent for products or services)

% of purchases from out of state/country

<< Back | Next >>

III. Survey Instruments

Question 12 of 18

**Which of the following best describes your total GROSS sales of products and services in 2021?**

- Less than \$500,000
- \$500,001-\$1,000,000
- \$1,000,001-\$2,000,000
- \$2,000,001-\$3,000,000
- \$3,000,001-\$4,000,000
- \$4,000,001-\$5,000,000
- \$5,000,001-\$6,000,000
- \$6,000,001-\$7,000,000
- \$7,000,001-\$8,000,000
- \$8,000,001-\$9,000,000
- \$9,000,001-\$10,000,000
- More than \$10,000,000

<< Back | Next >>

Question 13 of 18

**What was the total number of people employed during your business's peak season in 2021?**  
*(Include yourself, family members, and all full-time, part-time, and seasonal workers)*

Number of employees

<< Back | Next >>

Question 14 of 18

**How many of your employees were in each of the following categories in 2021?**

- Year round full-time
- Year round part-time
- Seasonal employees
- 0** Total employees

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Question 15 of 18

**How many people did you employ in each of the following categories in 2021?**

- Laborer/Sales staff
- Supervisors
- Crew leaders
- Management
- Administration
- Other, (please list titles):
- 0** Total employees

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III. Survey Instruments

Question 16 of 18

**Which category best represents what your total payroll, including costs of benefits, for your employees was in 2021?** (Include yourself, family members, and all full-time, part-time, and seasonal workers)

- Less than \$500,000
- \$500,000-\$1,000,000
- \$1,000,001-\$2,000,000
- \$2,000,001-\$3,000,000
- \$3,000,001-\$4,000,000
- \$4,000,001-\$5,000,000
- More than \$5,000,000 (please specify): \$

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Question 17 of 18

**What advertising methods do you use in your operation?**

Please answer yes or no for each one.

	Yes	No
Trade magazines	<input type="radio"/>	<input type="radio"/>
Local newspaper(s)	<input type="radio"/>	<input type="radio"/>
Email	<input type="radio"/>	<input type="radio"/>
Telephone	<input type="radio"/>	<input type="radio"/>
Catalog	<input type="radio"/>	<input type="radio"/>
Internet	<input type="radio"/>	<input type="radio"/>
Television	<input type="radio"/>	<input type="radio"/>
Radio	<input type="radio"/>	<input type="radio"/>
Billboards	<input type="radio"/>	<input type="radio"/>
Direct mail	<input type="radio"/>	<input type="radio"/>
Trade shows	<input type="radio"/>	<input type="radio"/>
Social media	<input type="radio"/>	<input type="radio"/>
Other (please specify): <input type="text"/>	<input type="radio"/>	<input type="radio"/>

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Question 18 of 18

**In which Idaho county is your business registered?**

County

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

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**You are about to finish this questionnaire.**

**To submit the questionnaire click the "Submit questionnaire" button below.**

**To review your answers starting from the beginning click the "Review your answers" button.**

Review your answers | Submit questionnaire

**Your survey has been received.**

**Please close this window.**

# 4.

## Appendix A: Analytics

**Background:** SESRC at WSU assisted the Idaho Nursery and Landscape Association with administering a survey of Idaho green industry businesses in the fall of 2022. This survey was similar to one conducted by the University of Idaho in 2000 and again in 2005. The primary objective of the survey was to estimate the economic impact green industry businesses have within Idaho and to compare the results in 2022 to those in 2005. A survey of 78 questions was formatted as an online web survey and a paper mail-back survey. Letters were mailed to 1,797 green industry businesses in Idaho with instructions for completing the survey. Surveying of these businesses continued through January 2023. For this study, 367 businesses completed or partially completed the survey out of 1,721 eligible businesses resulting in an 21.3% response rate.

**Assumptions:** The survey clients defined Idaho Green Industry as horticulture businesses in the state including wholesale nursery, growers and suppliers; retail nursery/garden centers including home stores with lawn/garden departments; landscape construction/maintenance and lawncare providers; greenhouse growers and sod growers; arborist, tree care, florist and interior landscape providers; pesticide applicators and irrigation contractors.

The SESRC assumed the starting list of 1,797 businesses represented the population of Idaho green industry businesses in 2021. The list was comprised of two sources: 1) a list of 1,717 Idaho businesses with plant nursery licenses obtained through a 2020 public information request to the Idaho State Department of Agriculture; and 2) a list of 87 members of the Idaho Nursery and Landscape Association. Duplicate cases were identified and removed. This combined list included both specialty and general product and services organizations.

**Method: *Estimated Total Sales and Sales by Green Industry Sector:*** Question 12 of the survey asked respondents to report total gross sales of products and services in 2021.

Question 12 of 18

**Which of the following best describes your total GROSS sales of products and services in 2021?**

- Less than \$500,000
- \$500,001-\$1,000,000
- \$1,000,001-\$2,000,000
- \$2,000,001-\$3,000,000
- \$3,000,001-\$4,000,000
- \$4,000,001-\$5,000,000
- \$5,000,001-\$6,000,000
- \$6,000,001-\$7,000,000
- \$7,000,001-\$8,000,000
- \$8,000,001-\$9,000,000
- \$9,000,001-\$10,000,000
- More than \$10,000,000

|

The way in which this question was worded and formatted, similar to how it was asked in 2005, resulted in two sources of data ambiguity. First, this question did not specify “horticulture” sales, so some responses given could potentially include sales in non-green industry goods and services. And second, this question used broad categories for response options, instead of asking for a single value. To estimate total sales and sales by the green industry sector using the data obtained, the SESRC used the following procedures/adjustments.

The SESRC calculated total gross sales for each survey respondent by assigning a mid-point value between each category in Q12. Those who indicated elsewhere in the survey that they had no sales in 2021, were recoded to “\$0”. Category 1, “Less than \$500,00” was assigned a value of “\$250,000”. Category 12, “More than \$10,000,000” was assigned a value of “\$10,500,000”. The SESRC then multiplied this midpoint value for each respondent by the proportion of total sales reported for each category in Q6. The categories in Q6 make up the various sectors of the green industry as defined by the client. An additional “Other” category was also included in Q6 to catch the non-horticultural commerce.

Question 6 of 18

**What percentage of your total sales came from products and services in each of the following categories in 2021? (Please type the percentage of your operation for each valid category so that it totals 100%)**

- % Landscape Maintenance/ Lawn Care
- % Landscape Contractor
- % Irrigation Contractor
- % General Pesticide Applicator
- % Arborist/ Tree Care Provider
- % Retail Nursery/ Garden Center
- % Florist/ Interior Landscape
- % Greenhouse Grower
- % Wholesale Nursery/ Grower
- % Sod Grower
- % Wholesale Supplier
- % Something else (please specify):

**0%**

|



Of the 367 who responded to the survey, 20 cases were excluded from this analysis because the respondent did not provide a response to Q12, the proportion of gross sales attributed to each category in Q6 added to more than 100%, or for other incomplete data reasons.

Of the 347 included in this analysis, 63 cases provided a proportion of sales in the "Other" category on Q6. In some cases this "other" proportion was quite high relative to the main green industry sectors specified, which led to concerns that the "other" category represented non-horticulture income across survey respondents. The decision was made to exclude the income values for this category for all cases as being "non-horticulture" income, with the exception of 22 respondents who typed in a description of what the "other" income referred to, which fit into one of the other green industry categories.

Summing the results case-wise for Q12 produced the total green industry sales contribution for each respondent. Summing the results case-wise in each sector category on Q6 produced the sales contribution for each horticulture sub-sector for the respondent pool. Summing all values produced the total green industry sales contribution for the respondent pool. To create statewide estimates, the SESRC calculated sales figures for each category in Q6 by dividing by the survey response rate.

**Statewide income = (Sample Income \* 100) / 22.1**

**Method: *Estimated Employment.*** Respondents were asked for the total number of people employed in their business during the peak season in 2021 (Q13). The numbers given in this question were used in conjunction with the Estimated Total Sales and Sales by Green Industry Sector to calculate employment by sector. Following the strategy used in the 2005 survey, the total number of employees was divided proportionally by sector.

Question 13 of 18  
**What was the total number of people employed during your business's peak season in 2021?**  
*(Include yourself, family members, and all full-time, part-time, and seasonal workers)*

Number of employees

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To create statewide employment estimates, the SESRC calculated employment figures for the total and for each sector by dividing by the survey response rate.

# 5.

## Credits

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### Project Team

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SESRC is committed to high quality and timely delivery of project results. The following list identifies the SESRC team members responsible for particular elements of this project.

Rose Krebill-Prather..... Associate Director  
Thom Allen..... Project Manager, Data Manager  
Nick Ponomarev, Ph. D..... Software Engineer  
Colleen Kulzsca..... Data Collection Manager  
Ian Kessack..... Survey Supervisor  
Tara Courtney..... Survey Supervisor  
Jair Johnson..... Survey Supervisor  
Jack Beck..... Fiscal Technician

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## SESRC Staff

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All of the work conducted at the Social & Economic Sciences Research Center is the result of a cooperative effort made by a team of dedicated research professionals. The research in this report could not have been conducted without the efforts of interviewers and part-time personnel not listed.

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Don A. Dillman, Ph.D..... Deputy Director for Research & Development  
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