

# Economic Contributions of the Green Industry in the United States in 2023

Melinda Knuth<sup>1\*</sup>, Alan Hodges<sup>2</sup>, Charles R. Hall<sup>3</sup>, Hayk Khachatryan<sup>4</sup>, and Daniel Tregeagle<sup>5</sup>

## Abstract

The economic contributions of the green industry in the United States were estimated for eight sectors in 2023 using information on industry employment and wages, and economic multipliers from a U.S. IMPLAN economic model. Total direct industry output was estimated at \$223 billion (B), and total output contributions, including indirect and induced regional economic multiplier effects, were \$520 B. The total value-added contribution to Gross Domestic Product (GDP) was \$303 B, including labor income contributions of \$175 B, other property income contributions of \$106 B, and taxes paid to local, state, and federal governments of \$69.1 B. The industry had direct employment of 1.48 million full-time and part-time individuals, and total employment contributions of 2.95 million jobs in the broader economy. Since the previous study for 2018, overall green industry contributions increased by 12.5% for employment, 20.8% for labor income, 14.9% for output, and 31.1% for GDP in inflation-adjusted terms. Although the growth has moderated, the green industry expanded strongly during the COVID-19 pandemic, and remains an essential contributor to national, state, and local economies. These findings provide benchmarks for policymakers and industry stakeholders and underscore the importance of the U.S. green industry's role as a driver of regional development.

**Index words:** Sales, industry output, employment, value added, Gross Domestic Product, production, manufacturing, landscaping services, wholesale, retail, lawn and garden.

## Significance to the Horticulture Industry

The green industry continues to play a vital role in both the U.S. economy and the economies of individual states and regions, with a national output contribution of \$519.8 billion in 2023 and supporting 2.95 million jobs when multiplier effects are considered. Despite supply chain disruptions from the COVID-19 pandemic, the industry has shown strong resilience and ongoing expansion, particularly within landscaping services, which now accounts for over 2.0 million jobs and \$355.3 billion in output contributions. The green industry encompasses a wide range of activities, with landscape services and wholesale–retail trade sectors present in nearly every community across the nation. By contrast, production and manufacturing sectors are concentrated in certain states, where they generate a disproportionately large impact through out-of-state shipments that inject new revenue into local economies. The insights presented in this report are essential for understanding the structure–conduct–performance dynamics that shape the green industry and the broader U.S. economy. Industry stakeholders can use these updated results to guide strategic decisions about future business investments, while policymakers can use this information to support more

effective allocation of resources among competing industries and priorities.

## Introduction

The U.S. environmental horticulture industry, or green industry, includes wholesale nursery, greenhouse, and turf-grass sod producers; landscape design, construction and maintenance firms; wholesale and retail distributors such as garden centers, home improvement stores, and mass merchandisers with lawn and garden departments; brokers and re-wholesale distribution centers; and allied trades supplying inputs to the industry. The green industry has historically been a fast-growing segment of the U.S. economy. However, the industry reached the mature stage of its life cycle and grew more slowly or even declined in some segments during the early 2000s (Hall 2010). As Hall et al. (2020) reported: “Over the 2007–18 period, total employment in the industry increased by 2.75%, although this varied widely among specific industry sectors, with strong positive growth for landscaping services (+15.6%), but decreased for florists (–35.3%), landscape architectural services (–26.2%), lawn and garden equipment manufacturing (–8.8%), and nursery and floriculture production (–18.9%)”. Over the 2001–2023 period, total employment in the industry increased by 7.5%, although this varies widely among the specific industry sectors, with strong positive growth in landscape services (+45%), lawn and garden equipment & supplies stores (+20%), and farm and garden equipment merchant wholesalers (+10%), but decreased for nursery and florist wholesalers (–5%), lawn and garden equipment manufacturing (–5%), nursery and floriculture production (–15%), florist (–40%), and landscape architectural services (–25%) (Fig. 1).

Hall et al. (2020) noted that “employment for most sectors increased during 2001–07, then declined during the recession of 2007–09, and recovered during 2011–18, although five sectors remained below their 2007 peak levels.” Building on this trend, we observe in the current study

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<sup>1</sup>Horticultural Science, North Carolina State University, 2721 Founders Drive Raleigh, NC 27695.

<sup>2</sup>Food and Resource Economics Department, University of Florida, P.O. Box 110240, Gainesville, FL 32611.

<sup>3</sup>Horticultural Science, Texas A&M University, 495 Horticulture Road, TAMU 2133, College Station, TX 77843.

<sup>4</sup>Food and Resource Economics Department, Mid-Florida Research and Education Center, University of Florida, 2725 S. Binion Road Apopka, FL 32703.

<sup>5</sup>Agricultural and Resource Economics, North Carolina State University, 2801 Founders Drive Raleigh, NC 27695.

\*Corresponding author email: mjkknuth@ncsu.edu.

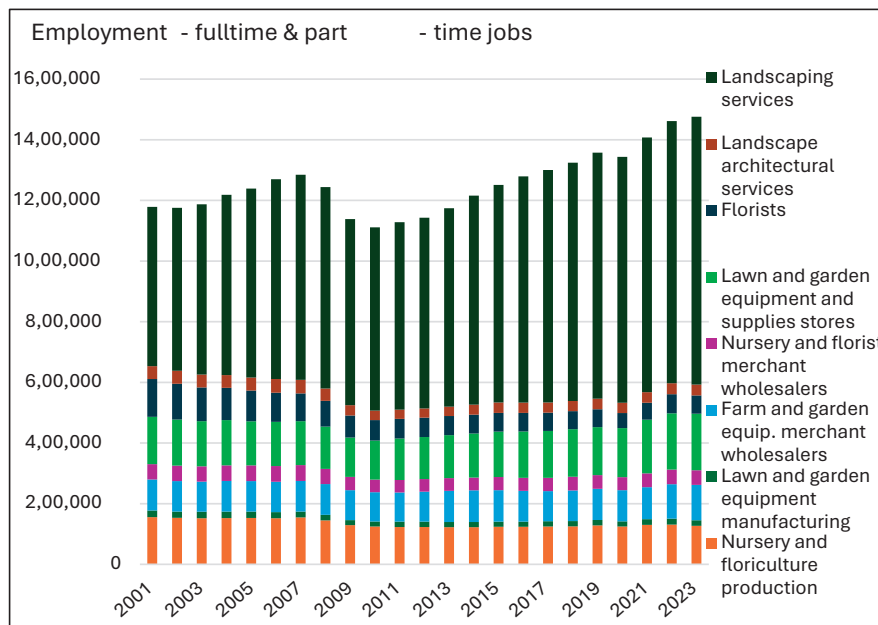


Fig. 1. Change in direct employment in primary sectors of the U.S. green industry during 2001-2023. Source: Annual data from the Quarterly Census of Employment and Wages (U.S. Department of Labor 2023).

that employment declined again in 2020 due to COVID-19 disruption but subsequently expanded during 2021-23. The only industry sectors that have trended down were florists, consistent with the decrease in brick-and-mortar establishments and omnichannel floral purchasing options (Jenkins et al. 2023), and landscape architecture services also decreased since 2013 (Hall et al. 2020). These long-term employment patterns provide a basis for interpreting the 2023 results, which capture not only cyclical recovery from the COVID-19 downturn but also structural shifts in consumer behavior and industry composition. The overall number of employer business establishments grew from about 150,000 in 2001 to over 181,000 in 2023 (BLS, Quarterly Census of Employment and Wages 2023). Despite supply chain disruptions and consumer-facing business shut-downs during the COVID-19 pandemic, the industry experienced significant growth as homeowners and apartment dwellers turned their discretionary income from travel and restaurant services to hobby projects and home renovations.

Historically, economic impact assessments of the green industry were conducted for individual states, sponsored by state nursery and landscape associations to show the industry's importance to policymakers (Hall et al. 2020). A common methodology was developed for a comprehensive national study of the green industry at roughly five-year intervals (Hodges et al. 2011, Hodges et al. 2015, Hall et al. 2020). A timely reassessment of the industry's economic contributions is therefore important, not only to benchmark current performance but also to inform industry stakeholders and policymaker decisions as they confront ongoing challenges with labor, supply chain disruptions, and changing consumer demand. The green industry impact assessment for 2018 (Hall et al. 2020) reported direct industry output for all sectors at \$159 billion (B), with total output contributions, including indirect and induced regional economic multiplier effects, of \$348 B. The

largest individual industry sectors in terms of employment and GDP contributions were landscaping and horticultural services (1,460,669 jobs, \$222 B), greenhouse, nursery and floriculture production (217,574 jobs, \$28.7 B), and lawn and garden equipment and supplies stores (292,614 jobs, \$43.8 B). The top ten states in terms of employment contributions were California (264,913 jobs), Florida (203,482), Texas (161,151), Ohio (90,406), Pennsylvania (90,075), New York (90,266), Illinois (87,595), North Carolina (78,766), Michigan (77,719), and Georgia (66,527).

The objective of this study was to update the previous estimates of the economic contributions of the U.S. green industry at the national, regional, and state levels by utilizing 2023 data. Findings from this study enable reliable comparisons among U.S. states and regions, inform public policy, and support efforts by industry stakeholders to communicate the importance of the green industry.

## Materials and Methods

Economic sectors associated with the green industry were identified based on definitions in the North American Industry Classification System (NAICS, U.S. Department of Commerce 2024b). The landscape design, construction and maintenance services industry group includes the sectors landscape services (56173) and landscape architecture services (54132). The production and manufacturing industry group includes the sectors for nursery and floriculture (NAICS 11142) and lawn and garden equipment manufacturing (333112). The wholesale and retail distribution industry group includes farm and garden equipment merchant wholesalers (42382), nursery and florist merchant wholesalers (42493), lawn and garden equipment and supplies stores (4442), and florists (4593). Together, these sectors accounted for 181,692 employer business establishments, 1,673,151

Table 1. Number of establishments, direct employment, employee wages and annual sales in principal sectors of the U.S. green industry in 2023<sup>2</sup>.

| Industry sector (NAICS code <sup>3</sup> )                                 | Business establishments (no.) | Employees (jobs) | Wages (million \$) | Annual sales (million \$) |
|----------------------------------------------------------------------------|-------------------------------|------------------|--------------------|---------------------------|
| Nursery and floriculture production (11142)                                | 7,340                         | 126,957          | 5,484              | 19,770                    |
| Lawn and garden equipment manufacturing (333112)                           | 274                           | 18,941           | 1,361              | 11,531                    |
| Farm and garden equip. merchant wholesalers (42382)                        | 9,388                         | 13,719           | 1,007              | 14,895                    |
| Flower, nursery stock, and florists' supplies merchant wholesalers (42493) | 3,792                         | 48,288           | 2,436              | 19,322                    |
| Lawn and garden equipment and supplies stores (4442)                       | 17,744                        | 186,102          | 7,273              | 67,212                    |
| Florists (4593)                                                            | 12,489                        | 60,535           | 1,738              | 8,149                     |
| Landscape architectural services (54132)                                   | 7,558                         | 35,781           | 2,787              | 8,096                     |
| Landscaping services (56173)                                               | 123,107                       | 1,182,827        | 50,982             | 148,525                   |
| <b>Total</b>                                                               | <b>181,692</b>                | <b>1,673,151</b> | <b>73,067</b>      | <b>297,499</b>            |

<sup>2</sup>Sources: U.S. Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages (2024); IMPLAN Group, (2025); IBISWorld industry reports (2024, 2025).

<sup>3</sup>North American Industry Classification System sector code.

direct employees, \$73.1 B in wages paid, and \$297.5 B in sales revenues in 2023 (Table 1).

The regional economic contributions of green industry sectors were evaluated using the information on employment, wages, and annual sales in Table 1, sourced from the Quarterly Census of Employment and Wages (BLS 2024), IMPLAN Group (2025), and IBISWorld Industry Reports (2024, 2025). These reports were downloaded out of each database and compared. Data was downloaded at the state-level and aggregated to the regional and national level. The federal data values were prioritized, and the private reports were used as supplemental if the federal data values were missing, represented in Table 1. Total economic contributions were assessed with economic multipliers from a U.S. model for 2023 created with the IMPLAN Input-Output/Social Accounting Matrix software (IMPLAN Group LLC 2025, Huntersville, NC, USA). These models represent the structure of a regional economy in terms of transactions between industries, employees, households, and government institutions (Miller and Blair 2009). Information in the model is derived from multiple sources, including the Quarterly Census of Employment and Wages, National Income and Product Accounts, state GDP and personal income statistics, the Economic Census, and Census of Agriculture

(Hall et al. 2020). The IMPLAN modeling system currently contains economic data for 528 industry sectors, including commodity production, employment, household income, commodity trade, capital investment, taxes, transfer payments (e.g. welfare, retirement pensions), and gross margins for wholesale and retail trade sectors which represent the share of sales that constitute final demand after netting out cost of goods sold. IMPLAN multipliers capture the product or service sales (direct effects), supply chain purchases by industry firms from other economic sectors (i.e., indirect effects) and employee household consumer spending (i.e., induced effects), with separate multipliers for industry output (i.e., sales revenues), employment, value added, and labor income (i.e., earnings).

Differences in multipliers reflect the structure of industry sectors, and the mix of supplier industries available to meet domestic demands. The IMPLAN model was adjusted for multi-industry economic contribution analysis according to the method used by Lucas (2019). The multiplier effect values used in the analysis were downloaded directly from the IMPLAN data library within the software. Economic contribution results for the U.S. were allocated to individual states based on the share of direct U.S.



Fig. 2. Map of the U.S. agroclimatic regions for economic contribution analysis of the green industry.

employment within each industry sector, and state-level results were aggregated within eight agroclimatic regions of the U.S., as shown in Fig. 2, derived from U.S. farm production regions (USDA 2000). The results of economic contribution analysis represent the ongoing activity in the industry rather than a net change in economic final demand that is usually considered for economic impact analysis (Watson et al. 2007).

## Results and Discussion

The estimated total economic contributions of the U.S. green industry in 2023 are summarized by industry groups and sectors in Table 2 and Figures 3 and 4. Direct industry output, or sales revenues, for all sectors was \$223 billion (B). The total output contribution, including indirect and induced regional economic multiplier effects, was \$520 B, and the total employment contribution was 2.95 million full-time and part-time jobs. The total value added, or GDP contribution, was \$303 B. This included \$175 B in labor income (employee compensation, benefits, and business owner income), \$106 B in other property income (rents, royalties, dividends, capital gains, and interest), and \$21.8 B in indirect business taxes. The industry contributed \$69.1 B in overall taxes paid to local (\$11.8 B), state (\$15.2 B), and federal (\$42.1 B) governments.

Landscape services was by far the largest individual green industry sector, contributing \$355 B in output, \$202 B in GDP, and 2.06 million jobs (Table 2 and Figs. 3–5). The next largest industry sector was nursery and floriculture production, with \$40.5 B in output, \$26.5 B in GDP, and 228,000 jobs. Among retail sectors, garden stores contributed \$41.4 B in output, \$30.7 B in GDP, and 270,000 jobs, while florists generated \$11.4 B in output, \$6.84 B in GDP, and 94,000 jobs. Wholesalers of lawn, garden, nursery, and florist products collectively contributed more than \$22.0 B in output, \$13.9 B in GDP, and 125,000 jobs. Lastly, lawn and garden equipment manufacturing contributed \$30.9 B in output, \$12.9 B in GDP, and 87,400 jobs.

Economic contributions of the green industry in U.S. states and regions are summarized in Tables 3 and 4. The largest regions in terms of employment contributions were the Midwest (571,754 jobs), and Northeast (555,189), followed by Pacific (482,249), Southeast (466,054 jobs), Southcentral (293,549), Appalachian (288,232), Mountain (227,886), and Great Plains (61,218). Industry output contributions were in the same order: Midwest (\$104.7 B) Northeast (\$103.3 B), Pacific (\$88.29 B), Southeast (\$75.9 B), and Southcentral (\$50.6 B, Appalachian (\$48.3 B), Mountain (\$38.2 B) and Great Plains (\$10.4 B).

Among individual states, the top 10 in terms of employment contributions were California (338,841 jobs, \$63.4 B in output), Florida (289,713 jobs, \$45.8 B), Texas (207,134 jobs, \$37.3 B), New York (122,679 jobs, \$23.7 B), Ohio (114,287 jobs, \$20.2 B), Illinois (109,302 jobs, \$21.4 B), North Carolina (105,915 jobs, \$17.9 B), Pennsylvania (104,736 jobs, \$17.7 B), Michigan (97,988 jobs, \$18.0 B), and New Jersey (87,792

Table 2. Summary of green industry economic contributions by industry sector in 2023<sup>a</sup>.

| Industry sector                       | Employment (Jobs) | Output <sup>b</sup> (M\$) | Value added <sup>c</sup> (M\$) | Labor income (M\$) | Other property income (M\$) | Local tax (M\$) | State tax (M\$) | Federal tax (M\$) | Total tax (M\$) |
|---------------------------------------|-------------------|---------------------------|--------------------------------|--------------------|-----------------------------|-----------------|-----------------|-------------------|-----------------|
| Nursery & floriculture production     | 227,992           | 40,526                    | 26,452                         | 14,167             | 10,936                      | 742             | 1,087           | 3,442             | 5,271           |
| Lawn & garden equipment manufacturing | 87,405            | 30,879                    | 12,875                         | 6,863              | 5,280                       | 400             | 560             | 1,711             | 2,672           |
| Lawn & garden equipment wholesalers   | 41,974            | 10,353                    | 5,510                          | 3,086              | 1,954                       | 252             | 308             | 752               | 1,311           |
| Nursery & florist wholesalers         | 83,081            | 11,671                    | 8,355                          | 4,930              | 2,636                       | 421             | 501             | 1,191             | 2,113           |
| Retail garden stores                  | 269,529           | 41,369                    | 30,659                         | 13,498             | 12,317                      | 2,542           | 2,644           | 3,586             | 8,773           |
| Florists                              | 94,019            | 11,404                    | 6,840                          | 4,525              | 1,580                       | 391             | 452             | 1,032             | 1,875           |
| Landscape architectural services      | 83,754            | 18,299                    | 10,457                         | 6,937              | 3,012                       | 281             | 427             | 1,587             | 2,295           |
| Landscape services                    | 2,058,378         | 355,261                   | 201,621                        | 121,143            | 68,108                      | 6,745           | 9,250           | 28,790            | 44,785          |
| U.S. Total                            | 2,946,132         | 519,763                   | 302,768                        | 175,149            | 105,823                     | 11,776          | 15,228          | 42,091            | 69,095          |
| Direct Multiplier Effect              | 1,659,075         | 223,213                   | 136,576                        | 84,409             | 44,409                      | 4,739           | 6,416           | 19,716            | 30,872          |
| Indirect Multiplier Effect            | 511,532           | 135,590                   | 70,491                         | 39,966             | 25,284                      | 2,826           | 3,612           | 9,645             | 16,084          |
| Induced Multiplier Effect             | 775,526           | 160,960                   | 95,701                         | 51,723             | 36,130                      | 4,210           | 5,200           | 12,729            | 22,139          |

<sup>a</sup>Values are given in millions of dollars or fulltime and part-time jobs.

<sup>b</sup>Industry output is equivalent to business sales. Labor income represents employee wages and benefits and business owner (proprietor) income. Value added is equivalent to Gross Domestic Product (GDP), including labor income, other property income (interest, rents, royalties, corporate profits) and business taxes. State-local and federal taxes represent all forms of taxation at prevailing average rates. Economic measures are independent and should not be added together.

<sup>c</sup>Results include direct, indirect and induced regional multiplier effects from the IMPLAN software (Implan Group, LLC 2025).

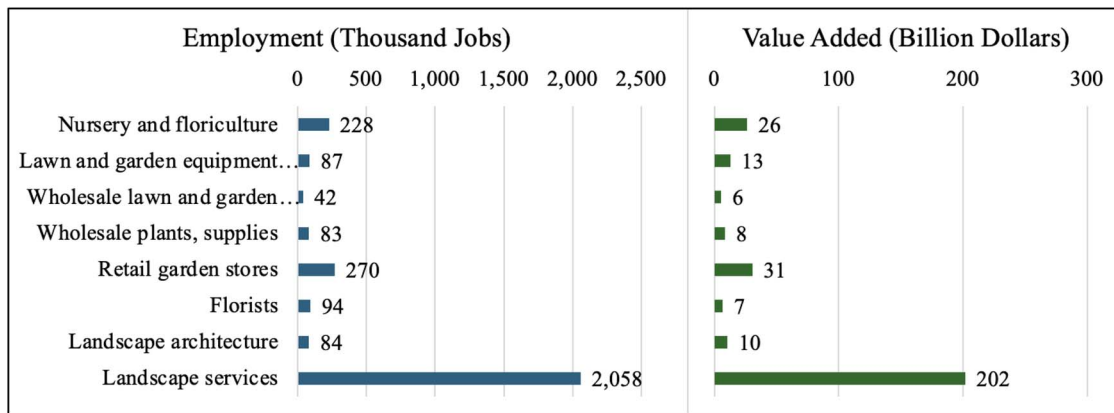


Fig. 3. Total employment and economic output contributions by U.S. green industry sectors in 2023.

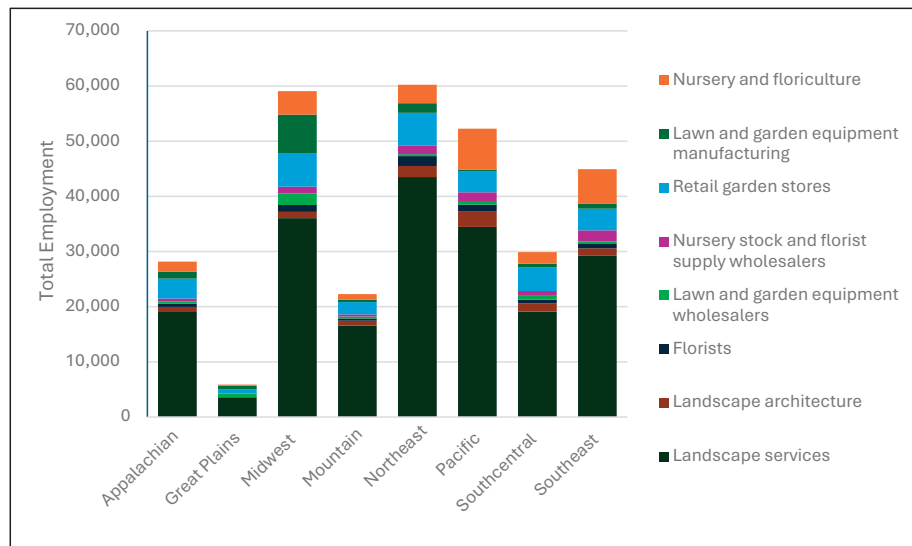


Fig. 4. Total employment contributions by U.S. green industry by sector and region in 2023.

jobs, \$15.6 B) (Table 3). Other states with employment contributions exceeding 40,000 jobs and output contributions over \$9.00 B included Georgia, Virginia, Washington, Massachusetts, Wisconsin, Maryland, Colorado, Arizona, Indiana, Tennessee, Minnesota, and Oregon. The top three states for value added, or GDP contributions, were California (\$37.5 B), Florida (\$27.3 B), and Texas (\$22.0 B).

Compared with 2018, the total U.S. green industry economic contributions in 2023 increased by 20.8% for labor income, 31.1% for value added (GDP), and 14.9% for industry output, with all values adjusted for inflation to 2023 dollars (U.S. Department of Commerce 2024a). Figure 5 illustrates these changes, showing steady growth across all three measures of economic contribution.



Fig. 5. Economic contribution estimates for 2023 compared to 2018 using the methodology from the 2023 study.

**Table 3. Summary of U.S. green industry economic contributions by state in 2023.**

| State <sup>z</sup>   | Employment<br>(Jobs) | Output <sup>y</sup><br>(M\$) | Value added<br>(M\$) | Labor<br>income (M\$) | Local tax<br>(M\$) | State tax<br>(M\$) | Federal tax<br>(M\$) | Total tax<br>(M\$) |
|----------------------|----------------------|------------------------------|----------------------|-----------------------|--------------------|--------------------|----------------------|--------------------|
| Alabama              | 35,383               | 5,855                        | 3,436                | 1,948                 | 140                | 178                | 471                  | 789                |
| Alaska               | 3,662                | 564                          | 334                  | 194                   | 14                 | 17                 | 47                   | 77                 |
| Arizona              | 55,817               | 9,431                        | 5,545                | 3,207                 | 225                | 287                | 771                  | 1,283              |
| Arkansas             | 20,209               | 3,099                        | 1,789                | 1,012                 | 77                 | 96                 | 245                  | 418                |
| California           | 338,841              | 63,385                       | 37,453               | 21,962                | 1,382              | 1,823              | 5,250                | 8,455              |
| Colorado             | 66,703               | 12,259                       | 7,119                | 4,193                 | 263                | 347                | 1,002                | 1,611              |
| Connecticut          | 38,882               | 7,403                        | 4,328                | 2,504                 | 169                | 218                | 602                  | 989                |
| Delaware             | 11,486               | 1,953                        | 1,140                | 666                   | 44                 | 57                 | 160                  | 261                |
| Florida              | 289,713              | 45,835                       | 27,323               | 15,888                | 999                | 1,322              | 3,806                | 6,127              |
| Georgia              | 80,024               | 14,467                       | 8,449                | 4,910                 | 328                | 425                | 1,179                | 1,931              |
| Hawaii               | 14,002               | 2,281                        | 1,337                | 789                   | 48                 | 64                 | 188                  | 300                |
| Idaho                | 23,070               | 3,789                        | 2,160                | 1,234                 | 87                 | 111                | 298                  | 496                |
| Illinois             | 109,302              | 21,449                       | 12,118               | 7,067                 | 452                | 594                | 1,695                | 2,741              |
| Indiana              | 56,415               | 9,187                        | 5,418                | 3,103                 | 226                | 285                | 749                  | 1,260              |
| Iowa                 | 23,635               | 3,644                        | 2,137                | 1,226                 | 87                 | 111                | 296                  | 493                |
| Kansas               | 25,914               | 4,276                        | 2,443                | 1,405                 | 98                 | 125                | 339                  | 561                |
| Kentucky             | 31,186               | 4,890                        | 2,900                | 1,652                 | 122                | 154                | 399                  | 675                |
| Louisiana            | 26,894               | 4,168                        | 2,513                | 1,411                 | 110                | 136                | 342                  | 588                |
| Maine                | 16,612               | 2,831                        | 1,657                | 953                   | 67                 | 85                 | 230                  | 382                |
| Maryland             | 61,545               | 11,454                       | 6,638                | 3,852                 | 258                | 334                | 925                  | 1,517              |
| Massachusetts        | 71,117               | 15,360                       | 8,893                | 5,233                 | 334                | 438                | 1,251                | 2,024              |
| Michigan             | 97,988               | 18,041                       | 10,374               | 5,924                 | 409                | 526                | 1,430                | 2,364              |
| Minnesota            | 52,740               | 10,012                       | 5,605                | 3,181                 | 216                | 280                | 770                  | 1,265              |
| Mississippi          | 17,239               | 2,483                        | 1,512                | 826                   | 76                 | 90                 | 202                  | 369                |
| Missouri             | 52,330               | 8,432                        | 4,928                | 2,804                 | 208                | 261                | 678                  | 1,147              |
| Montana              | 10,865               | 1,595                        | 937                  | 543                   | 38                 | 49                 | 131                  | 217                |
| Nebraska             | 20,548               | 3,783                        | 2,048                | 1,160                 | 80                 | 103                | 281                  | 465                |
| Nevada               | 29,580               | 4,764                        | 2,760                | 1,629                 | 104                | 136                | 389                  | 628                |
| New Hampshire        | 17,316               | 3,218                        | 1,903                | 1,102                 | 76                 | 97                 | 265                  | 438                |
| New Jersey           | 87,792               | 15,631                       | 9,061                | 5,306                 | 339                | 445                | 1,271                | 2,055              |
| New Mexico           | 10,857               | 1,450                        | 867                  | 497                   | 36                 | 46                 | 120                  | 202                |
| New York             | 122,679              | 23,734                       | 13,818               | 8,033                 | 552                | 708                | 1,928                | 3,188              |
| North Carolina       | 105,915              | 17,855                       | 10,362               | 5,966                 | 409                | 526                | 1,437                | 2,371              |
| North Dakota         | 6,653                | 1,070                        | 623                  | 354                   | 27                 | 34                 | 86                   | 146                |
| Ohio                 | 114,287              | 20,162                       | 11,371               | 6,491                 | 448                | 576                | 1,568                | 2,592              |
| Oklahoma             | 28,456               | 4,556                        | 2,728                | 1,527                 | 120                | 149                | 371                  | 640                |
| Oregon               | 59,022               | 10,786                       | 6,510                | 3,740                 | 240                | 316                | 897                  | 1,453              |
| Pennsylvania         | 104,736              | 17,672                       | 10,389               | 6,047                 | 411                | 529                | 1,450                | 2,390              |
| Rhode Island         | 12,539               | 2,287                        | 1,339                | 787                   | 49                 | 65                 | 188                  | 301                |
| South Carolina       | 43,696               | 7,290                        | 4,211                | 2,414                 | 168                | 216                | 582                  | 966                |
| South Dakota         | 8,102                | 1,314                        | 769                  | 426                   | 37                 | 44                 | 104                  | 185                |
| Tennessee            | 57,360               | 9,790                        | 5,683                | 3,256                 | 231                | 294                | 785                  | 1,311              |
| Texas                | 207,134              | 37,293                       | 21,999               | 12,746                | 884                | 1,130              | 3,062                | 5,076              |
| Utah                 | 35,515               | 5,503                        | 3,230                | 1,889                 | 124                | 162                | 452                  | 738                |
| Vermont              | 7,604                | 1,215                        | 739                  | 415                   | 34                 | 42                 | 101                  | 177                |
| Virginia             | 80,868               | 13,882                       | 8,104                | 4,685                 | 321                | 412                | 1,126                | 1,859              |
| Washington           | 66,722               | 11,271                       | 6,654                | 3,824                 | 262                | 337                | 921                  | 1,520              |
| West Virginia        | 12,904               | 1,890                        | 1,130                | 645                   | 48                 | 60                 | 156                  | 265                |
| Wisconsin            | 65,058               | 13,762                       | 7,121                | 4,018                 | 261                | 344                | 977                  | 1,582              |
| Wyoming              | 6,336                | 890                          | 535                  | 303                   | 23                 | 29                 | 73                   | 125                |
| District of Columbia | 2,881                | 554                          | 327                  | 200                   | 13                 | 17                 | 47                   | 77                 |
| <b>U.S. Total</b>    | <b>2,946,132</b>     | <b>519,763</b>               | <b>302,768</b>       | <b>175,149</b>        | <b>11,776</b>      | <b>15,228</b>      | <b>42,091</b>        | <b>69,095</b>      |

<sup>z</sup>National estimates allocated to states in proportion to direct employment. Contributions include indirect and induced regional multiplier effects.

<sup>y</sup>Results include direct, indirect and induced regional multiplier effects from the IMPLAN software (Implan Group, LLC).

Figure 5 presents economic contribution estimates compiled for both 2018 and 2023 using comparable sources and methods. The output of the industry expanded from \$452.5 B in 2018 to \$519.8 B in 2023, while value added increased from \$231.0 B to \$302.8 B, and labor income rose from \$145.0 B to \$175.1 B during this period with values adjusted for inflation using the GDP Implicit Price Deflator (U.S. Department of Commerce 2024a). The industry's diversity makes it uniquely sensitive to broader

economic conditions, with production, service, and retail segments each responding differently to cycles in housing and changes in consumer preferences and discretionary spending. These results demonstrate that, despite lingering structural challenges in some sectors, the green industry has continued to grow in both absolute and relative economic importance in the U.S.

Beyond its direct effects, the U.S. green industry supports employment across a wide range of related industries

**Table 4. Summary of green industry economic contributions by U.S. region in 2023.**

| Region <sup>z</sup> | Employment<br>(jobs) | Output <sup>y</sup><br>(M\$) | Value<br>added (M\$) | Labor<br>income (M\$) | Local tax<br>(M\$) | State tax<br>(M\$) | Federal tax<br>(M\$) | Total<br>tax (M\$) |
|---------------------|----------------------|------------------------------|----------------------|-----------------------|--------------------|--------------------|----------------------|--------------------|
| Midwest             | 571,754              | 104,689                      | 59,072               | 33,814                | 2,307              | 2,977              | 8,162                | 13,445             |
| Northeast           | 555,189              | 103,312                      | 60,233               | 35,097                | 2,348              | 3,035              | 8,417                | 13,800             |
| Pacific             | 482,249              | 88,287                       | 52,288               | 30,510                | 1,946              | 2,558              | 7,302                | 11,806             |
| Southeast           | 466,054              | 75,930                       | 44,932               | 25,987                | 1,712              | 2,230              | 6,241                | 10,183             |
| Southcentral        | 293,549              | 50,565                       | 29,895               | 17,194                | 1,227              | 1,557              | 4,140                | 6,924              |
| Appalachian         | 288,232              | 48,307                       | 28,179               | 16,204                | 1,131              | 1,446              | 3,903                | 6,480              |
| Mountain            | 227,886              | 38,231                       | 22,286               | 12,997                | 864                | 1,119              | 3,116                | 5,099              |
| Great Plains        | 61,218               | 10,442                       | 5,883                | 3,346                 | 242                | 306                | 810                  | 1,358              |

<sup>z</sup>Regional results were aggregated from state-level results.

<sup>y</sup>Results include direct, indirect and induced regional multiplier effects from the IMPLAN software (Implan Group, LLC).

through indirect and induced economic activity (Table 5). These impacts highlight the extensive supply-chain and household spending linkages generated by the sector. The largest supported industry in 2023 was real estate (NAICS 429), with 70,922 jobs created through indirect and induced effects. Employment services (NAICS 454) followed closely with 49,686 jobs, reflecting the industry's role in generating demand for labor placement and contracting services. Logistics-related sectors were also strongly impacted, with warehousing and storage (NAICS 404, 34,031 jobs), couriers and messengers (NAICS 403, 31,673 jobs), and truck transportation (NAICS 399, 19,922 jobs) all showing significant contributions. Professional and management services also benefitted substantially. The green industry supported legal services (NAICS 437, 21,085 jobs), management of companies and enterprises (NAICS 451, 22,707 jobs), and insurance agencies and brokerages (NAICS 427, 19,154 jobs). In addition, support activities for agriculture and forestry (NAICS 19, 23,715 jobs) and commercial and industrial machinery repair (NAICS 497, 11,846 jobs) demonstrate how the sector drives activity in both upstream agricultural services and downstream equipment maintenance.

In conclusion, taken together, these results underscore that the green industry not only represents a major direct contributor to the U.S. economy but also serves as an engine for growth in complementary industries ranging from real estate and logistics to professional services and manufacturing support. During the 1980s and 1990s, the green industry ranked among the fastest-growing sectors of the U.S. economy, fueled by robust demand for ornamental plants, landscaping, and related products and services

associated with commercial and residential development and rising affluence. However, recent trends suggest that consumer demand is maturing, with growth now concentrated in certain sectors while traditional sectors continue to contract.

Although growth has moderated compared to earlier decades (Hall 2010, Hall et al. 2020), the green industry continues to demonstrate resilience in the face of economic challenges. The severe recession of 2008–09 and the COVID-19 pandemic in 2020 placed considerable financial strain on many businesses, but the industry has since recovered and expanded strongly, particularly in the landscaping and retail sectors. While some traditional sectors such as florists and nursery production have contracted, the industry as a whole remains a vital contributor to both the national and regional economies.

The green industry is broad-based, with landscape services and wholesale–retail trade present in virtually all communities across the nation. In contrast, production and manufacturing sectors are concentrated in certain states and contribute disproportionately through out-of-state shipments that bring new money into local economies. These findings are critical as a precursor to further structure–conduct–performance analyses assessing the dynamics affecting the industry, as well as the broader economy. Industry participants now have access to up-to-date data to guide strategic decisions regarding future investments, while policymakers are better equipped to make informed choices about the efficient allocation of resources among competing industries and interests.

**Table 5. Top 10 domestic industries supported by the U.S. green industry in 2023**

| Industry (NAICS code)                                                          | Indirect impact<br>employment | Induced impact<br>employment | Total impact<br>employment |
|--------------------------------------------------------------------------------|-------------------------------|------------------------------|----------------------------|
| Real estate (429)                                                              | 47,599                        | 23,322                       | 70,922                     |
| Employment services (454)                                                      | 33,202                        | 16,484                       | 49,686                     |
| Warehousing and storage (404)                                                  | 26,964                        | 7,067                        | 34,031                     |
| Support activities for agriculture and forestry (19)                           | 21,438                        | 2,277                        | 23,715                     |
| Couriers and messengers (403)                                                  | 20,671                        | 11,002                       | 31,673                     |
| Legal services (437)                                                           | 14,154                        | 6,931                        | 21,085                     |
| Management of companies and enterprises (451)                                  | 11,635                        | 11,072                       | 22,707                     |
| Truck transportation (399)                                                     | 11,610                        | 8,312                        | 19,922                     |
| Insurance agencies, brokerages, and related activities (427)                   | 11,500                        | 7,653                        | 19,154                     |
| Commercial and industrial machinery and equipment repair and maintenance (497) | 9,904                         | 1,942                        | 11,846                     |

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