The Economic Impact Study of Plant-Based Industries and Agriculture in Rhode Island

Total Annual Economic Impact
$1.78 Billion

Total Green Industry Businesses
2,812

Total Jobs Impact
12,372

“Rhode Island is the smallest state in the union, but among the most diverse in terms of agricultural production and plant-based industry. Despite the state’s small size, estimating the economic impact of these sectors has proven difficult. At the outset of this study, a number of public officials indicated that reliable estimates of economic impacts were unavailable, and local industry groups claimed that the relevant, published Federal government estimates were too low.

“In addition, plant-based industry, as a group, defies standardized industry classification systems (e.g. SIC, NAICS) because these businesses reside under such disparate categories as retail, wholesale, services, and entertainment. As a result, the impact of these businesses may be both underestimated and improperly aggregated for the purpose of current policy discussions. This study attempts to fill the knowledge gap surrounding the economic impact of agriculture and plant-based industry in Rhode Island and to correct any misinformation or misconceptions that may exist.

“Plant-based industries and agriculture are included together in this study because of their long interconnected histories in Rhode Island. While a common perception is that agriculture exists primarily to produce food, fiber and fuel, the 2007 Agricultural Census found that RI agriculture generated 61.8% of gross sales from nursery, greenhouse, floriculture and sod production, and our own data were roughly consistent with this percentage... Our conservative estimate of $170.6 million in annual agricultural revenues is more than two and a half times the USDA’s 2007 estimate of $65.9 million, implying that Rhode Island farmers may produce 66% of their economic impact via direct interaction with consumers.”

This study combined 1,100 green-related business listings from various sources with industry profile data and listings from the USDA Agricultural Census, the Rhode Island Department of Environmental Management, and the Rhode Island Secretary of State.

All the missing businesses were extrapolated according to highly conservative practices to avoid any overconfidence in the estimates. The study also does not include many related businesses in Forestry, Wood Products, Fisheries, Aquaculture or Marine Resources. All estimated values are considered lower bounds.

### Economic Impact by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Firms</th>
<th>Output</th>
<th>Indirect †</th>
<th>Total</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1,219</td>
<td>$170,650,704</td>
<td>$97,452,764</td>
<td>$268,103,468</td>
<td>15.00%</td>
</tr>
<tr>
<td>Landscape</td>
<td>1,030</td>
<td>$339,092,273</td>
<td>$275,772,707</td>
<td>$614,864,980</td>
<td>34.50%</td>
</tr>
<tr>
<td>Retail</td>
<td>454</td>
<td>$290,565,507</td>
<td>$206,010,945</td>
<td>$496,576,452</td>
<td>27.90%</td>
</tr>
<tr>
<td>Golf Courses</td>
<td>62</td>
<td>$144,562,489</td>
<td>$120,709,686</td>
<td>$265,272,184</td>
<td>14.90%</td>
</tr>
<tr>
<td>Other</td>
<td>47</td>
<td>$82,420,500</td>
<td>$55,000,858</td>
<td>$137,421,358</td>
<td>7.70%</td>
</tr>
<tr>
<td>Total</td>
<td>2,812</td>
<td>$1,027,291,483</td>
<td>$754,946,959</td>
<td>$1,782,238,442</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

* † - Indirect output created in other sectors

---

**Our Study vs. Federal Estimates**, Select Sectors

* - 2007 Data are sourced from the Census Bureau’s 2007 Economic Census and the USDA’s 2007 Agricultural Census.
# Study Findings

## Jobs Impact by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Firms</th>
<th>Jobs</th>
<th>Indirect Jobs †</th>
<th>Total Jobs</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1,219</td>
<td>1,792</td>
<td>542</td>
<td>2,334</td>
<td>18.90%</td>
</tr>
<tr>
<td>Landscape</td>
<td>1,030</td>
<td>3,034</td>
<td>1,203</td>
<td>4,237</td>
<td>34.20%</td>
</tr>
<tr>
<td>Retail</td>
<td>454</td>
<td>1,723</td>
<td>739</td>
<td>2,462</td>
<td>19.90%</td>
</tr>
<tr>
<td>Golf Courses</td>
<td>62</td>
<td>1,872</td>
<td>940</td>
<td>2,812</td>
<td>22.70%</td>
</tr>
<tr>
<td>Other</td>
<td>47</td>
<td>287</td>
<td>240</td>
<td>527</td>
<td>4.30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,812</td>
<td>8,708</td>
<td>3,664</td>
<td>12,372</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

† - Indirect output (jobs) created in other sectors

## Our Study vs. Federal Estimates, Select Sectors

* - 2007 Data are sourced from the Census Bureau's 2007 Economic Census and the USDA's 2007 Agricultural Census
What Makes Up Plant-Based Industries and Agriculture in RI?

For the purposes of this Economic Impact Study, Plant Based Industries and Agriculture are defined as Rhode Island businesses whose foundation is reliant on natural resources use and/or plants, including:

**Agriculture**
- Food / Feed / Fiber / Fuel crops
- Dairy & Livestock
- Nurseries
- Cut Flower Growers
- Sod Growers

**Retail Supply & Florists**
- Retail Lawn & Garden Centers
- Florists
- Landscape Supplies
- Outdoor Power Equipment
- Plant Brokers

**Landscape**
- Arborists
- Parks & Recreation
- Lawn & Landscaping Services
- Landscape Architects & Designers
- Masonry Contractors

**Golf Courses**
- Public Golf Courses
- Private Country Clubs

**Other**
- Agriculture Support Industries
- Farm Product Wholesalers
- Landscape-Related Contractors
- Cemeteries

This is the first consolidated effort to assess the true impact of green industry to Rhode Island by

Rhode Island Nursery & Landscape Association
Rhode Island Turfgrass Foundation
Rhode Island Agricultural Partnership
Rhode Island Department of Environmental Management
URI College of Business and College of the Environment and Life Sciences
Rhode Island Economic Development Corporation

The alliance of organizations participating in the survey would like to thank Dr. Thomas Sproul, URI Dept. of Environmental and Natural Resource Economics for providing statistical analysis of survey results.

Rhode Island Department of Environmental Management and The van Beuren Charitable Foundation for their generous financial support.