

# Economic Importance OF THE Iowa Egg Industry

## EXECUTIVE SUMMARY

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# INTRODUCTION

In 2008, Iowa State University was commissioned by the Iowa Egg Council to analyze the Iowa egg industry's economic impact to the state of Iowa. Since that time, the report has been periodically updated to ensure the impact remains pertinent. Funding for this update was received from the Iowa Egg Council, Iowa Soybean Association, and the Iowa Area Development Group.

The objectives of the report are to:

- Describe the Iowa and US egg production and prices trends.
- Provide estimates of the total economic contribution of egg production and processing to Iowa.
- Identify competitive advantages and considerations for the future of the Iowa egg industry.

## Size of Iowa's egg industry and total economic contributions (direct/indirect/total value added)

Iowa is the largest egg-producing state in the US, **57.7 million** layers in Iowa produced **16.4 billion** eggs in 2018, which represented **17%** of the US table egg production.

This level of production utilizes **57.8 million** bushels of corn (valued at \$196.8 million) and **531,317 tons** of soybean meal (valued at \$171.8 million) to feed the laying hens and growing pullets.

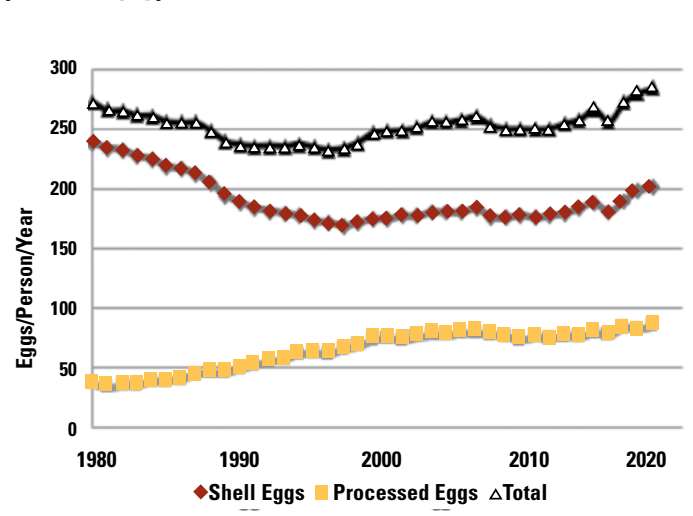
Eggs produced and marketed in Iowa in 2018 had a value of over **\$1.333 billion**; including hatchery eggs for export (\$34.5 million), eggs for the shell market (\$499 million), and liquid eggs (\$799.3 million).

Iowa egg industry grew **6.8 fold** from 1988 to 2007.

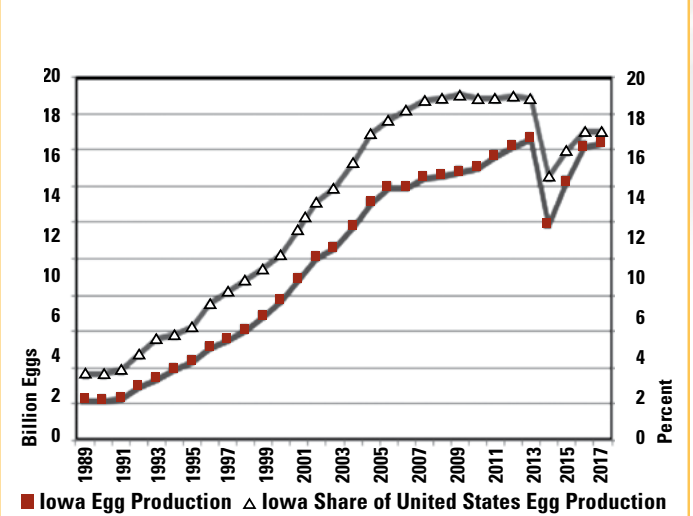
The 2017 Census of Agriculture reports **4,425** egg-producing farms in Iowa; however, 92% have fewer than 100 layers, serving local and niche markets like free-range, organic and farm-fresh.

The Iowa egg industry generated **\$2.62 billion** in total industrial output in the state in 2018, \$788 million (30%) of this output represents value-added.

**Figure 1.1 United States per capita egg consumption by processing type.** Source: USDA Economic Research Service



**Figure 1.2 Iowa egg production and share of US production.** Source: USDA National Agricultural Statistics Service



## Iowa egg's job contributions and wage comparisons

**58** commercial chicken egg production facilities employing **2,398** people.

Wages paid by Iowa's commercial egg industry is over **\$110 million** in direct wages to those who work within the industry, and a total of **\$450 million** payroll is created by the egg industry when indirect and induced effects are taken into account.

Average annual pay for workers is **\$45,967**.

The egg industry generated an additional **2,647** indirect jobs in industries that supplied inputs for egg production.

The **2,398** direct jobs created by the egg industry and **2,647** indirect jobs induced another **2,039** jobs in industries that provides goods and services to households such as home construction and sales, auto sales, grocery stores, etc.).

In totality, the egg industry supported **7,084** jobs in Iowa.

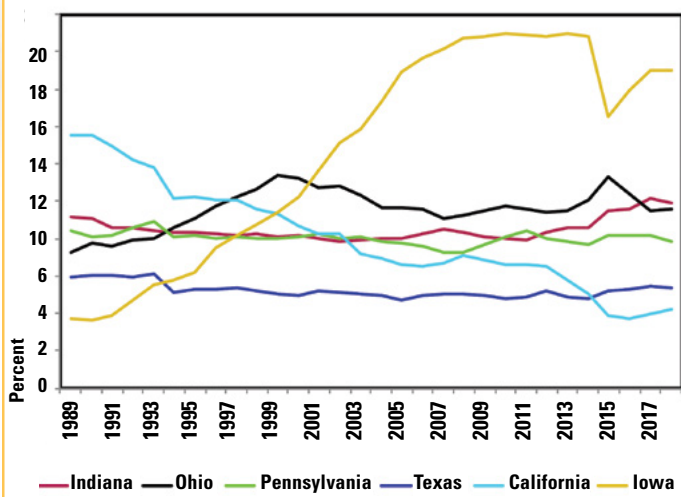
**1.9** additional jobs are supported by the egg industry for every job directly created.

### Iowa's advantages

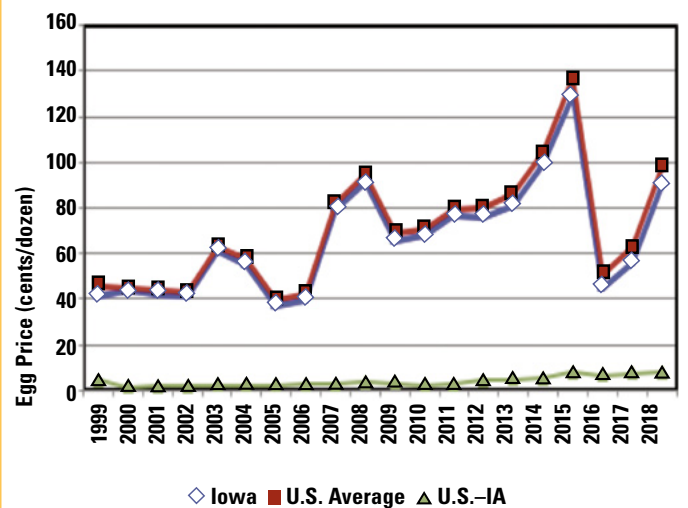
**Low cost of production:** Ready access to feed provides Iowa a competitive advantage because of lower cost of production. Iowa's cost of production per dozen eggs is nearly 4 cents lower than a dozen eggs produced in Pennsylvania and over 21 cents cheaper than eggs produced in California.

**Processed eggs:** A national trend toward processed egg use benefits Iowa because it reduces transportation costs relative to shipping shell eggs for retail sales. With 70% of Iowa's eggs delivered in liquid form, producers take advantage of plentiful and inexpensive local feed supplies and optimize transportation costs to more distant population centers. Converting eggs to liquid form also allows producers to add those processing facilities to their operation, providing a value-added function to their farms.

**Figure 1.3 Market share of the top five egg producing states and California, 1988–2018.** *Source: USDA National*



**Figure 1.4 Egg producers price in Iowa and US average (excluding California).**



## An eye toward the future (challenges to watch)

**Alternative production systems:** Cage-free and other alternative hen housing systems require major investments in new facilities in order to comply with customer requirements and regulations in states where eggs are sold. This investment is often being made despite of great uncertainty about marketing outlets, increased egg production costs, increased footprints of facilities and labor shortages. Additional requirements for hens to have access to outdoor spaces throughout the year would add additional costs beyond these investments and would be especially challenging during winter in Iowa.

**Labor:** Iowa has one of the lowest unemployment rates in the US. Recruiting and retaining specialized labor into the rural settings of most operations is challenging, especially if an increased number of employees is needed for cage-free or alternative housing systems. Development of new technologies including automation and robotics could help offset this challenge for rural areas, as well as any effort possible to make rural living more appealing.

**Volatile markets:** Changes in prices of eggs delivered to the store have fluctuated greatly since the end of 2014, affecting the capacity of producers to plan for large investments ahead

**Transportation costs:** cost of transporting eggs to major population areas is the main competitive disadvantage of Iowa, any change increasing trucking costs would affect Iowa's competitive position.

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