

LOCAL FOOD ECONOMICS FACT SHEET

HOW MUCH DO US SCHOOL DISTRICTS PAY FOR LOCAL APPLES?

This fact sheet focuses on procurement of local foods by districts to serve their students in the form of breakfasts, lunches, or snacks, and the prices school districts pay for a commonly purchased farm to school food—apples.

Apple Prices over Time

The two graphs below show the weekly average apple prices in each state. We see that most of the time, the price paid by districts for local apples is higher than the wholesale price at the nearest shipping point.

Weekly Apple Averages

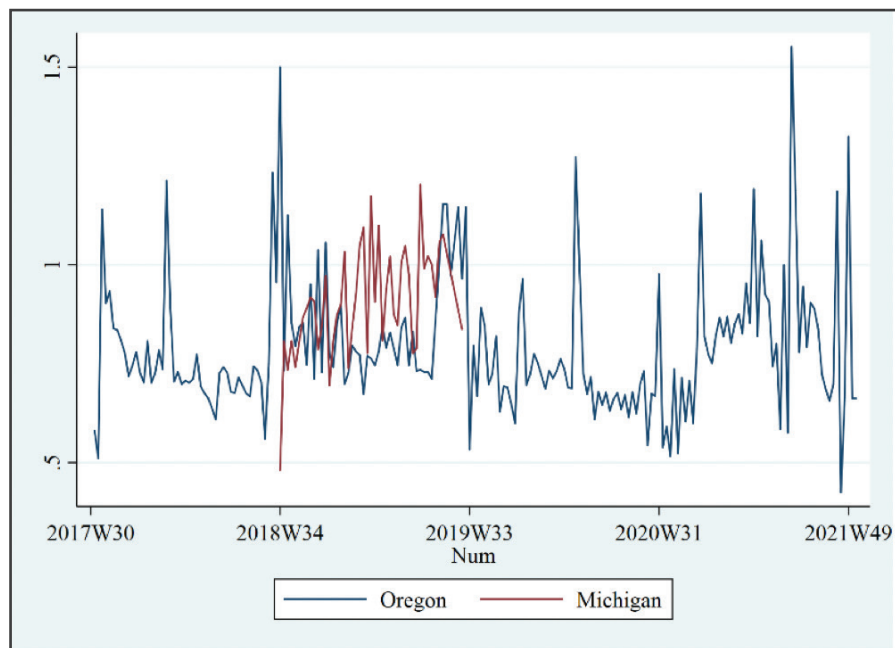


Figure 1. Weekly Average Apple Price Paid in Oregon and Michigan (USD/pound)

Apple Prices and Location

Although apple prices in Oregon and Michigan are connected via the national (and global) markets for apples, the prices for locally produced apples are different in each state because they are impacted by the supply of and demand for locally produced apples in each state.

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Key Takeaways

- » School districts are willing to pay a price premium for apples produced in-state.
- » Price premiums are higher for characteristics valued by schools.
- » In-state prices vary considerably across states.



State	Mean Price (USD/Pound)	Mean Price Premium (USD/Pound)	Mean as % of USDA Price
Michigan	0.86	0.23	44%
Oregon	0.78	0.16	41%

Table 1. Apple Prices and Premiums Paid by School Districts

Apple Prices and Apple Characteristics

Just like consumers at the grocery store, districts pay a higher price for characteristics they prefer. Districts pay the highest prices for Honeycrisp and Granny Smith apples, while they pay the highest price premium for Red Delicious apples, suggesting school districts prefer Red Delicious more than other buyers in the wholesale market.

They pay the highest price for medium apples (relative to small and large), but the highest price premium for small apples, suggesting school districts prefer small apples more than other buyers in the wholesale market. This makes sense because if districts are serving apples as small apples, they want them to be a size students are willing to eat to keep costs (and waste) lower. This holds across both states for the time periods we observe.

Most apples are sold to school districts through intermediated markets (meaning there is at least one intermediary between the farmer and the school district that will get a share of the apple price we observe). Districts pay a higher price for apples they purchase directly from farmers in Michigan, while in Oregon we see the opposite.

State	Mean Farm Direct Price (USD/Pound)	Mean Farm Indirect Price (USD/Pound)
Michigan	1.02	0.84
Oregon	0.74	0.79

Table 2. Apple Prices by Market Channel

What is Farm to School?

FTS activities take place in the cafeteria (e.g., procurement of local foods and cafeteria promotions), the classroom (e.g., integrating nutrition and/or agricultural education), or outside the classroom (e.g., school gardens, farm visits).

USDA Farm to School Census

U.S. Department of Agriculture's Food and Nutrition Service (USDA FNS) conducted the third Farm to School Census, for the school year 2018-19, to better understand participation in FTS activities, challenges, expenditures, and future needs, surveying every SFA that participates in the USDA FNS National School Lunch Program.

Funding provided by:

Award number 2021-68006-34029

Document last edited 9-26-22



Data Sources:

The data come from the states of Oregon and Michigan. Both states fund state-level reimbursement programs that provide funds to support local food procurement by schools. Data shared with us by partners in Oregon and Michigan come only from those schools that receive these reimbursement funds. For more details on which school districts receive reimbursement funds, see O'Hara et al. (2022). The data include every transaction for apples in the years from 2018 to 2019 (Michigan) and from 2017 to 2021 (Oregon). We also use shipping point data from USDA's Market News portal for comparison. The shipping points used for comparison are Yakima, WA (for Oregon apples) and Benton Harbor, MI (for Michigan apples).