

# **IMPACT OF COVID-19 ON THE WASHINGTON APPLE INDUSTRY**

**R. Karina Gallardo  
SCHOOL OF ECONOMIC SCIENCES  
WASHINGTON STATE UNIVERSITY**

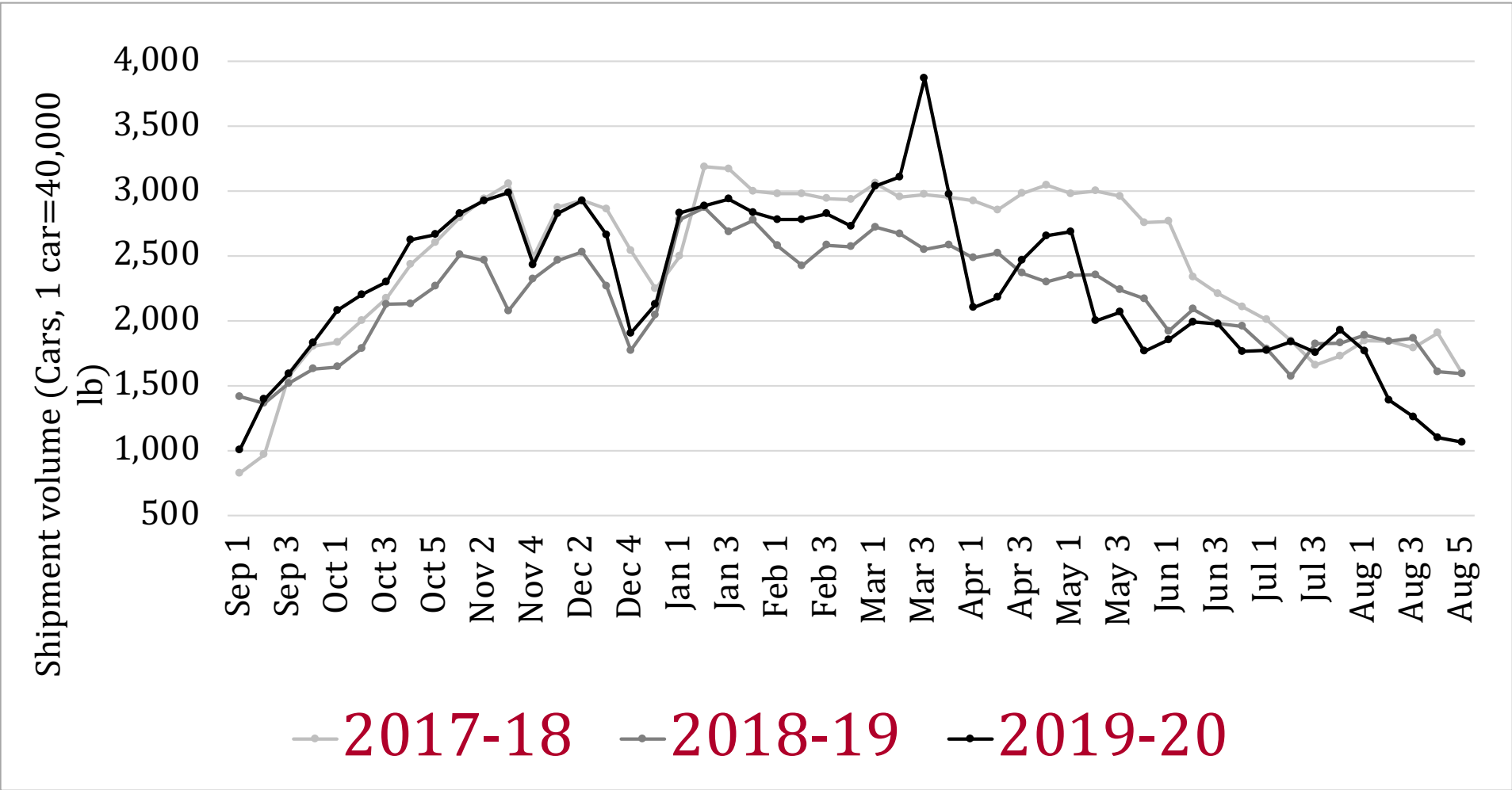
# Background

- The first confirmed case of COVID-19 in the United States was announced in Washington State on Jan 21, 2020.
- By March-April, the most affected areas were King county-West side of the state.
- By June 2020, Eastern WA was heavily affected – Yakima county.

# COVID-19 and the food supply chain

- The COVID-19 pandemic has severely disrupted the food supply chain, preventing farmers from getting their products to the market at a normal pace.
  - Empty shelves at supermarkets.
  - Farmers dumping milk.
  - Crops left unharvested in the fields.
  - Restaurants, food services closed or downsized.

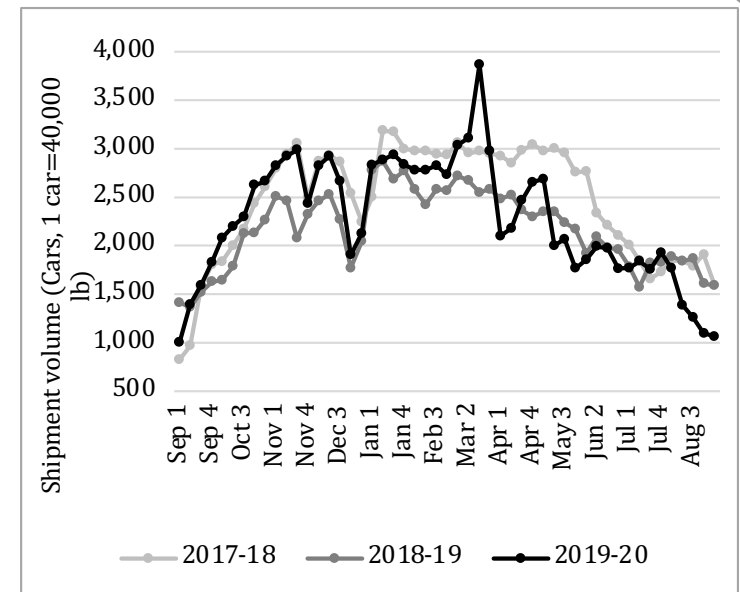
# Comparisons of apple shipments' quantities.



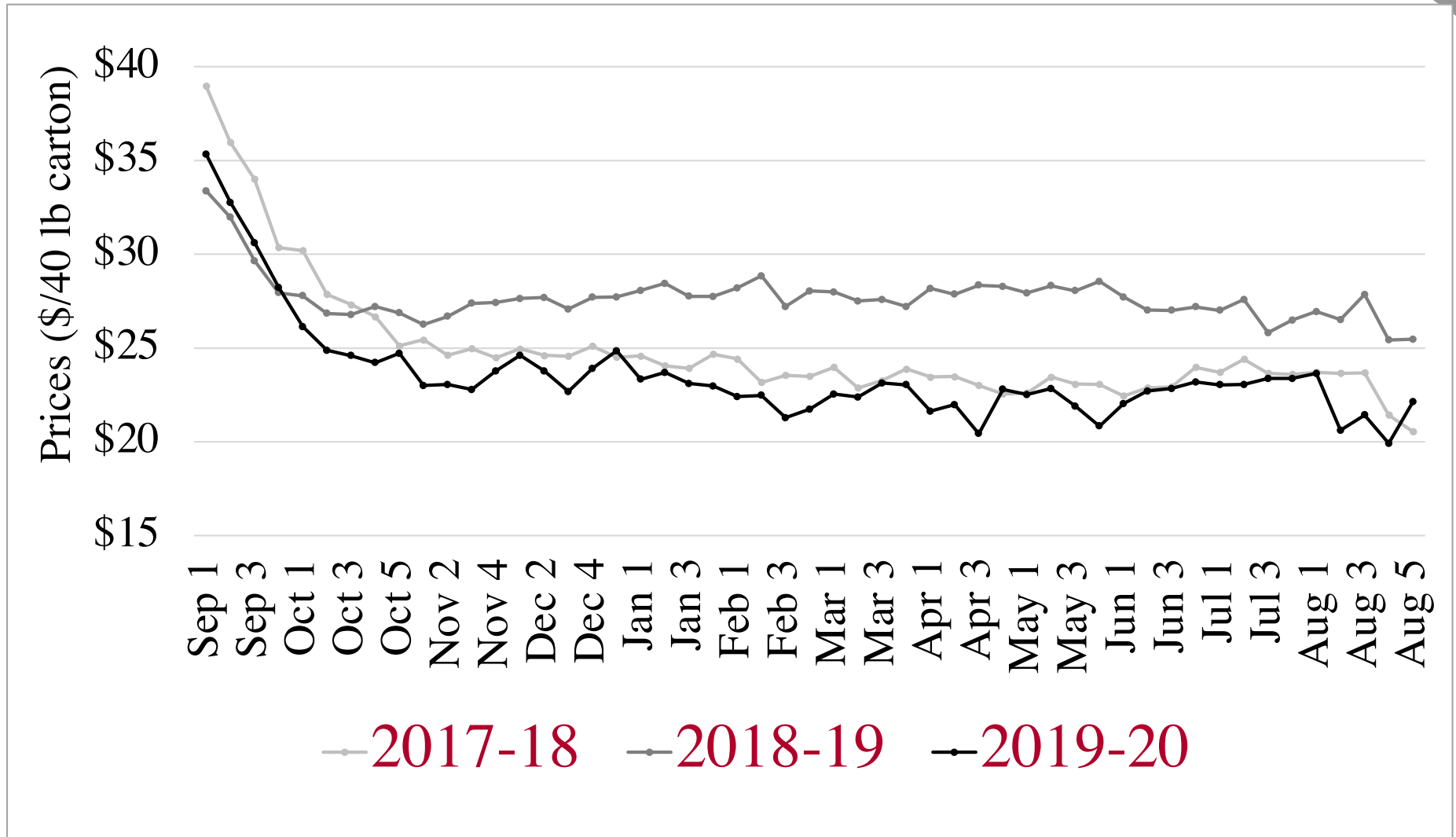
Data source: WSTFA, 2020

# Comparisons of apple shipments' quantities (cont.)

- Average shipment volumes:
  - 2017-2018: 2,466 cars (1 car=40,000 lb or 1,000 40 lb boxes)
  - 2018-2019: 2,170 cars
  - 2019-2020: 2,280 cars.
- On avg. shipment volumes for 2019-2020 were not statistically significant from volumes in 2017-2018 and 2018-2019.
- More volatility in shipments is observed 2019-2020 compared to the other two years.

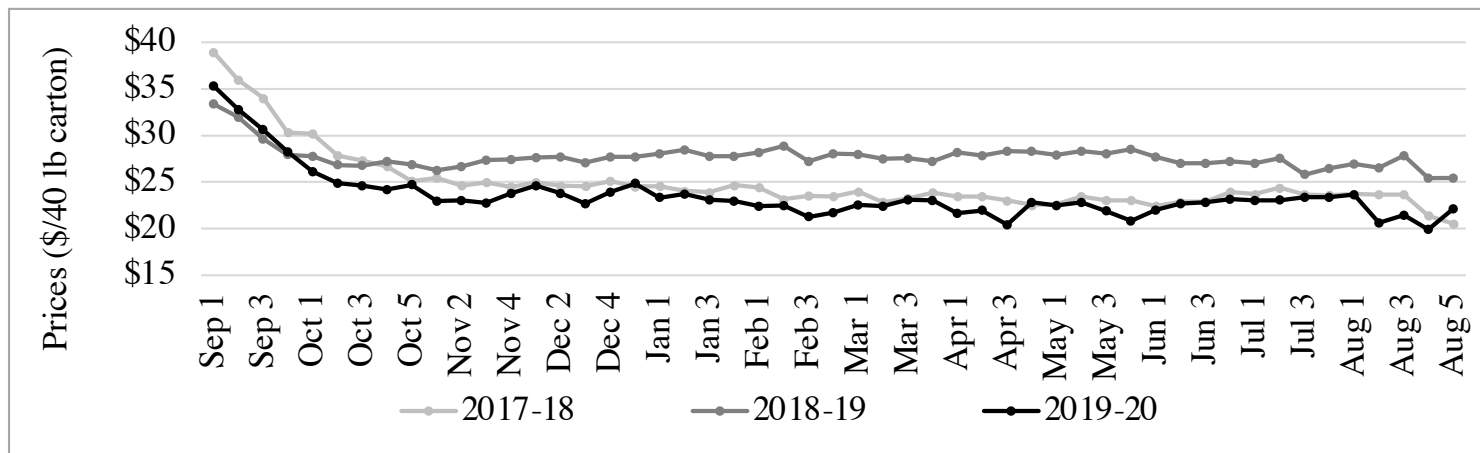


# Comparisons of apple shipments prices



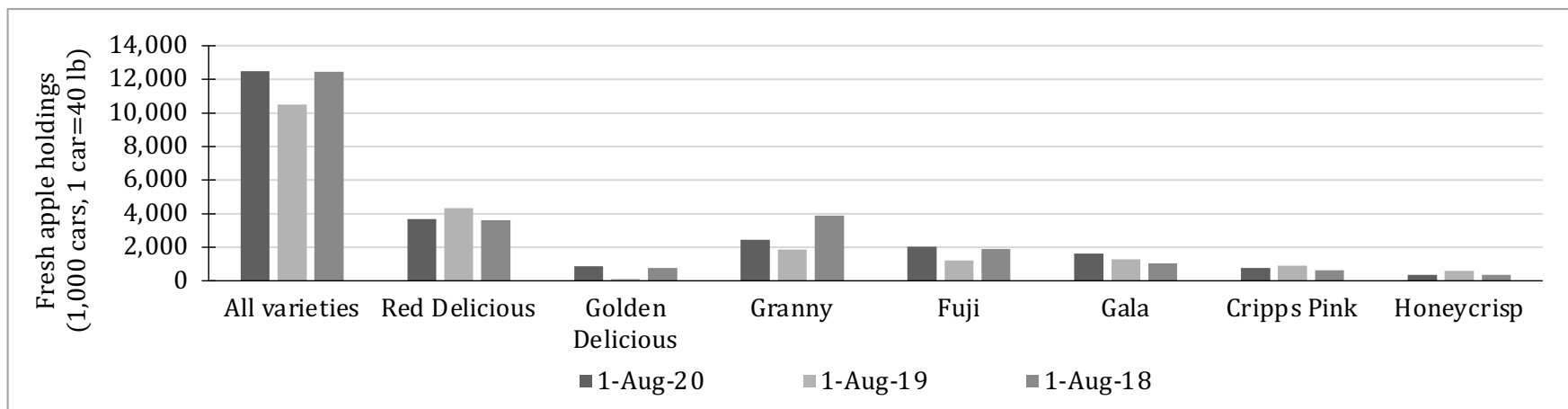
# Comparisons of apple shipments prices (cont.)

- Average FOB (Free on Board) price for all Washington grown apple varieties
  - 2017-2018: \$24.9/40 lb box
  - 2018-2019: \$27.7/40 lb box
  - 2019-2020: \$23.6/40 lb box.
- The average price in 2019-2020 was on average \$4.1 /40 lb box lower than 2018-2019, and \$1.3 /40 lb box lower than 2017-2018.



# Inventories

- August 1, 2020: Washington apple inventories was 12.5 million 40 lb boxes:
  - 19% higher than the inventory left on August 1, 2019 at 10.5 million 40 lb boxes
  - 0.4% higher than the inventory left on August 1, 2018 at 12.4 million 40 lb boxes.
- The inventory left by the end of 2019-2020 was not significantly different to the inventory left by the end of 2017-2018 (the crop size of 2017-2018 was similar in volume to the crop size of 2019-2020).



Data source: WSTFA, 2020



## COVID-19 costs

- To date, we do not have an accurate estimate in dollars per acre or dollars per box of the increased production and packing costs associated with COVID-19.
- Costs can be divided in the following categories:
  - (1) Labor related: Bonus/performance pay, health insurance increases, COVID-19 employee training, additional cleaning and sanitation personnel, time by managers to deal with COVID-19 policies, additional employees to conduct wellness checks, take employees' temperatures, conduct surveillance on handwashing, or provide transportation to work site.

## COVID-19 costs-categories

(2) Sanitization materials: Personal protective equipment such as masks, additional sanitation chemicals, hand sanitizer, thermometers, and investment in technologies for worker health checklists.

(3) Housing related: Reduced capacity (e.g., a unit that used to house ten workers but can now only house five) and/or in obtaining additional housing or making changes to existing housing (sleeping areas, dining areas, etc.) to meet state or federal COVID-19 guidelines for social distancing, costs to secure housing to be used to isolate any workers that test positive for COVID-19.

## COVID-19 costs-categories

(4) Yield reduction costs: Crop left unharvested in the field.

(5) Quality reduction costs: Smaller fruit sizes, decreased grade, and any quality related price reduction due to delays in growers' ability to conduct horticultural practices, such as pruning or thinning due to worker absences or shortages caused by COVID-19.

### **Costs at the packinghouse:**

- Labor related costs, sanitization materials, productivity related like shutdown times, changes to existing facilities, and increased fruit loss in storage

## COVID-19 relief

- The U.S. government launched programs to help farmers cope with the pandemic ([Coronavirus Food Assistance Program](#) CFAP).
  - CFAP1 that opened on May 26 and that accepted applications until October 9, 2020.
  - CFAP2 that applies from September 21 to December 11, 2020.
- CFAP1 specialty crop eligibility:
  - Crops suffered 5 percent or greater price decline between January 15 and April 15, 2020
  - Crops that left the farm by April 15 but suffered spoilage due to disturbances in the marketing channel
  - Shipments did not leave the farm or remained unharvested, by April 15

## CFAP1 – Specialty crops

- Apples and pears were technically eligible for all three categories, while sweet cherries did not appear in the list.
- In practice, it was not possible for Washington state apple and pear growers to qualify to categories 2 and 3, based on how the program was designed.
- The only payments received were for category 1. Considering the average price for all Washington apple varieties at \$23.7/40 lb box in mid-January and at \$21.97/40 lb box in mid-April, the decline in prices for all varieties, was 8%.

## CFAP2 – Specialty crops

- CFAP2 is directed to agricultural producers “who continue to face market disruptions and associated costs because of COVID-19”.
- Under CFAP2 payments for apples will be based on the producer’s 2019 gross sales in a declining block format using payment factors.
- According to the language in the CFAP2, the sales value “may include basic packaging for wholesale or bulk transportation”. However, does not include additional packinghouse charges such as sorting, packaging, and marketing, for which Washington growers’ gross sales are deducted.

Source: USDA CFAP, 2020.

# Conclusions

- COVID-19 impacted tree fruit production by increasing the volatility of the quantities supplied especially around the weeks that marked the beginning of the pandemic.
- In 2019-2020, Washington state apple prices have decreased compared to previous years especially compared to 2017-2018, a year with a comparable crop size.
- The decrease in prices and increases in production costs (mainly increases in labor costs) adds stressors to the Washington apple industry and the consequences are yet to be seen.

**R. KARINA GALLARDO**

**[KARINA\\_GALLARDO@WSU.EDU](mailto:KARINA_GALLARDO@WSU.EDU)**

**[HTTPS://PEOPLE.SES.WSU.EDU/GALLARDO](https://people.ses.wsu.edu/gallardo)**

**253-445-4584**

**WSU – PUYALLUP**