THE WEBINAR WILL BEGIN SOON

An Agriculture and Food Research Initiative project funded by the US Department of Agriculture National Institute of Food and Agriculture.

Lessons from COVID-19: Consumers' Interactions with the Food Supply Chain

November 18th, 2021 | 1:00 pm CT

Welcome to Our Project Webinar Series

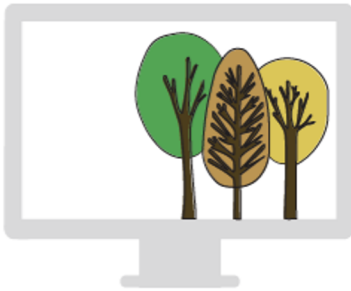
University of Minnesota

University of Wisconsin-Madison

UF University of Florida

UCI University of California, Irvine

Kansas State University



Project Webinar Series

"Lessons from COVID-19: Positioning Regional Food Supply Chains for Future Pandemic, Natural Disasters and Human-made Crises" is **one of 17** projects funded by the USDA NIFA AFRI Rapid Response to COVID-19 Program.

Project period: Sept 2020-August 2022

4-part webinar series (Jan-28, Jun-17, Nov-18, Apr-21)

You are not only our audience but a valuable contributor to our project!

Agenda for Today: Webinar #3

1. Brief Overview of Project:

Cheryl Boyer, *Associate Professor of Horticulture at Kansas State University*

2. Consumer Behavior Survey:

Lauri M. Baker, *Associate Professor of Agricultural Communication at the University of Florida.*

Hikaru Peterson, *Professor of Applied Communication at the University of Minnesota*

3. Activity Updates:

Christa Court, *Assistant Professor of Regional Economics at the University of Florida*

Michelle Miller, *Associate Director, Center for Integrated Agricultural Systems at the University of Wisconsin Madison*

Hikaru Peterson, *Professor of Applied Communication at the University of Minnesota*

4. Closing and Questions:

Cheryl Boyer, *Associate Professor of Horticulture at Kansas State University*

Project Overview

Project Overview

The COVID-19 pandemic has disrupted supply chains, compromising their core function of providing safe and appropriate food to people and distressing the livelihoods of individuals and businesses.

This integrated project seeks to generate knowledge and resources to enhance preparedness of the U.S. agrifood supply chains for future disruptions.

We will explore the extent to which **regional food systems** can effectively **augment mainstream supply chains** to meet the nation's food needs, with a focus on ensuring the economic security of our small-scale operations.

Project objectives

1. Assess the impact of the COVID-19 pandemic on farm and food supply chain operations.
2. Understand capacities & structural vulnerabilities of regional food systems to support their population needs.
3. Develop resources & strategies for current & future disruptions.
4. Develop and offer training programs to strengthen support and understanding for local and regional supply chain participants at times of disruptions.

Project team

UNIVERSITY OF MINNESOTA

WISCONSIN
UNIVERSITY OF WISCONSIN–MADISON

KANSAS STATE UNIVERSITY

Center for Rural Enterprise Engagement

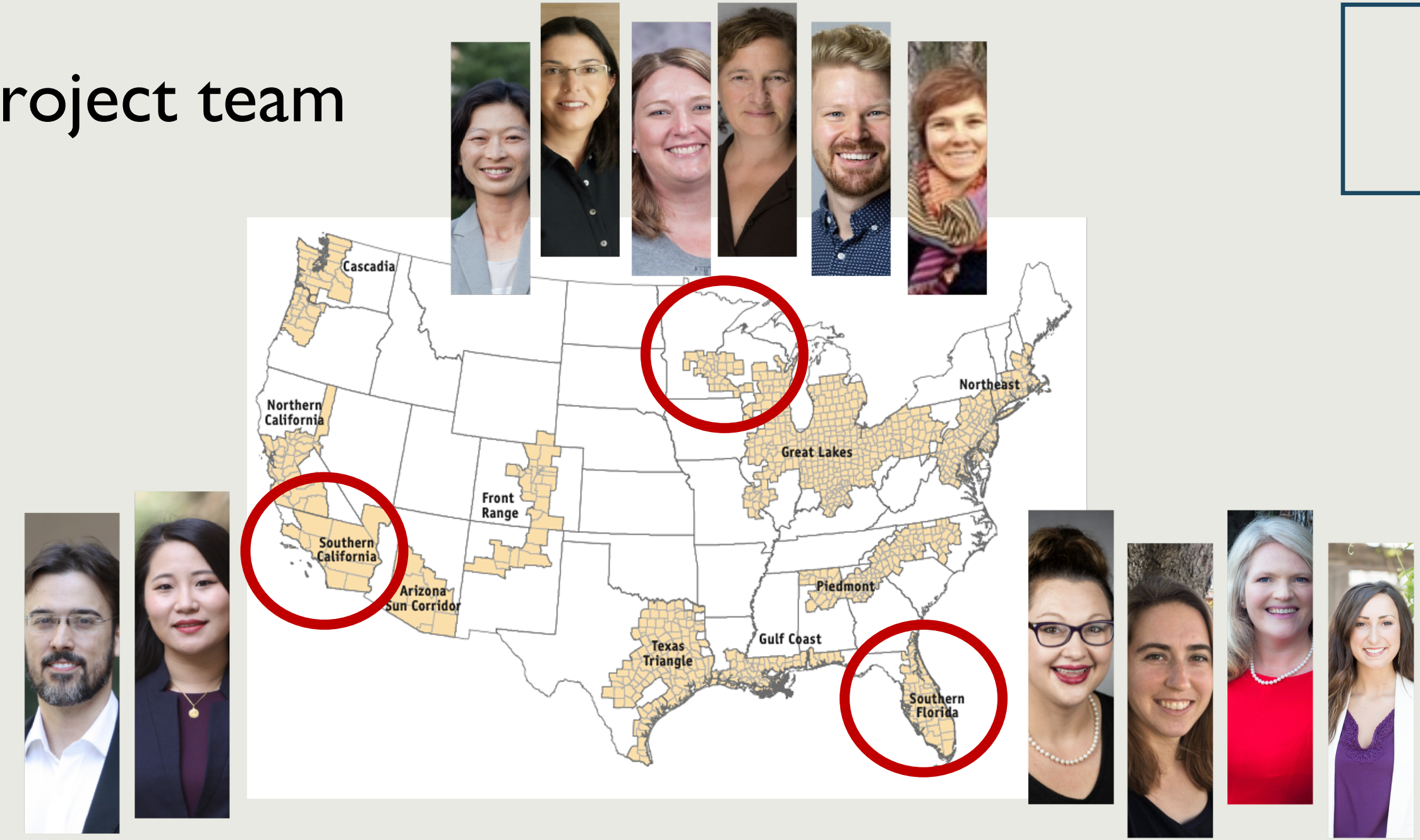
UCI University of California, Irvine

UF UNIVERSITY of FLORIDA

UF|IFAS UNIVERSITY of FLORIDA

Center for Public Issues Education

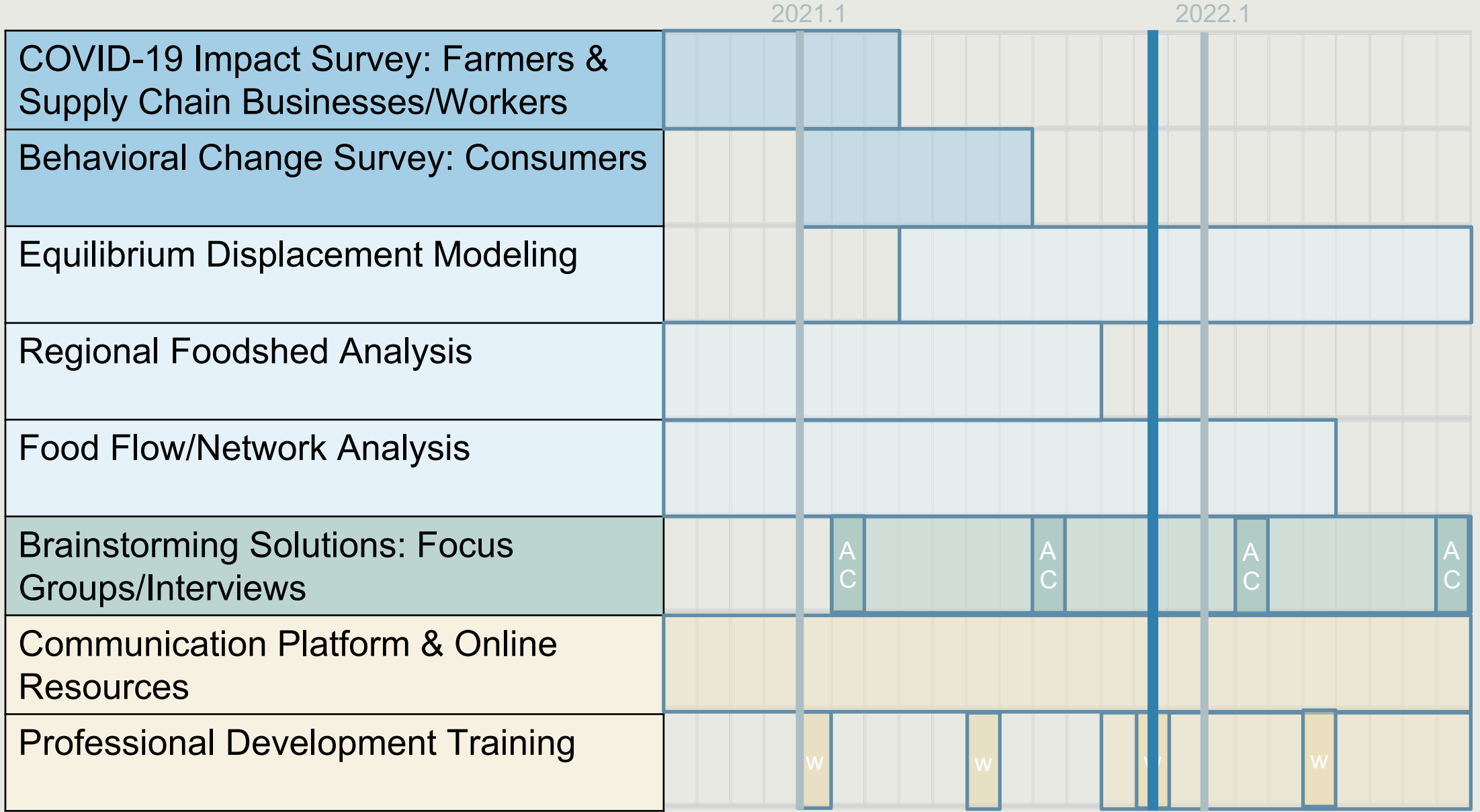
Project team



Advisory committee members

- Ben Nauman Senior Director of Purchasing, National Cooperative Grocers
- Christine Tran Executive Director, Los Angeles Food Policy Council
- Christopher Bacon Associate Professor, Dept. of Environmental Studies & Sciences, Santa Clara University
- Helene Murray Executive Director, Minnesota Institute for Sustainable Agriculture
- John Walt Boatright Director of National Affairs, Florida Farm Bureau Federation
- John Silianoff Vice President of Sales, Winnesota Regional Transportation
- Keith Harris Associate Professor, Dept. of Agricultural Economics, Kansas State University
- Lauren Gwin Associate Director, Center for Small Farms & Community Food Systems, Oregon State University
- Robin Safley Executive Director, Feeding Florida
- Steven Helfand Professor & Chair, Dept. of Economics, University of California-Riverside
- Tori Rumenik Commodity Services & Supply Chain Manager, Florida Fruit and Vegetable Association
- Tracy Irani Professor & Head, Dept. of Family, Youth and Community Sciences, University of Florida
- Zhaohui Wu Professor, College of Business, Oregon State University

Research & outreach activities



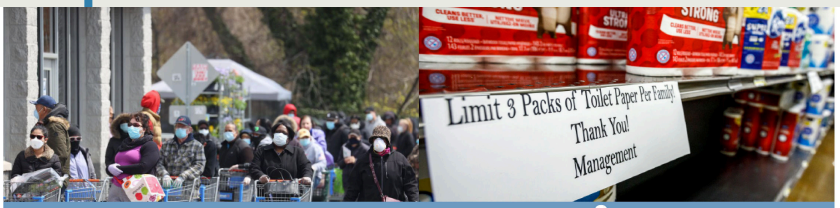
Consumer Survey

Methods & sampling

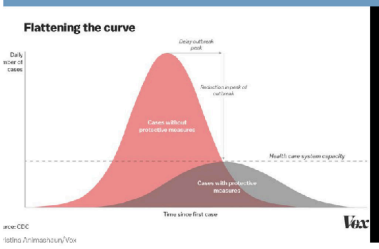
- July - August 2021
- Non-probability opt-in sample
  - U.S. residents 18 years of age or older
  - Stratified sampling
    - Income, race, region
    - 1,004 total responses in final sample

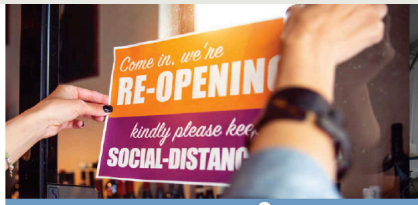
- Survey structure
  - Food purchase/acquisitions during three time periods over the pandemic
  - Choice experiment

Timeframes

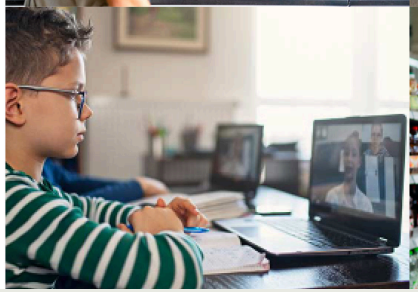


Early Pandemic: March-April 2020



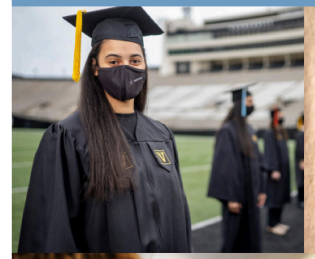



Mid Pandemic: August-September 2020



Current: June 2021



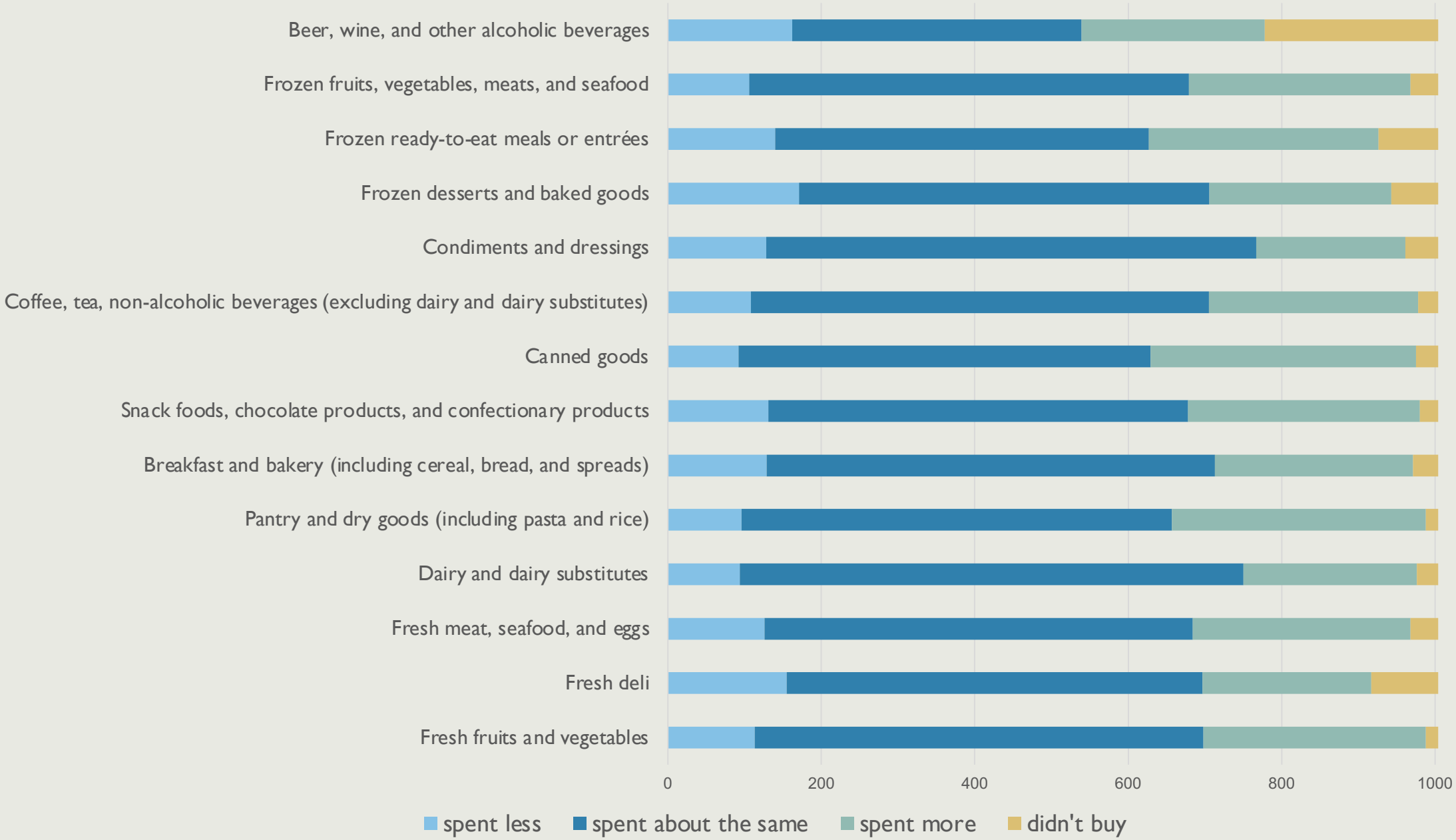



Changes in dollars spent for food

Asked to compare

- Change in dollars spent
- By food category
- Pre-pandemic with Time 1

Changes in Dollars Spent - Pre-pandemic to Time 1: March-April 2020

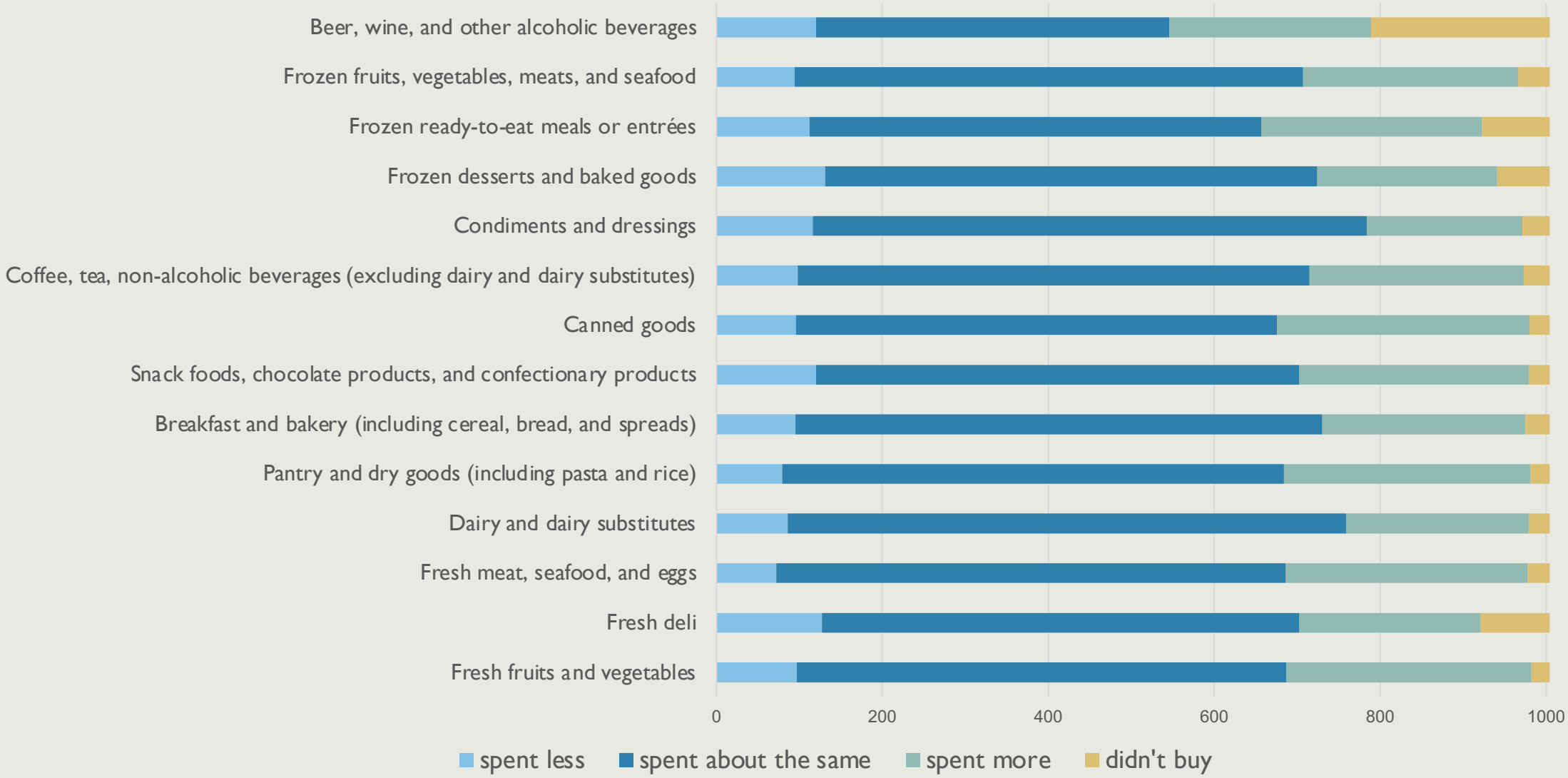



Limit 3 Packs of Toilet Paper Per Family!
Thank You!
Management
Early Pandemic:
March-April 2020
Flattening the curve
MASK
REQUIRED
FOR ENTRY
WHO declares novel coronavirus outbreak a pandemic
CLOSED DUE TO
COVID-19

Vs.


Come in, we're
RE-OPENIN
kindly please kee
SOCIAL-DISTANC
Mid Pandemic:
August-September 2020
Remember
Social
Distancing
Keep A 6-foot
Distance!

Changes in Dollars Spent - Time 1: March-April 2020 to Time 2: August-September 2020

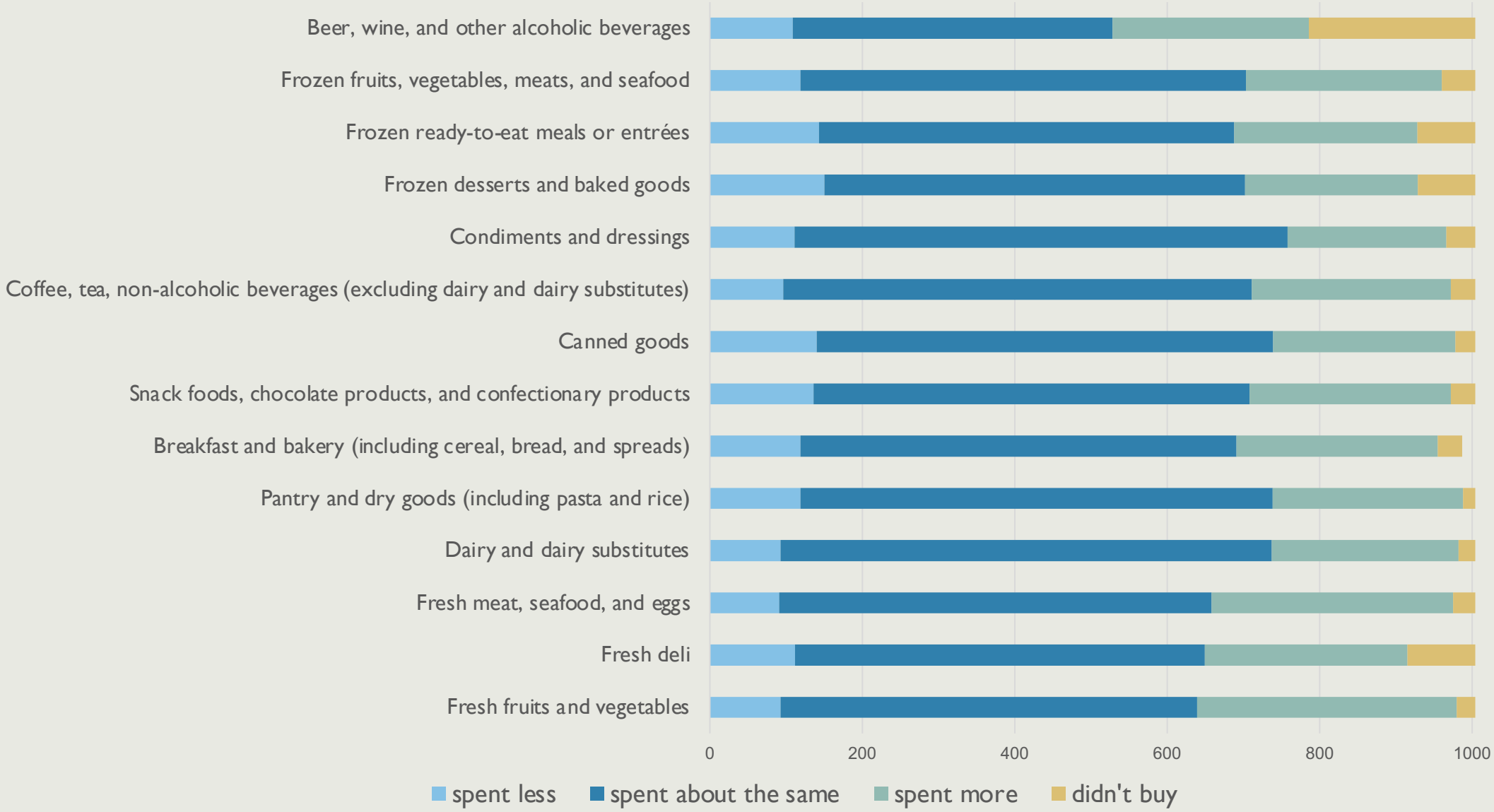


Mid Pandemic: August-September 2020

Vs.

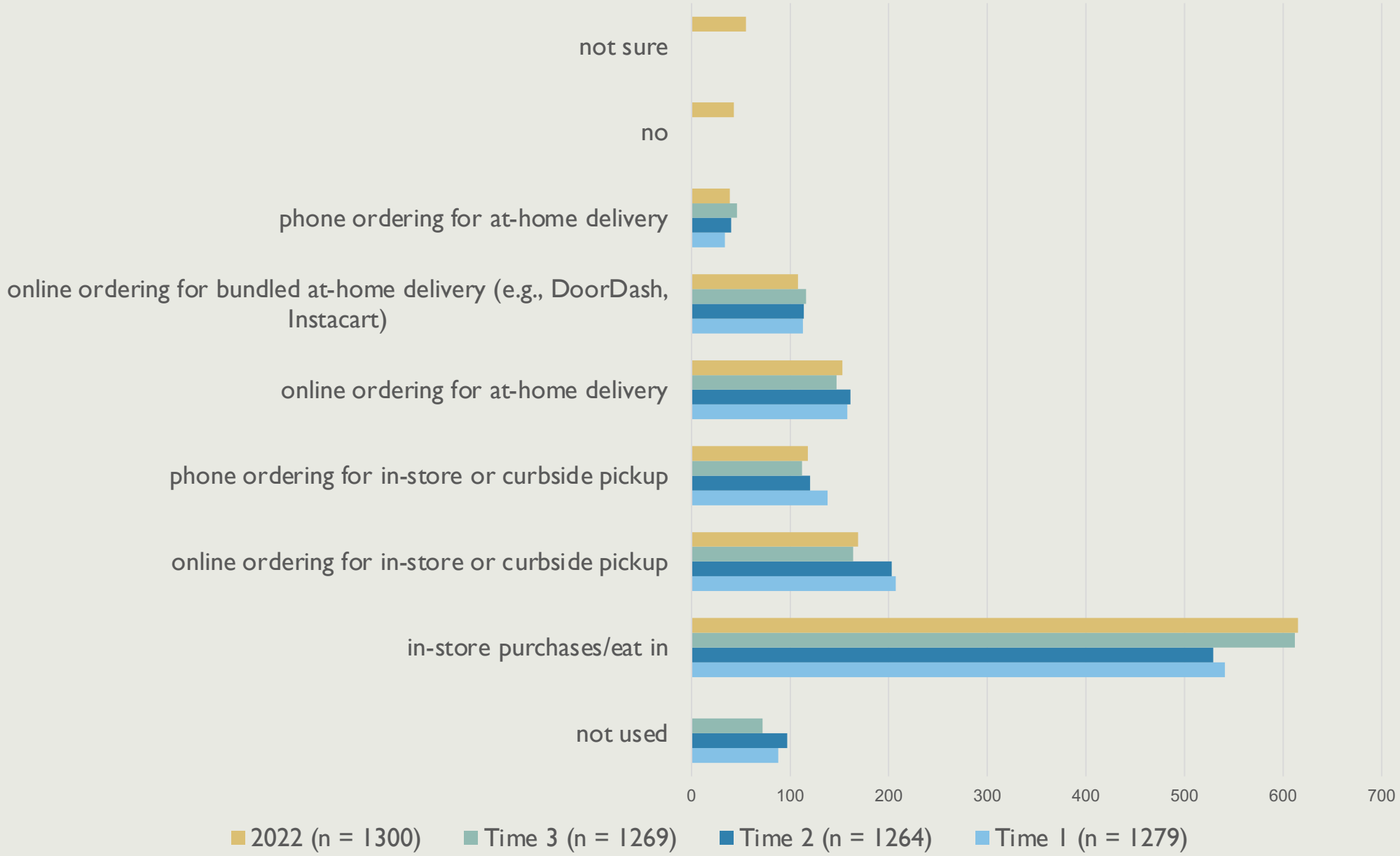
Current: June 2021

Changes in Dollars Spent - Time 2: August-September 2020 to Time 3: June 2021

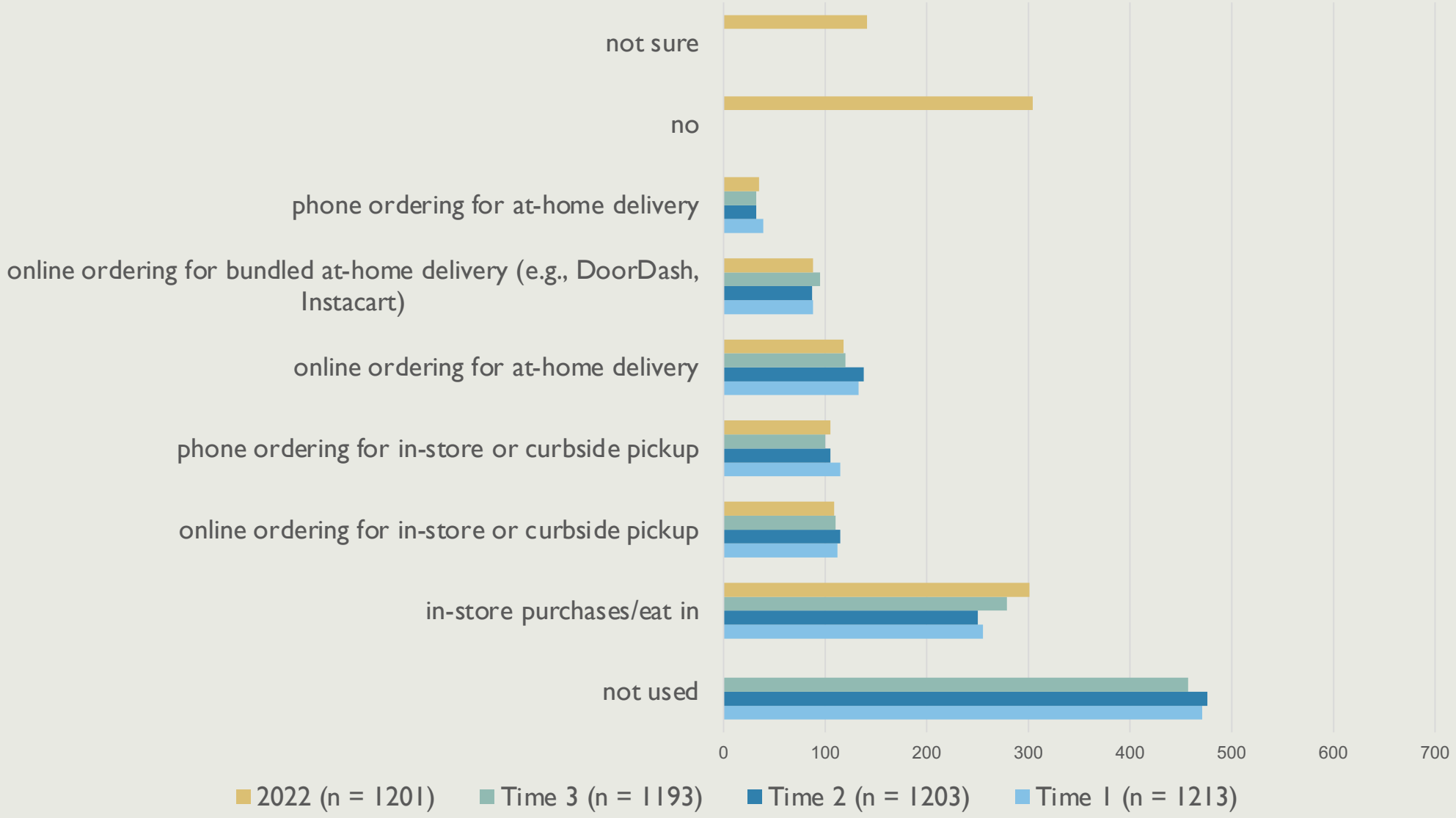


Types of food outlets and logistics

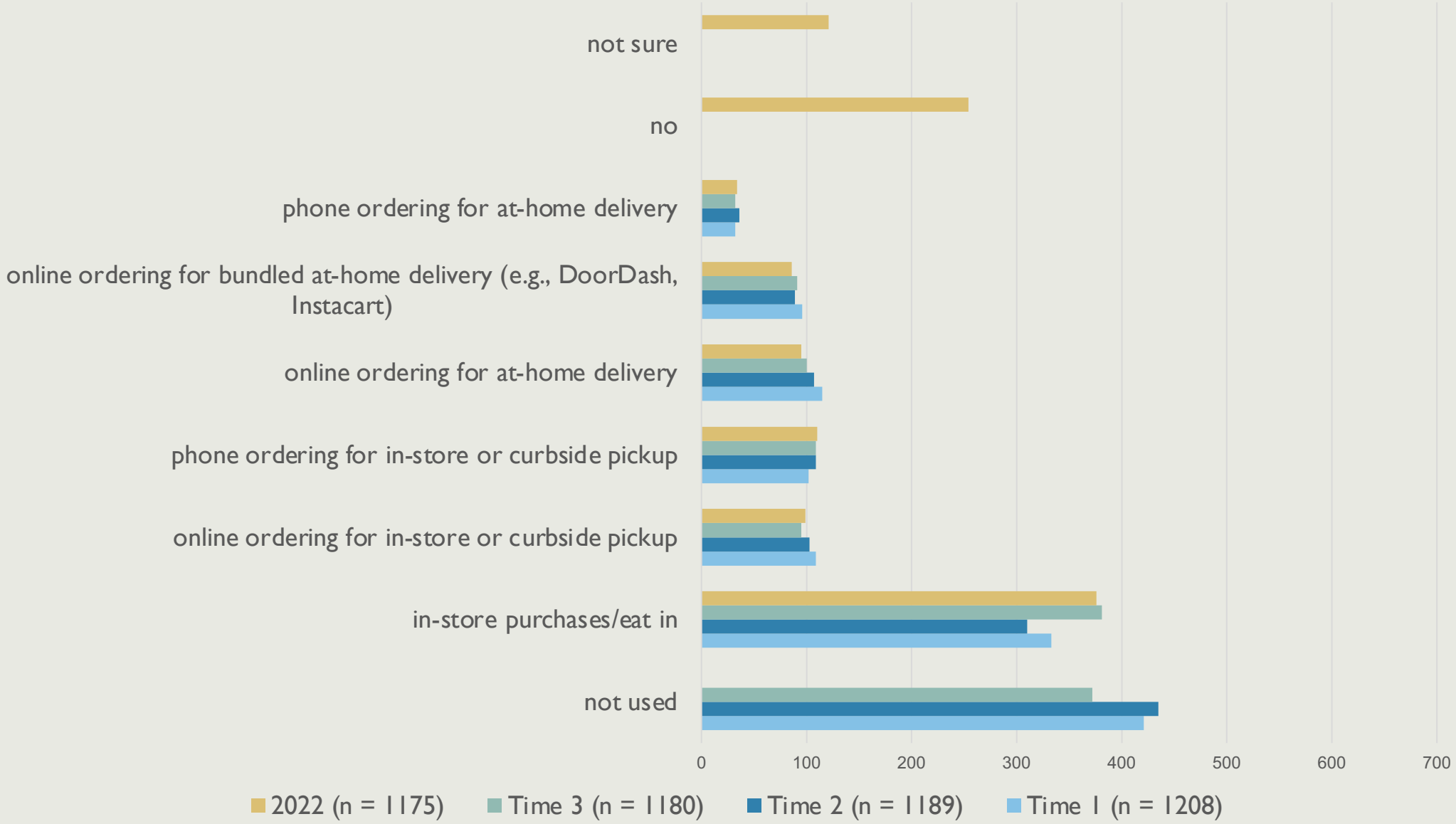
Super centers and/or supermarkets: By acquisition type



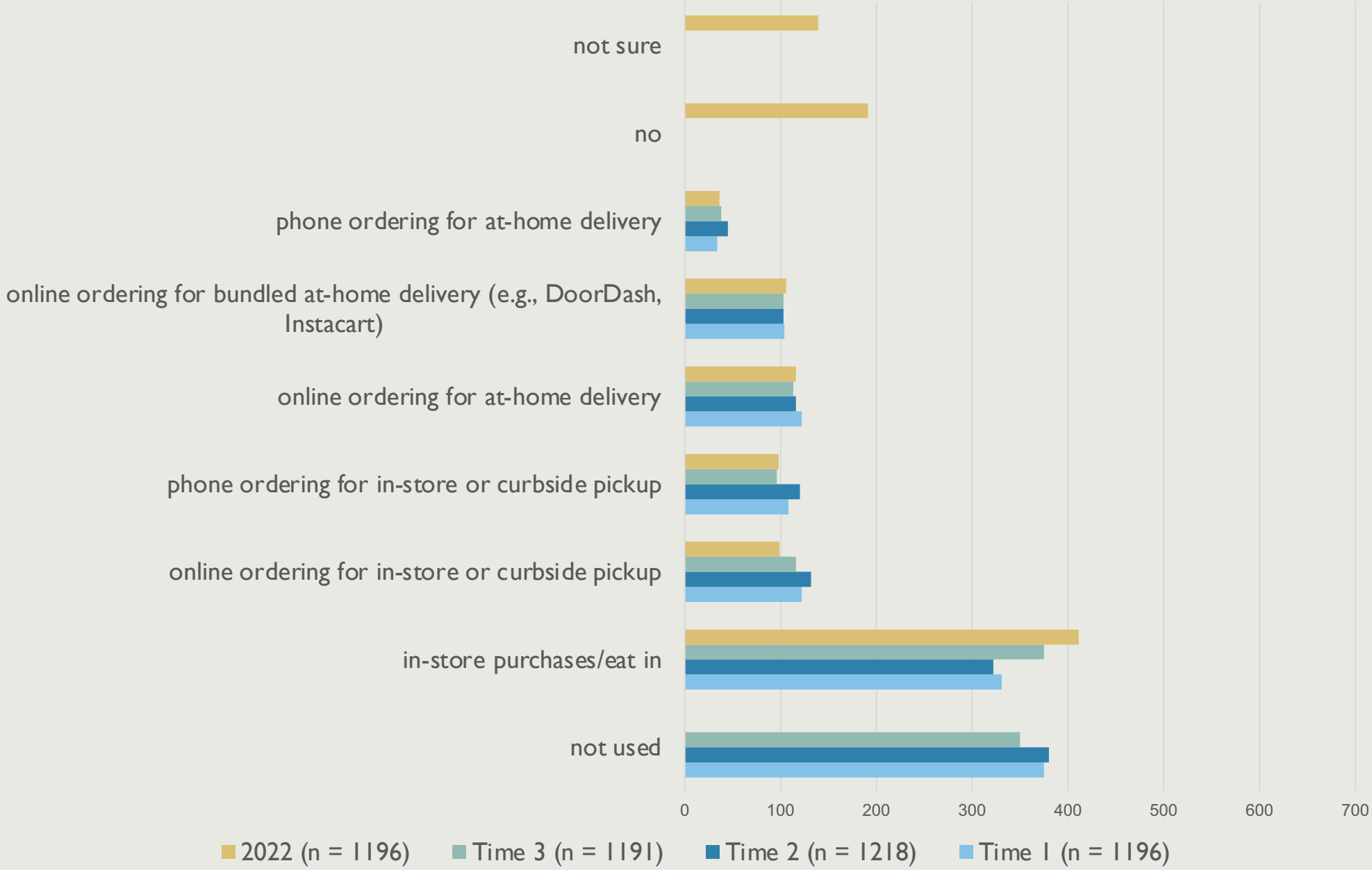
Health, natural, smaller format grocery store chains (e.g., Whole Foods): By acquisition type



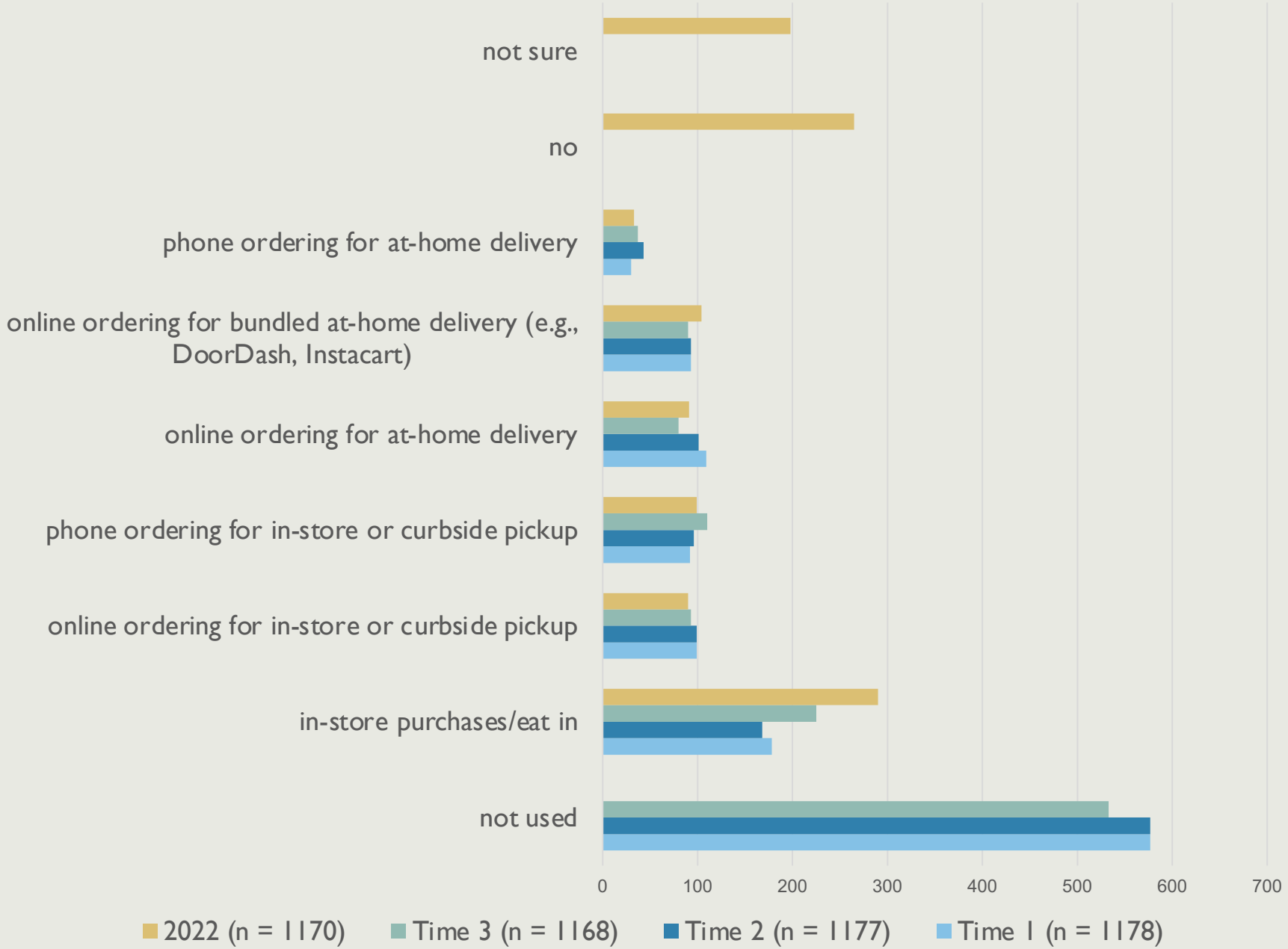
Convenience store, corner store, and/or smaller store with limited selection (e.g., 7-Eleven): By acquisition type



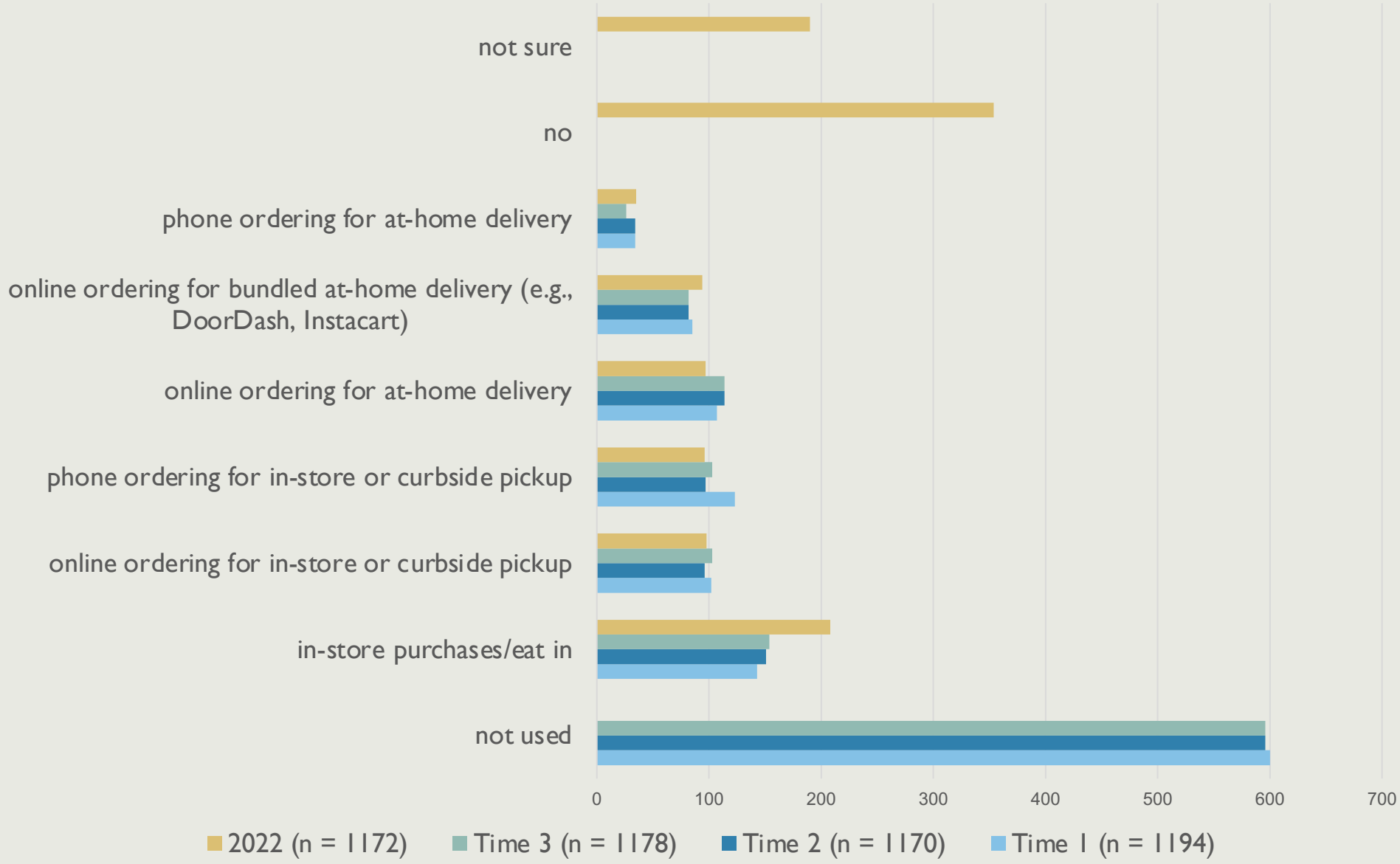
Independent grocery store and/or food co-op: By acquisition type



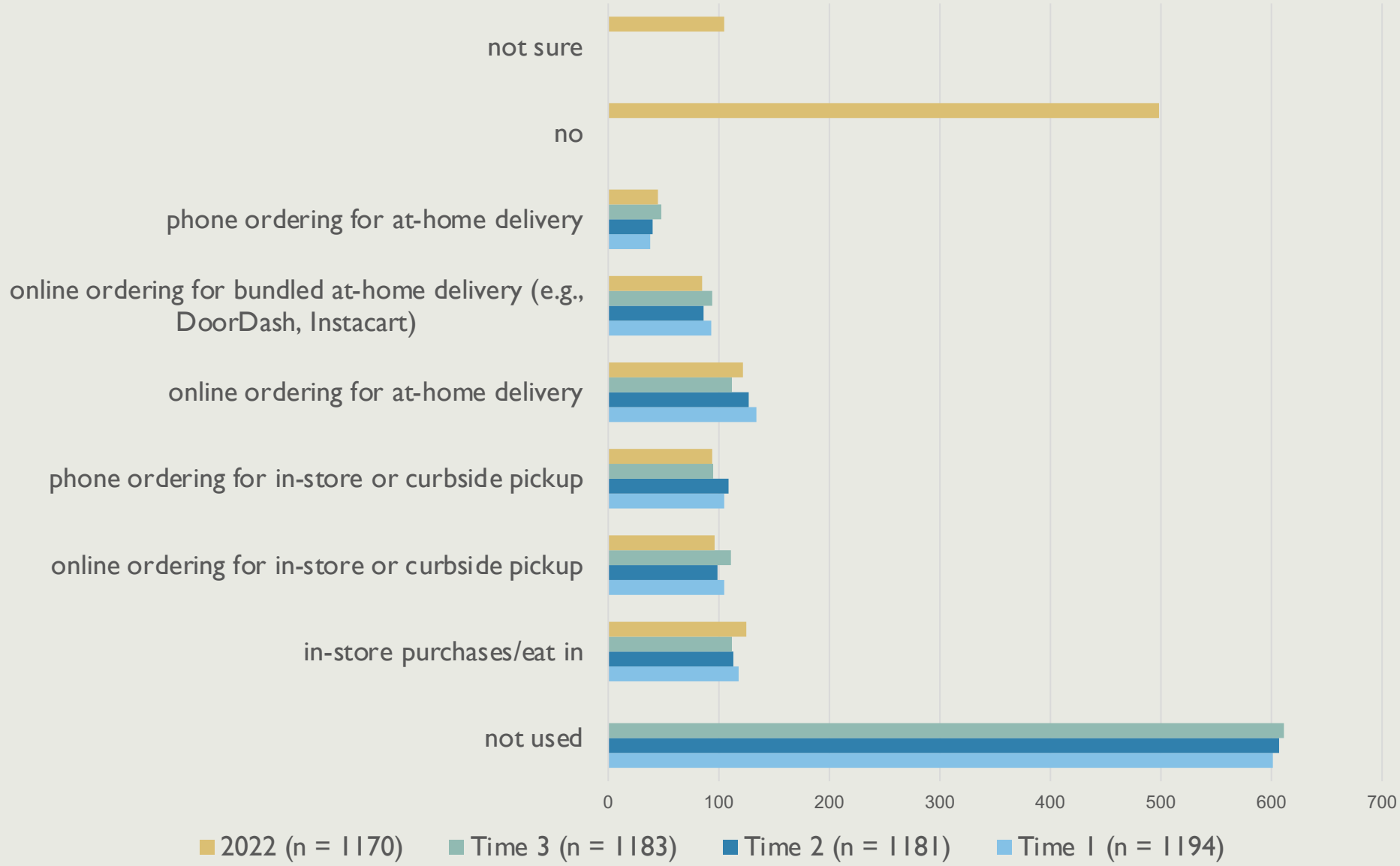
Farmers market: By acquisition type



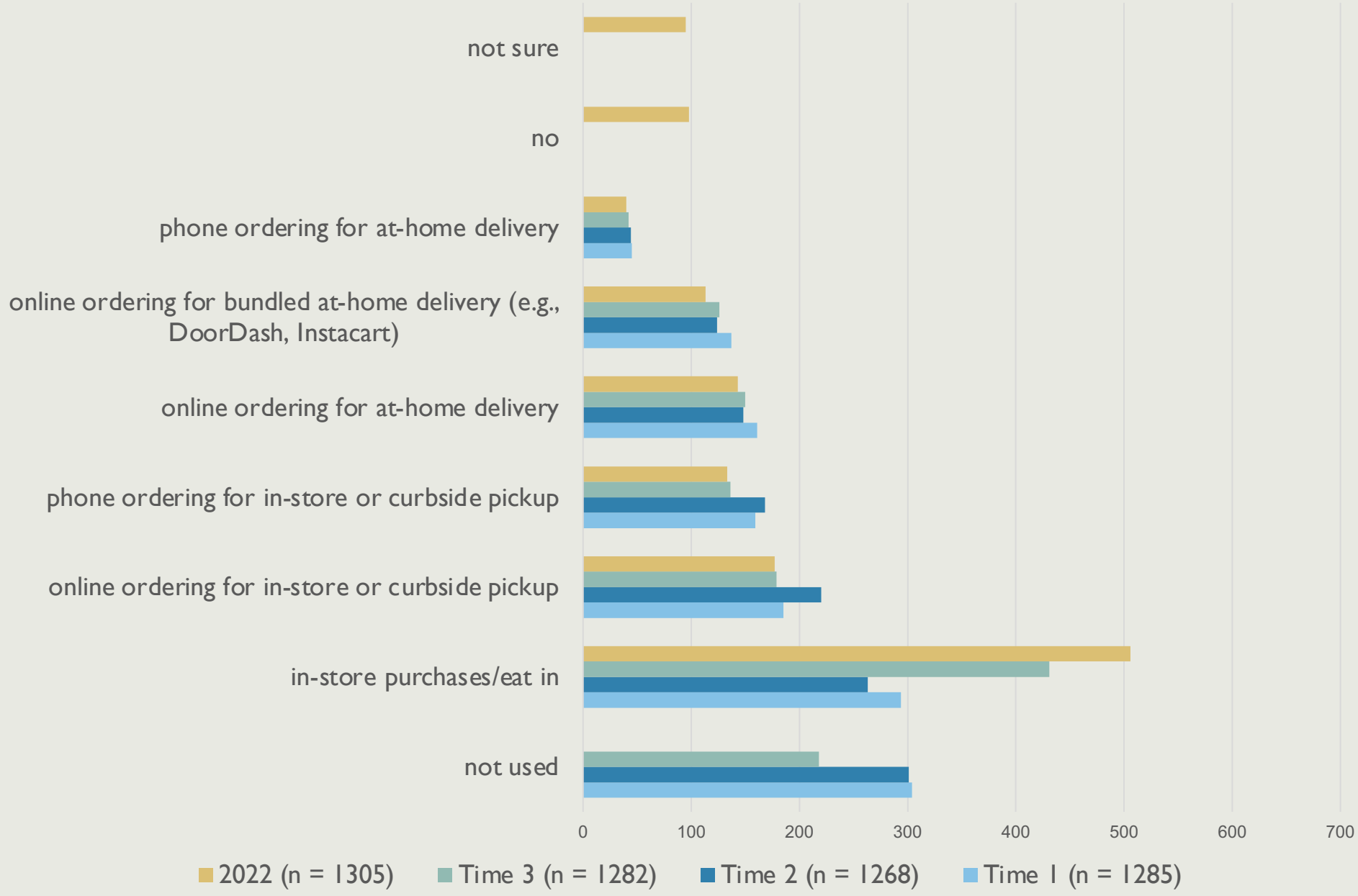
Direct from farmers and/or food makers, excluding farmers markets (e.g., farm stand, CSA): By acquisition type



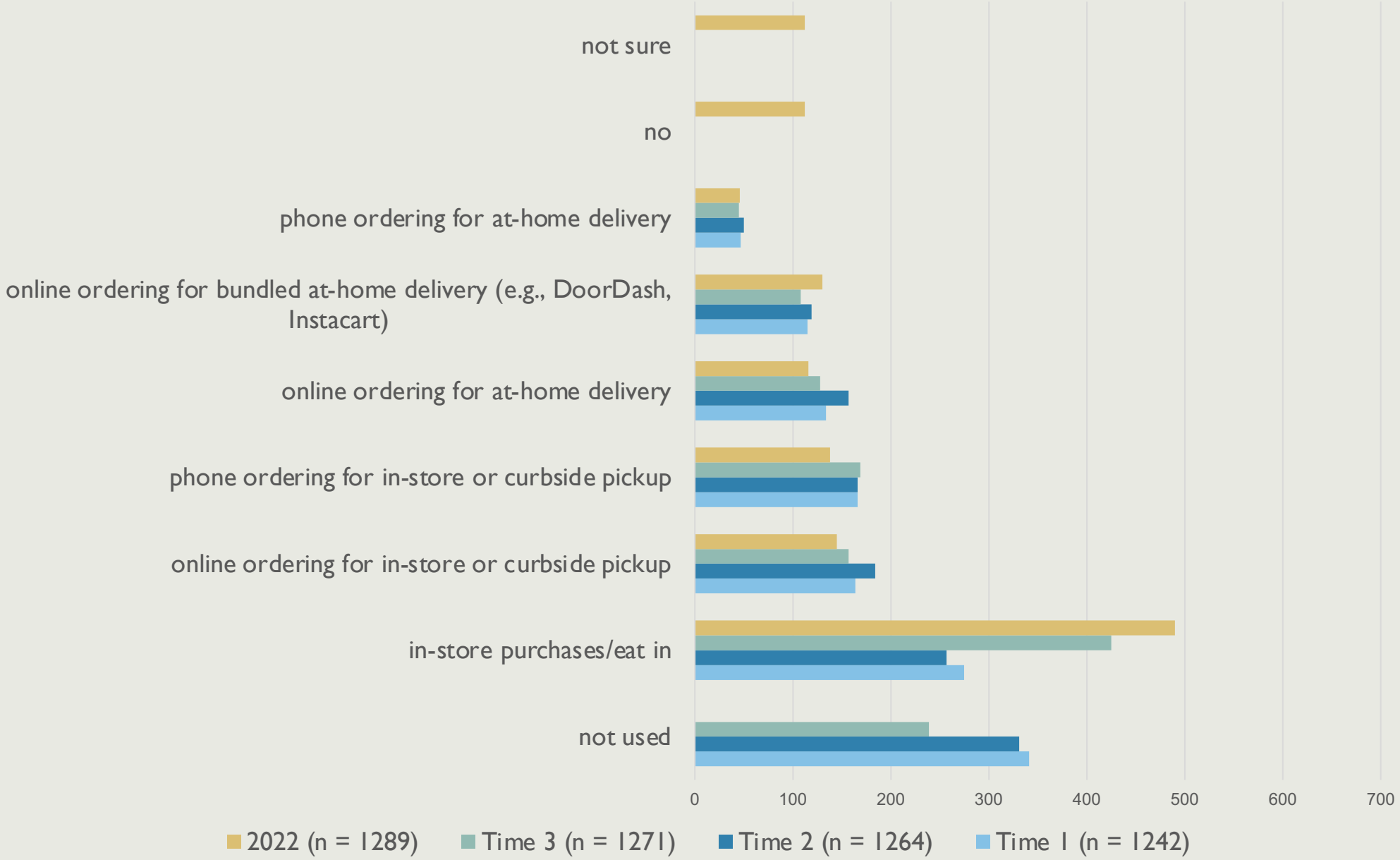
Meal and/or meal-kit delivery service (e.g., Blue Apron, Schwan's): By acquisition type



Large, national restaurant chain: By acquisition type



Local, independent restaurant: By acquisition type



Consumer choice experiment

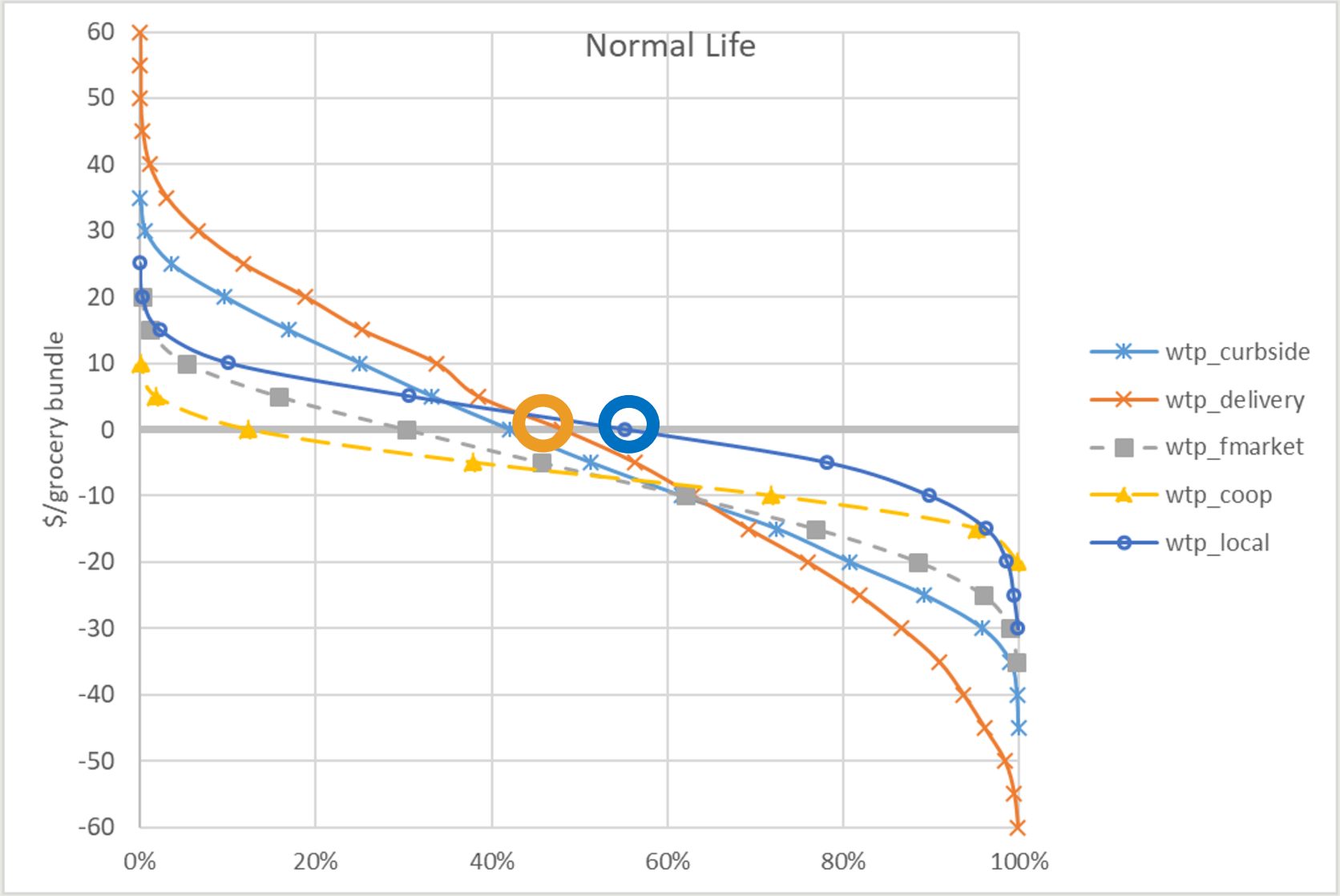
Choice experiment

- Three situations
  1. Life is normal with no major health crisis
  2. A disease outbreak: the local health office recommends "*choose delivery or curbside pickup instead of shopping in person*"
  3. A disease outbreak: the local health office recommends "*you can lower risk while grocery shopping by keeping your visits as short as possible; consider using delivery or curbside pickup instead*"

- In all cases
  - A regular assortment of food groceries
  - A retail outlet 3 miles away (8 minutes by car)
  - Fixed delivery fee $3.99

Logistics	In-store purchases, online ordering for curbside pick up, online ordering for at-home delivery
Outlet	Farmers market, food co-op, supermarket
Food origin	Local/regional foods where available, foods from anywhere
Value of groceries	$35, $45, $60

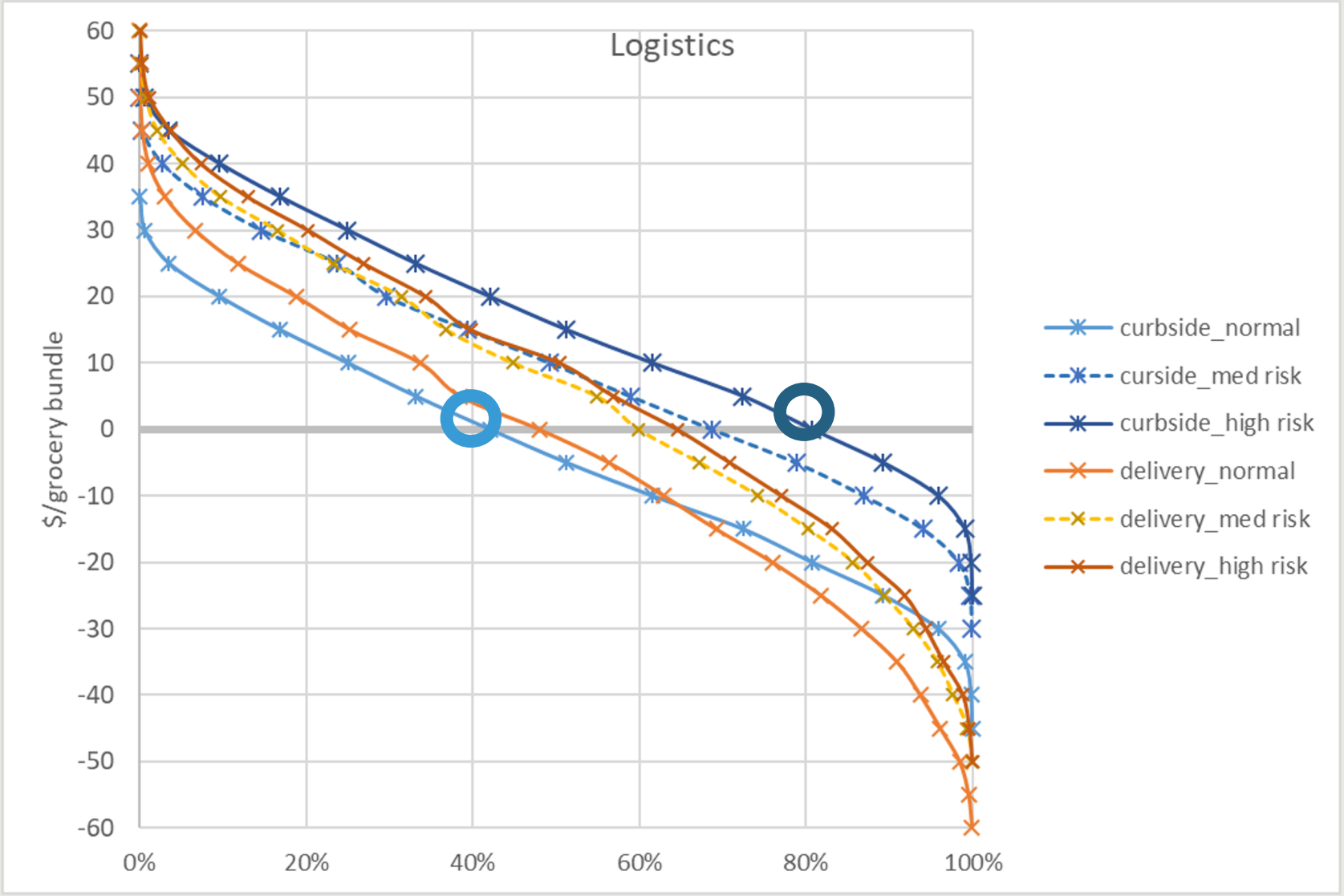
Demand under “normal life”



A little less than half of people are willing to pay for grocery delivery services.

More than half are willing to pay for local foods.

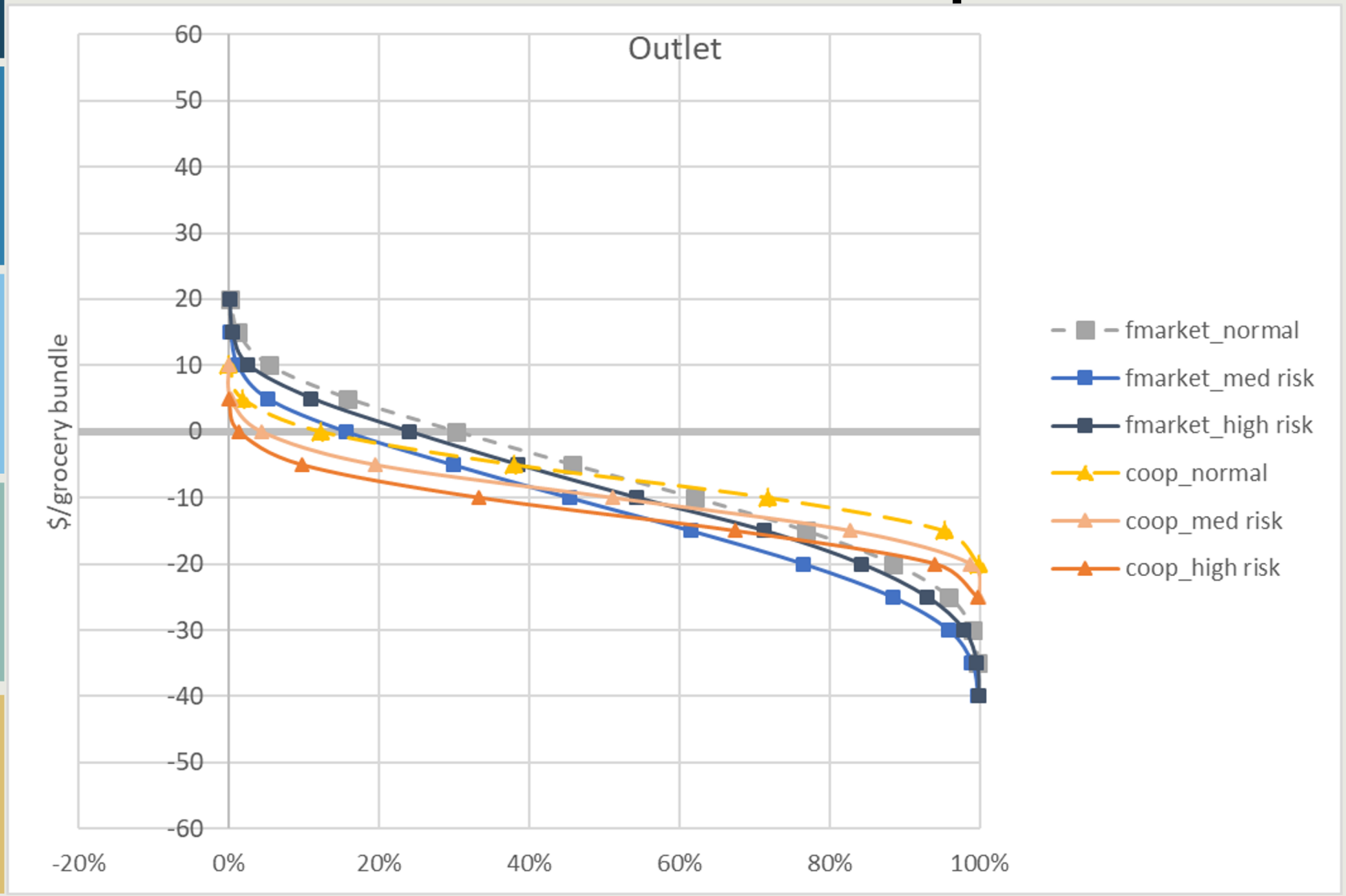
Demand for logistics & public health risk



Demand for curbside doubled under high public health risk.

Demand for grocery deliveries is more inelastic than demand for curbside pickup.

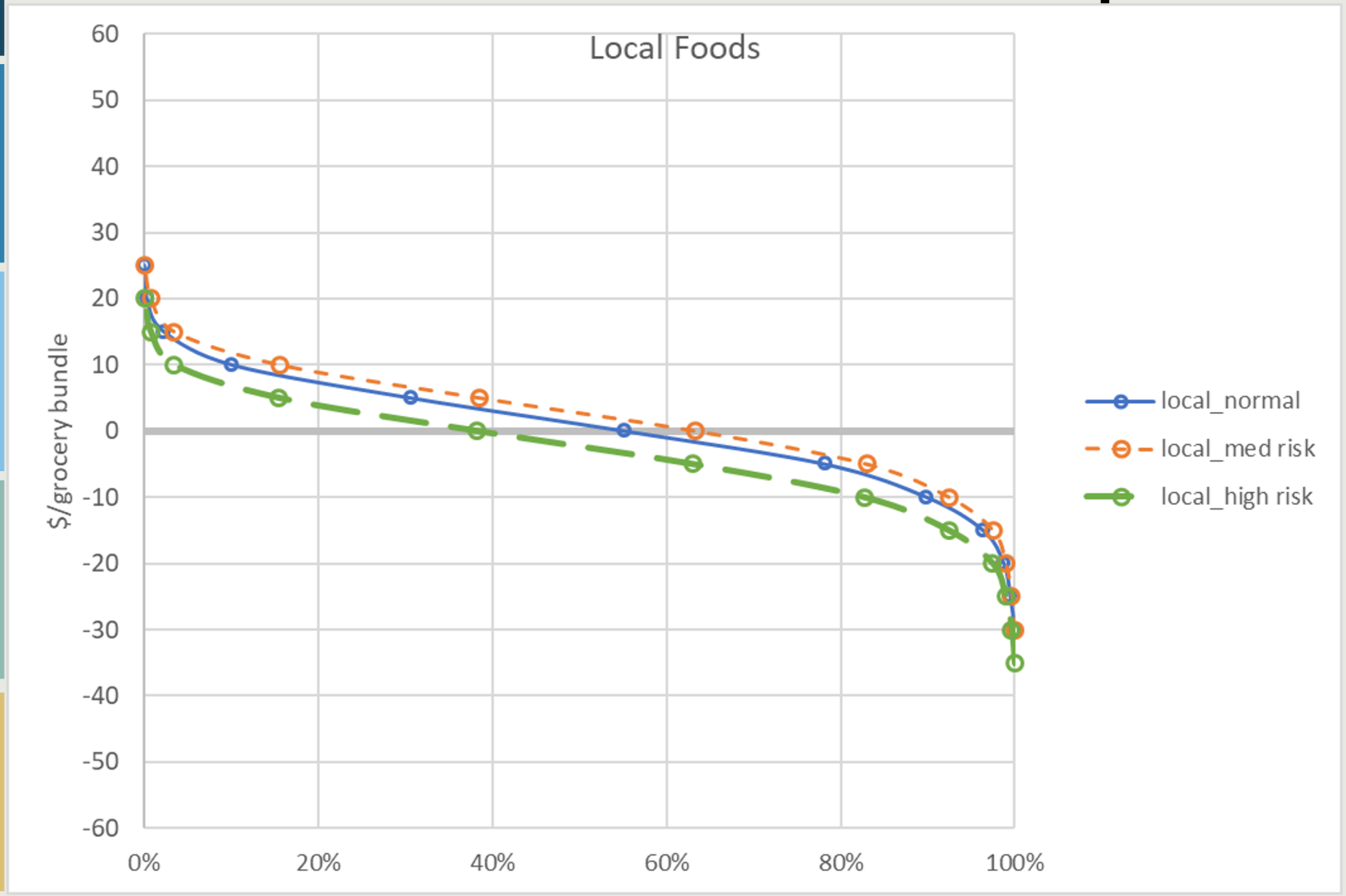
Demand for outlets & public health risk



Demand for farmers markets over supermarkets declines initially, then increases, as public health risk heightens.

Demand for coop over supermarkets declines as public health risk increases.

Demand for local foods & public health risk



Demand for local foods increases initially, then declined, as public health risk heightens.

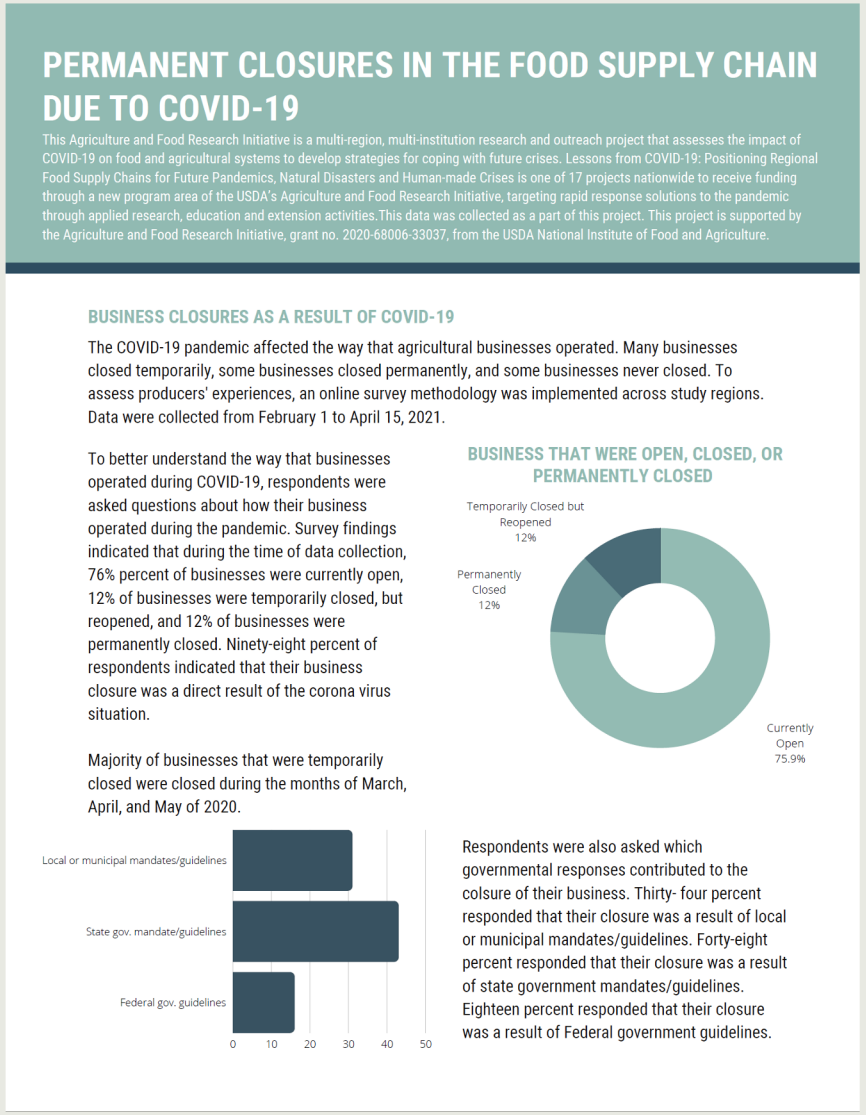
Summary of findings to date

- Food purchases by category remained consistent for the majority of Americans across 3x periods.
- The way Americans acquired food shifted throughout the 3x periods.
- Demand for purchase logistics is drastically affected by public health concerns.
  - Demand for grocery delivery is more inelastic than demand for curbside pickup.
- Changes in demand for local outlets and local foods during the pandemic seem sensitive to levels of public health risks.

Activity Updates

Activity 1: COVID-19 Impact Survey

- Data files are cleaned and ready!
- Overall summary
  - Academic publication
  - Podcast/Media interviews
- Extension Factsheets
- Conference presentations
- Additional academic publications



PERMANENT CLOSURES IN THE FOOD SUPPLY CHAIN DUE TO COVID-19

This Agriculture and Food Research Initiative is a multi-region, multi-institution research and outreach project that assesses the impact of COVID-19 on food and agricultural systems to develop strategies for coping with future crises. Lessons from COVID-19: Positioning Regional Food Supply Chains for Future Pandemics, Natural Disasters and Human-made Crises is one of 17 projects nationwide to receive funding through a new program area of the USDA's Agriculture and Food Research Initiative, targeting rapid response solutions to the pandemic through applied research, education and extension activities.This data was collected as a part of this project. This project is supported by the Agriculture and Food Research Initiative, grant no. 2020-68006-33037, from the USDA National Institute of Food and Agriculture.

BUSINESS CLOSURES AS A RESULT OF COVID-19

The COVID-19 pandemic affected the way that agricultural businesses operated. Many businesses closed temporarily, some businesses closed permanently, and some businesses never closed. To assess producers' experiences, an online survey methodology was implemented across study regions. Data were collected from February 1 to April 15, 2021.

To better understand the way that businesses operated during COVID-19, respondents were asked questions about how their business operated during the pandemic. Survey findings indicated that during the time of data collection, 76% percent of businesses were currently open, 12% of businesses were temporarily closed, but reopened, and 12% of businesses were permanently closed. Ninety-eight percent of respondents indicated that their business closure was a direct result of the corona virus situation.

BUSINESS THAT WERE OPEN, CLOSED, OR PERMANENTLY CLOSED

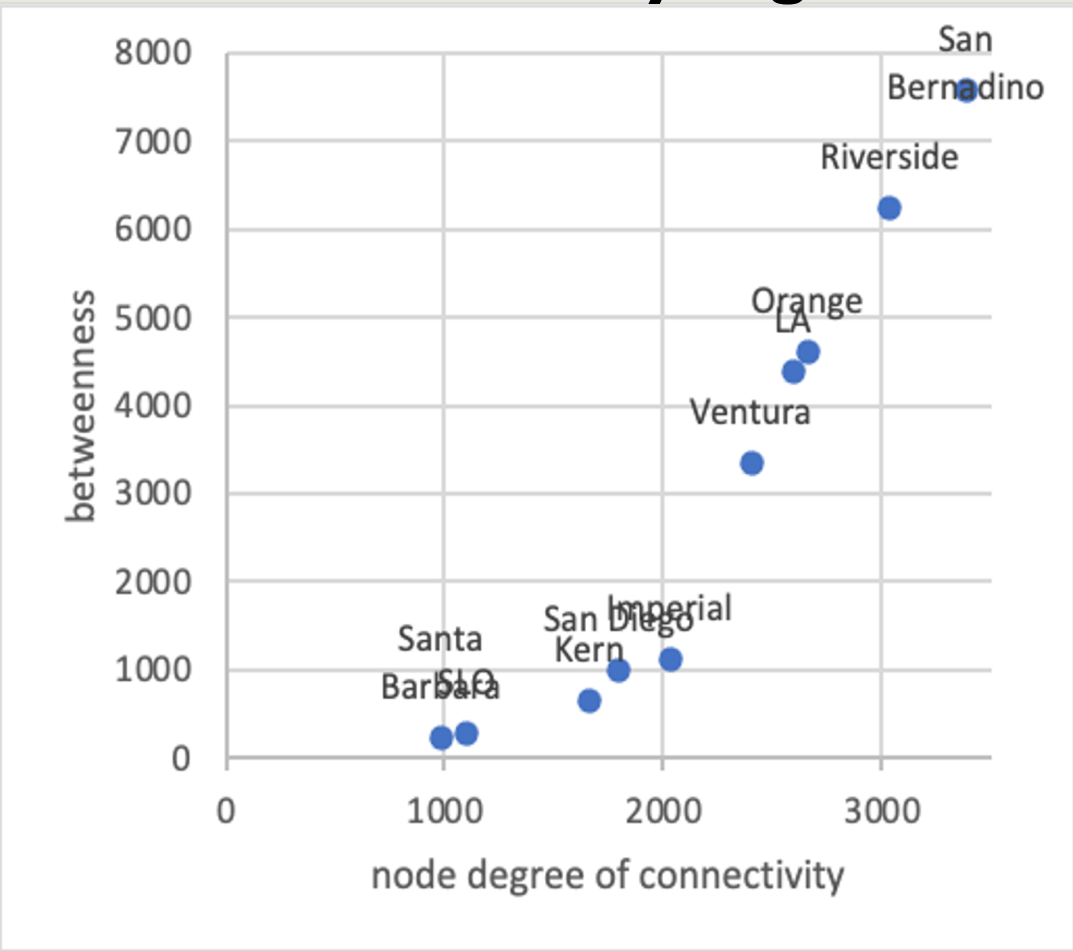
Majority of businesses that were temporarily closed were closed during the months of March, April, and May of 2020.

Respondents were also asked which governmental responses contributed to the colsure of their business. Thirty- four percent responded that their closure was a result of local or municipal mandates/guidelines. Forty-eight percent responded that their closure was a result of state government mandates/guidelines. Eighteen percent responded that their closure was a result of Federal government guidelines.

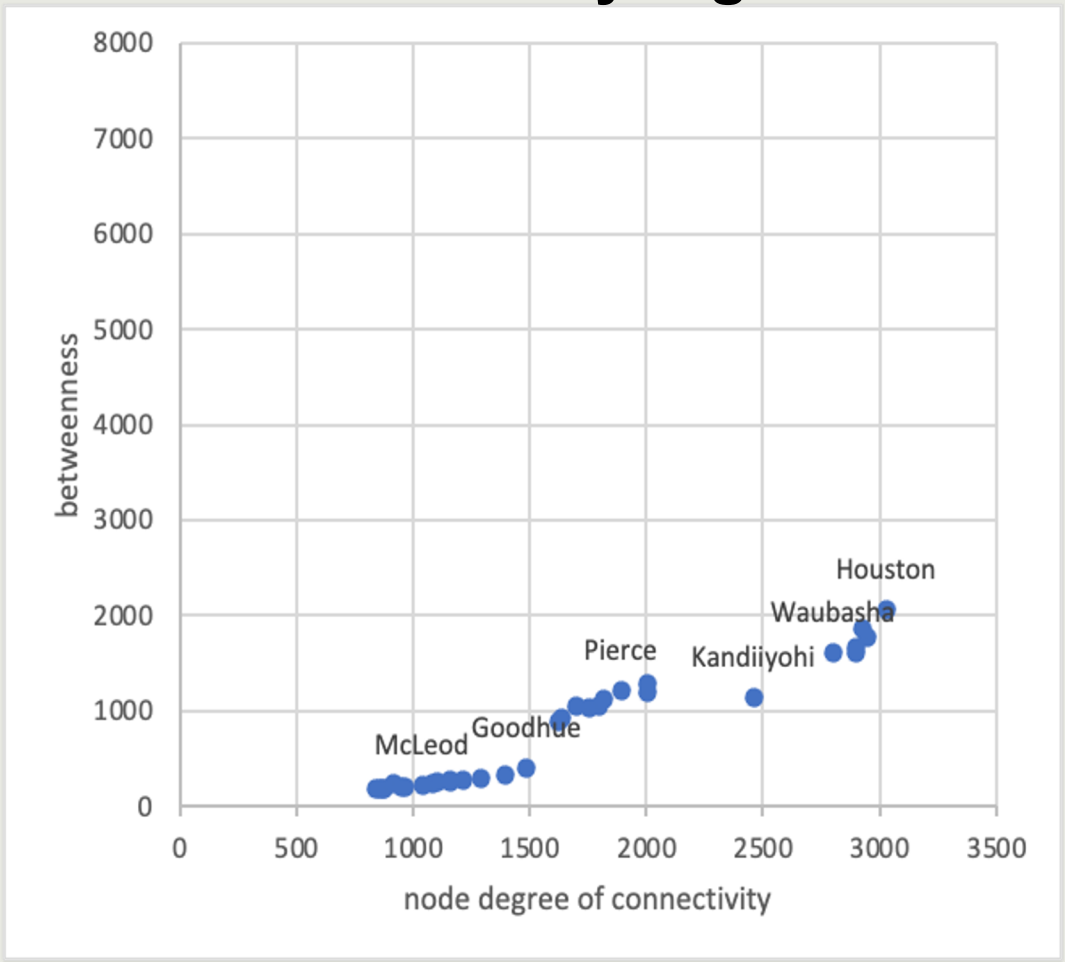
Activity 5 food flows: what counties are critical to the national meat supply chain?

Activity 5 food flows: how do regions function in the national meat supply chain?

California study region

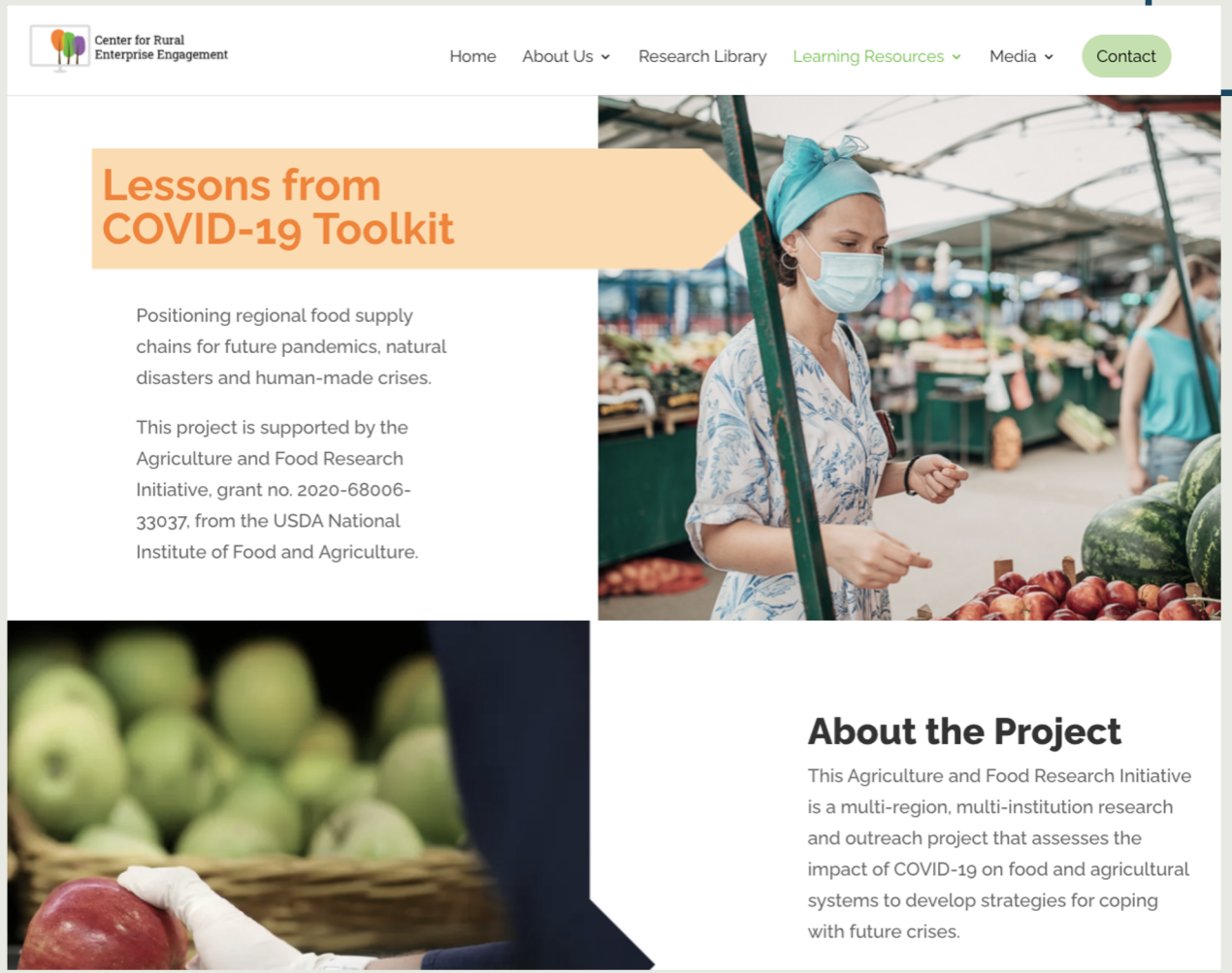


MN/WI study region



Communication

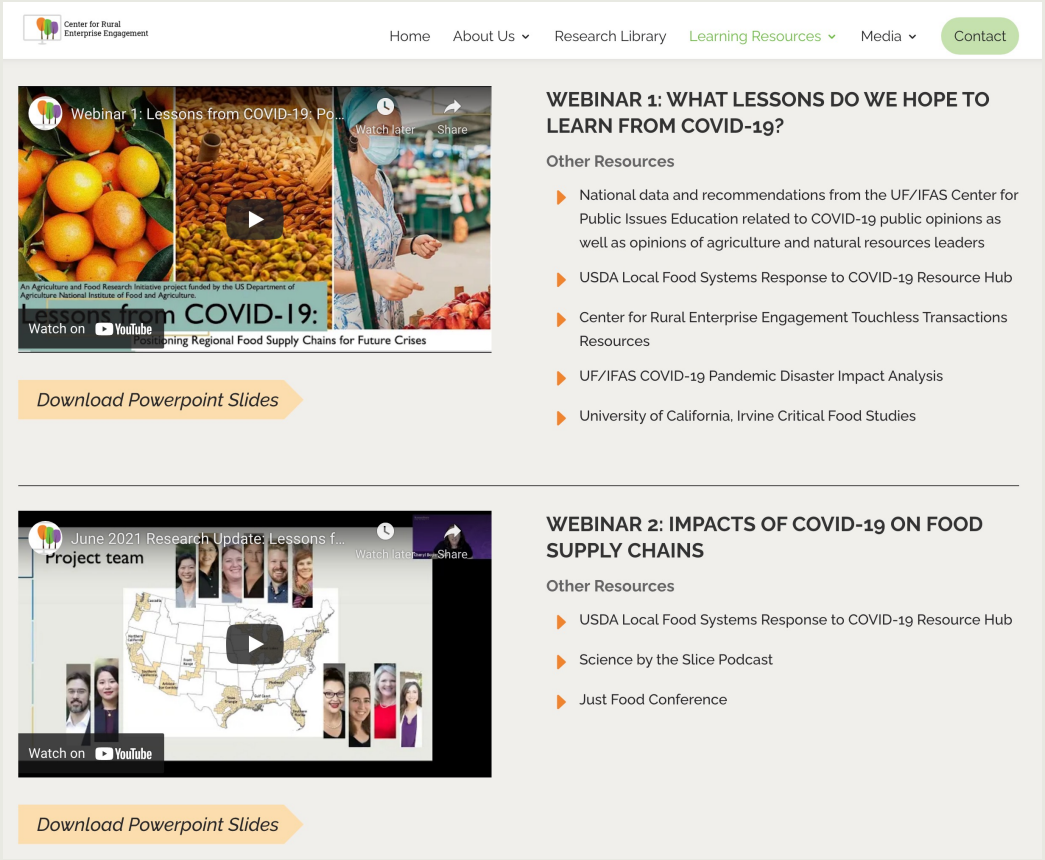
- Website Update!
- Media releases
- Extension Factsheets
- Podcast interviews
- Conference presentations
- Academic publications



https://ruralengagement.org/lessons-from-covid-19-toolkit/

Learning opportunities

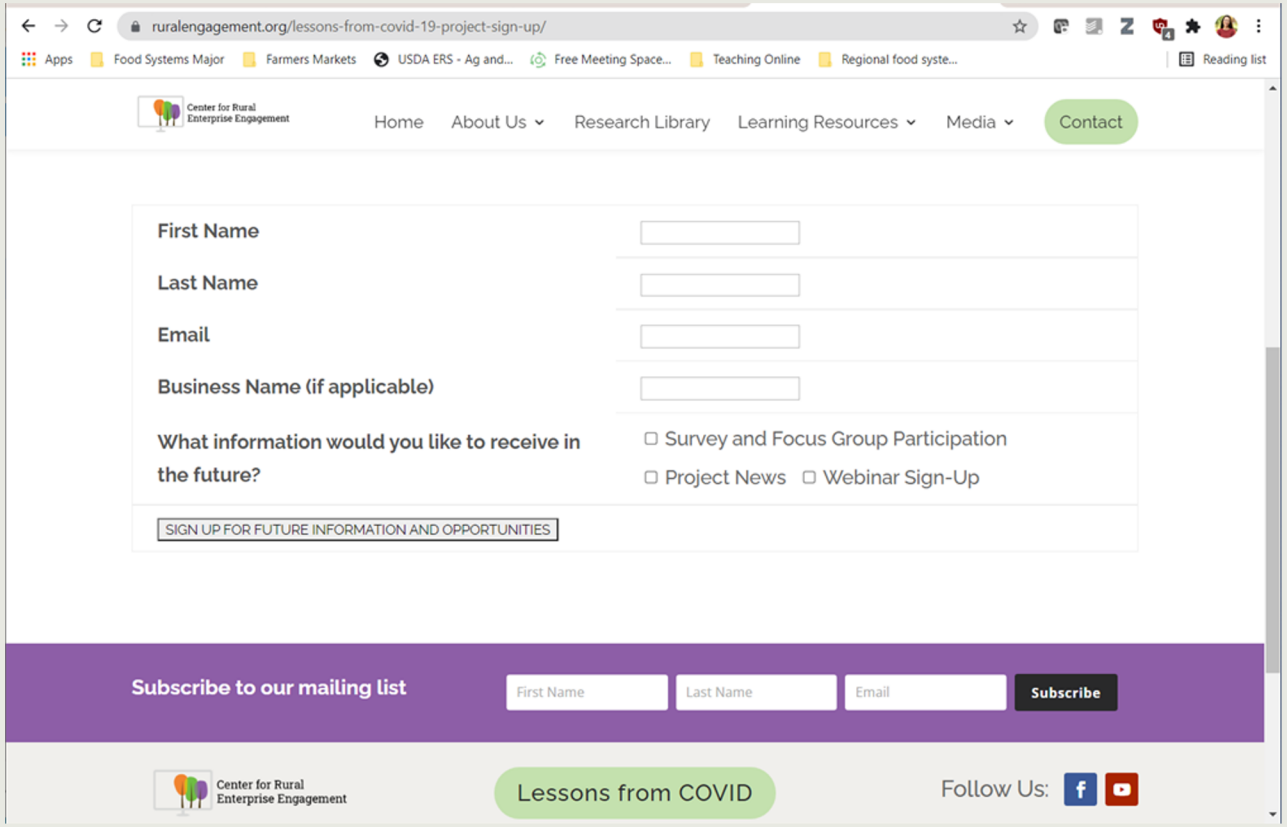
- Webinar series (this is 3 out of 4)
  - Recordings available
- Train-the-Trainer Conference
  - May 5, 2022
  - Online, synchronous
- Online Course
  - Available July/August 2022
  - Asynchronous + office hours with project leaders



https://ruralengagement.org/lessons-from-covid-19-toolkit/

Focus group conversations

- Scheduled for Jan-Apr 2022
- Opportunities to exchange ideas for improving resilience of our food system with other food supply chain business professionals
- Sign up at https://ruralengagement.org/lessons-from-covid-19-project-sign-up/



Thank you for learning with us!

Join us for our last webinar on April 21, 2022 to hear results from the regional foodshed analysis, foodflow network analysis, and more
https://tinyurl.com/lessonsfromcovid-webinar

Save the date for the train-the-trainer conference: May 5, 2022

Contact: Hikaru Peterson (hhp@umn.edu)

USDA United States Department of Agriculture
National Institute of Food and Agriculture

Questions?