



# Economic Intel for Wisconsin and the New North Region

Program will begin  
promptly at 1:31.

## Webinar Overview: Welcome

Brian Bruess, President, St. Norbert College

Phil Flynn, President & CEO Associated Bank

## Wisconsin Economic Outlook

Secretary Peter Barca, WI Dept. of Revenue

John Koskinen, Chief Economist, WI Dept. of Revenue

## New North Regional Data

Emily Camfield, Economist, WI Dept. of Revenue

## Alternative Data Trends in Wisconsin

Marc Schaffer, Director, CBEA

Emily O'Leary, Research Analyst, CBEA



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BUSINESS & ECONOMIC  
ANALYSIS



# Economic Intel for Wisconsin and the New North Region

Welcome

Brian Bruess

President, St. Norbert College



Phil Flynn

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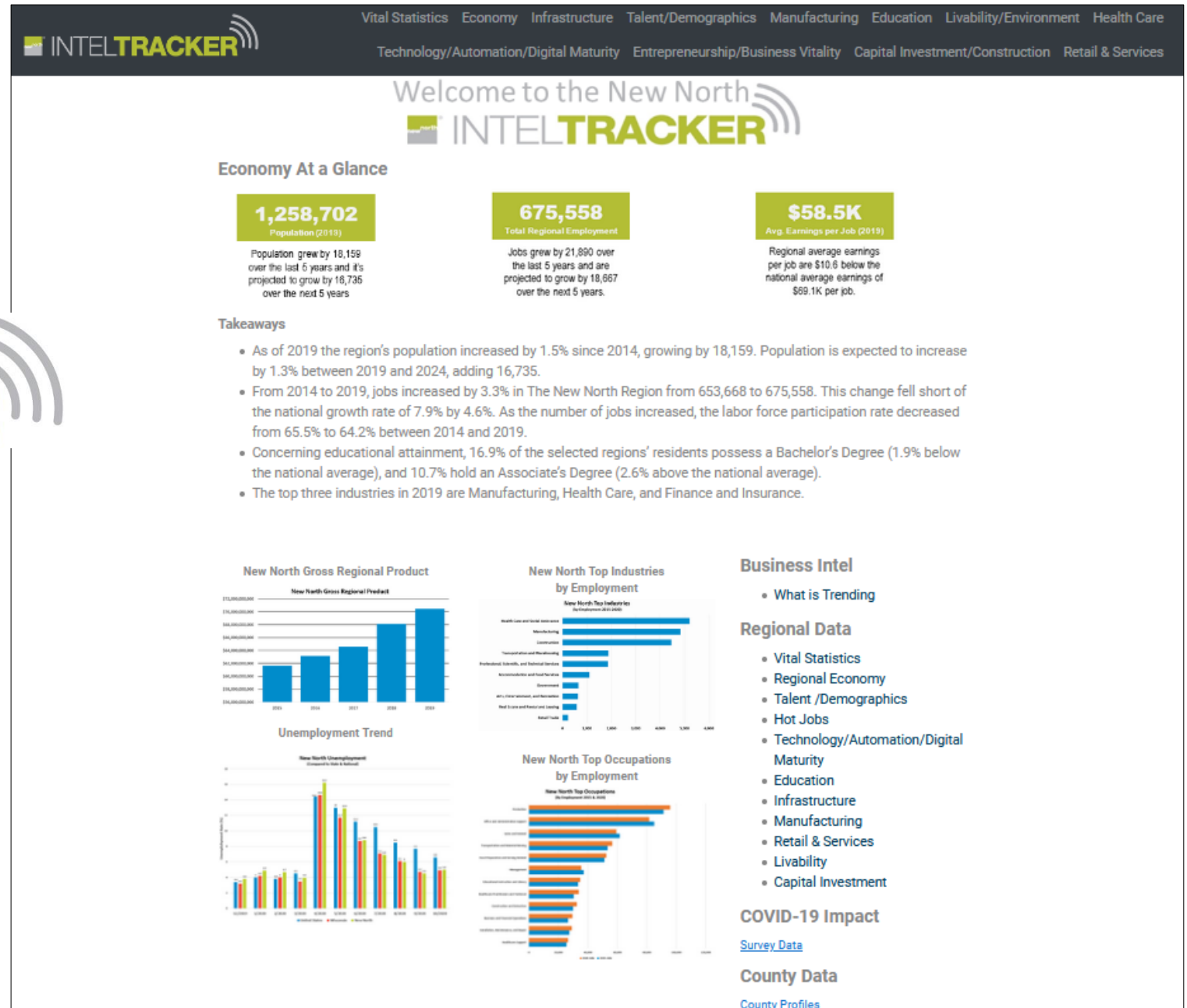


## Business Intelligence Committee



## Data Insights and Trends

**NewNorthInteltracker.com**



# Wisconsin's Recovery from the COVID Contraction

John Koskinen,  
Chief Economist, WI Dept. of Revenue



# Key Discussion Topics

1. Demonstrate the divide in the economy between the goods and service sectors
2. Consider the risks to recovery in 2021
3. Developments to watch that affect the recovery's potential

# *The Cross-Currents and Rip Tides*

## The COVID Recovery Is A Tale of Three Economies

Wide Variance in Recovery Status by Industry  
Depending on Continuing COVID Related Restrictions or Personal Response to COVID Risks

**REVIVED**  
Immediate Bounce  
Back Industries

Retail Sales  
Auto Production  
Housing

**REBOUNDING**  
Gradual  
Recovery Industries

Health Care  
Personal Services  
Industrial Production

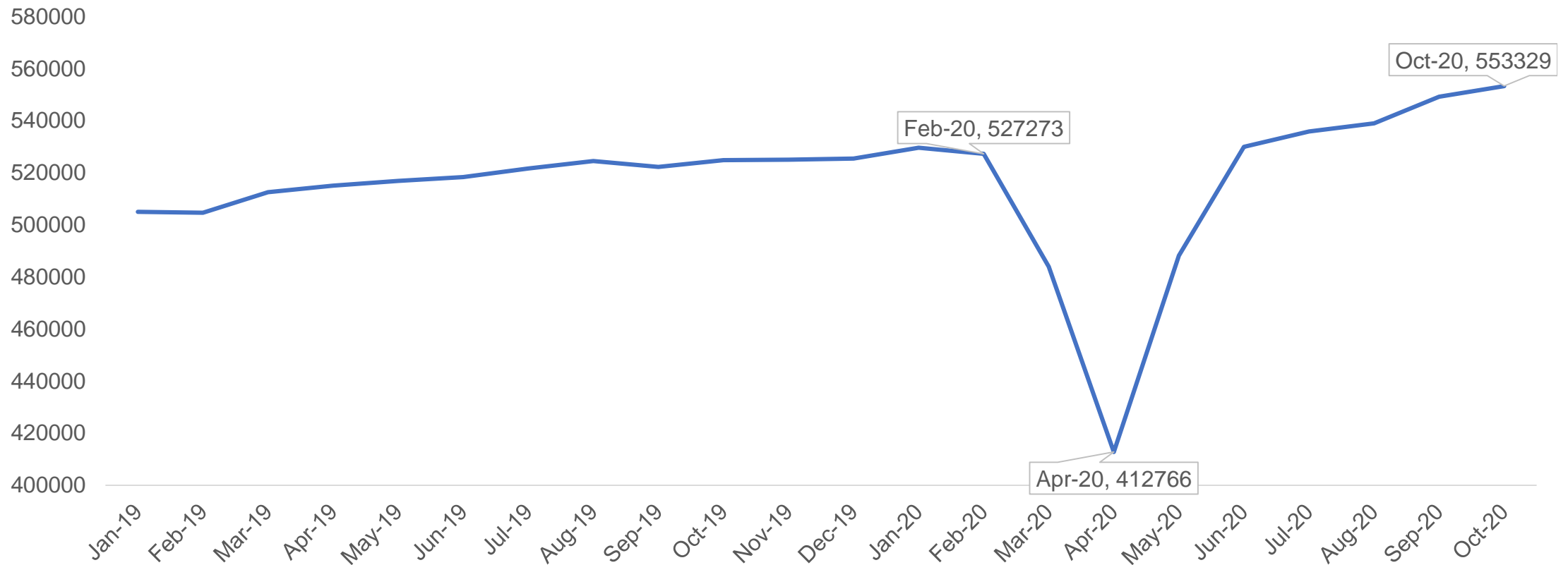
**RECESSIONARY**  
Deeply Challenged  
Industries

Air Travel  
Airplane Production  
Destination Travel  
Mass Entertainment  
Education

# *Revived:* Total U.S. Retail Sales Rebound

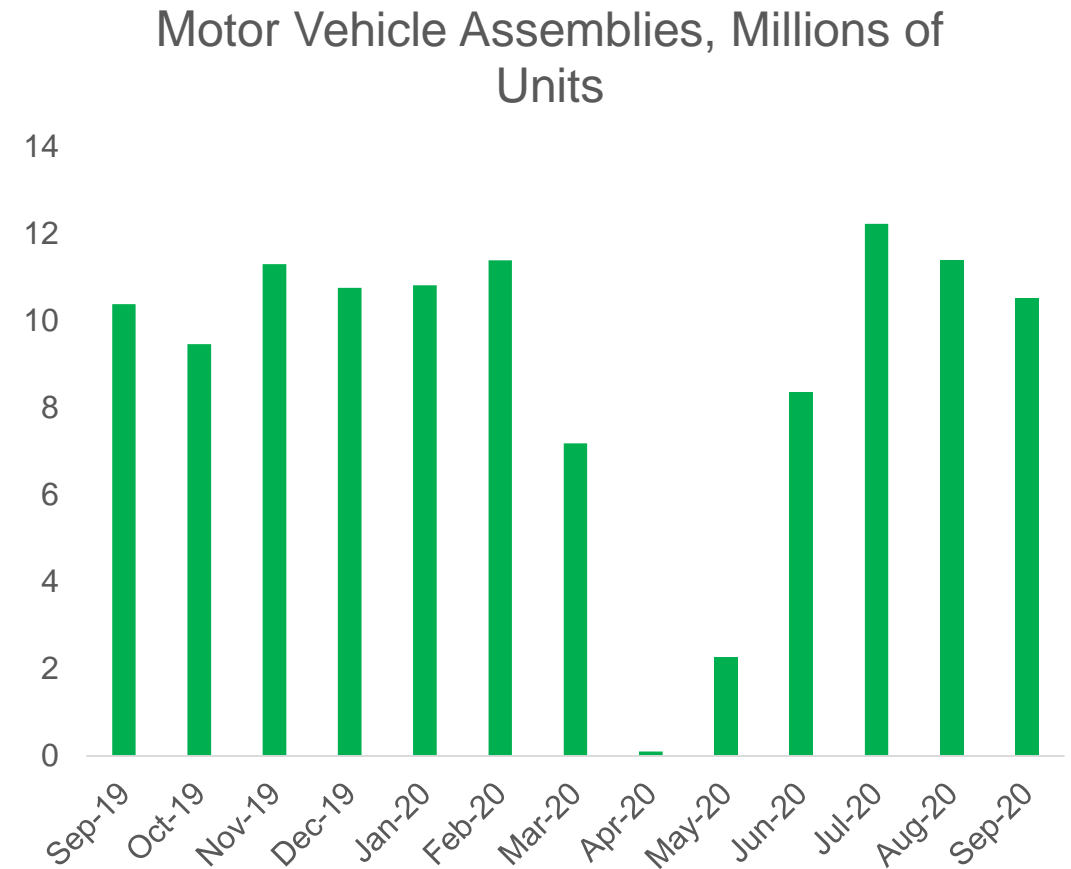
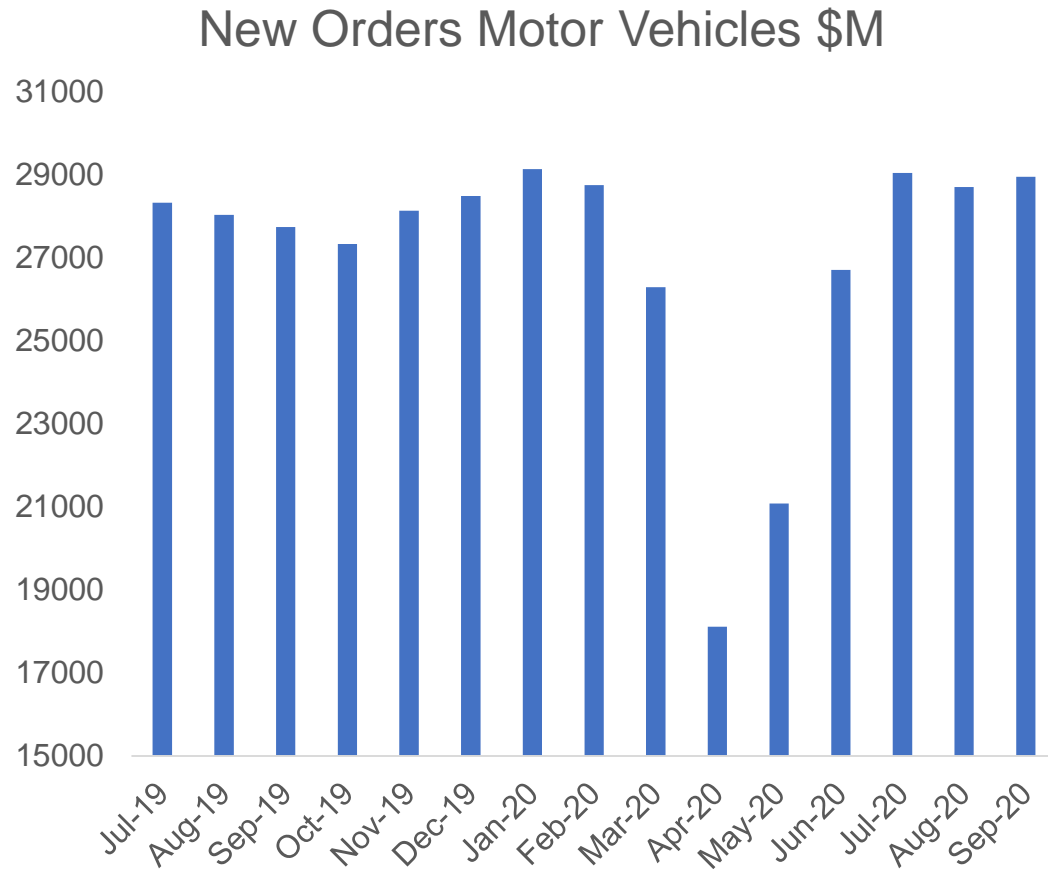
October Retail Sales Up 4.8% Over Pre-Recession Levels and 5.6% over Year Ago

Total U.S. Retail Sales \$B Seasonally Adjusted at Annual Rates



Source: U.S. Bureau of the Census, Advance Retail Sales, Release Date November 17,, 2020

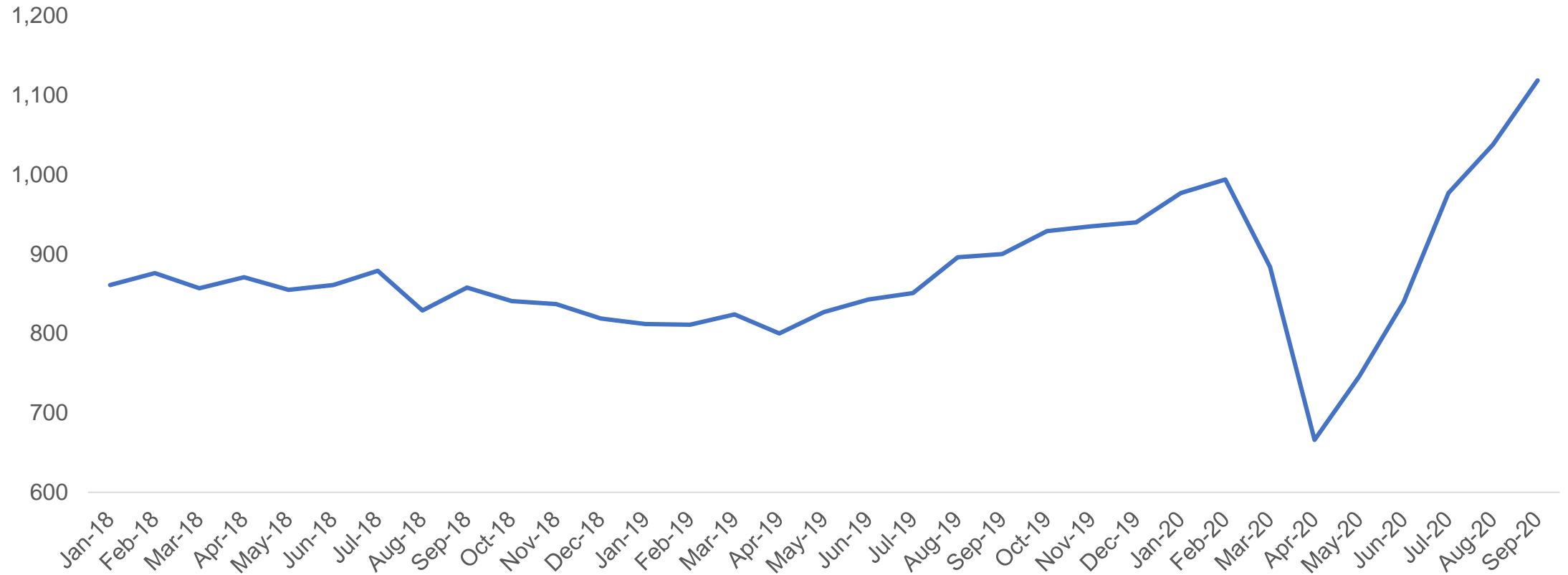
# *Revived:* Motor Vehicle New Orders Recovers, Production Follows





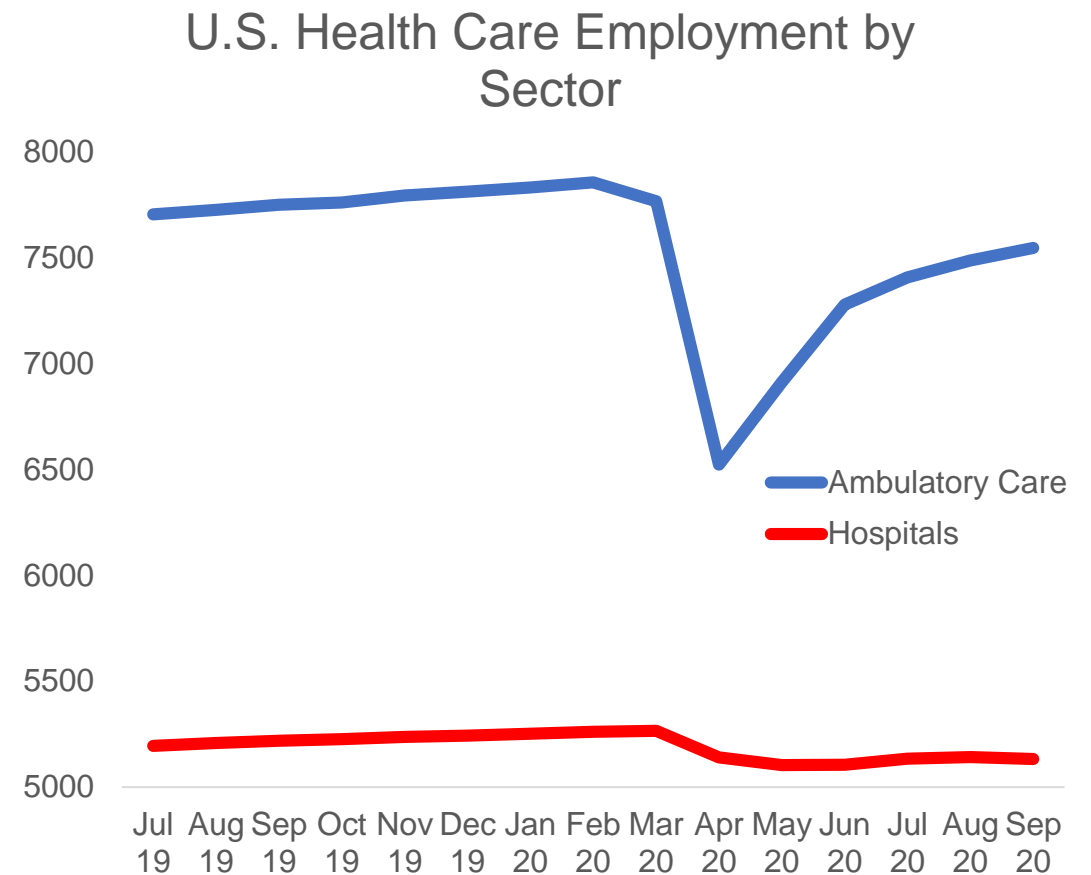
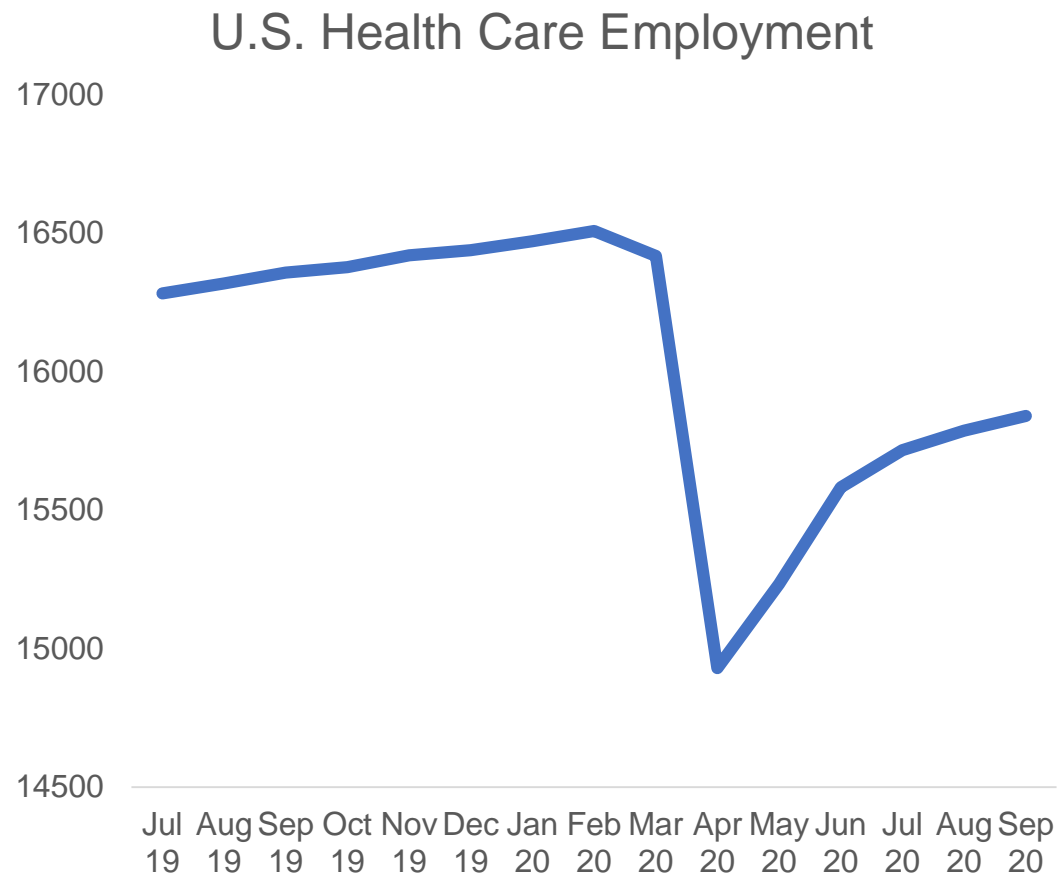
# *Revived:* Single Family Home Construction

U.S. Total Single Family Home Building Permits Issued, Thousands of Units



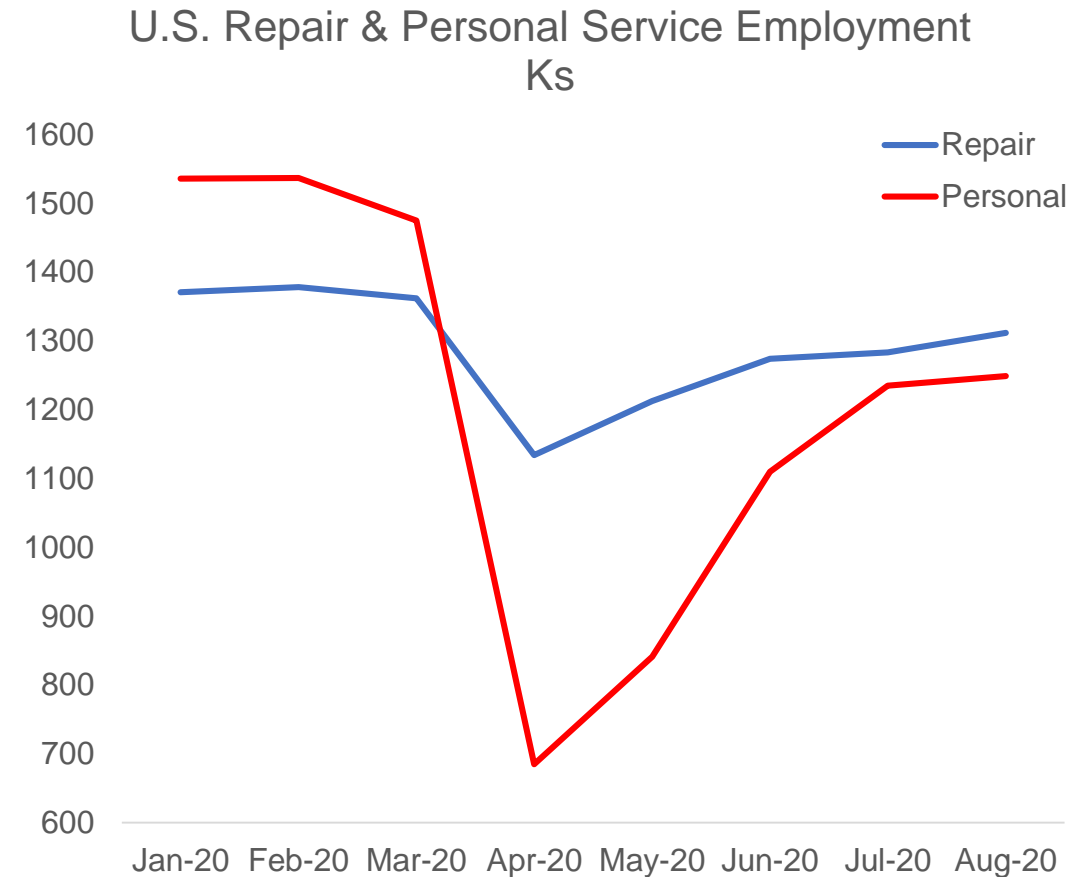
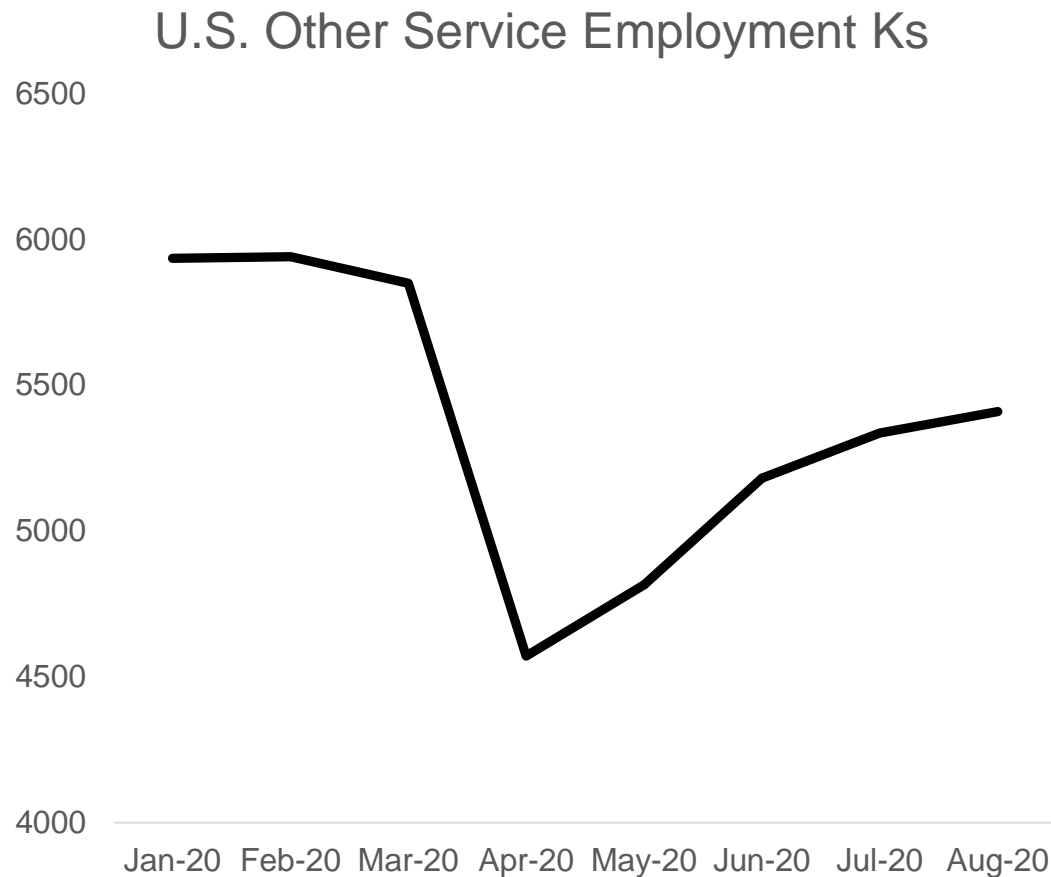
Source: U.S. Bureau of the Census, New Residential Construction, November 18, 2020, <https://www.census.gov/construction/nrc/pdf/newresconst.pdf>

# *Recovering:* Recovery in Ambulatory Care Leads Health Care



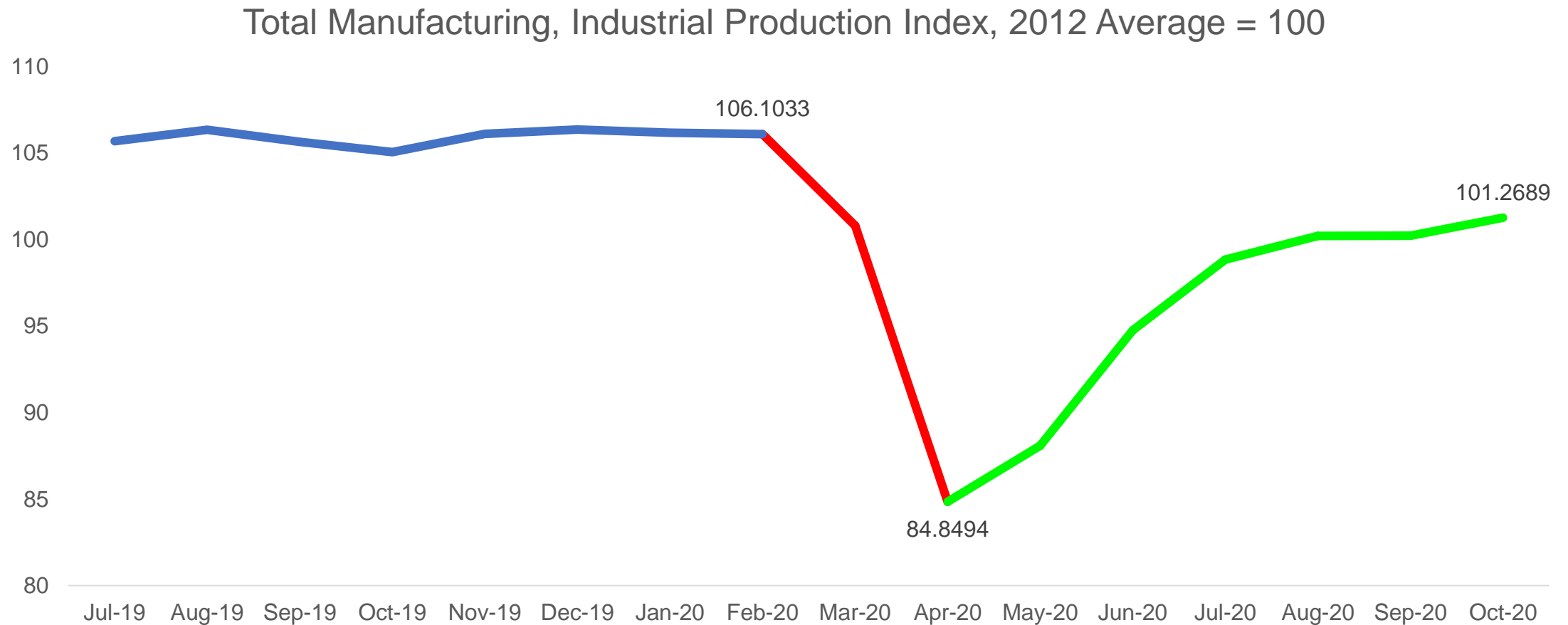
Source: U.S. Department of Labor Statistics, Current Employment Statistics, Data Released November 6,, 2020;  
<https://www.bls.gov/news.release/empst.nr0.htm>

# *Recovering:* Repair & Personal Services Leads Other Service Employment Rebound



Source: U.S. Department of Labor Statistics, Current Employment Statistics, Data Released November 6,, 2020; <https://www.bls.gov/news.release/empsit.nr0.htm>

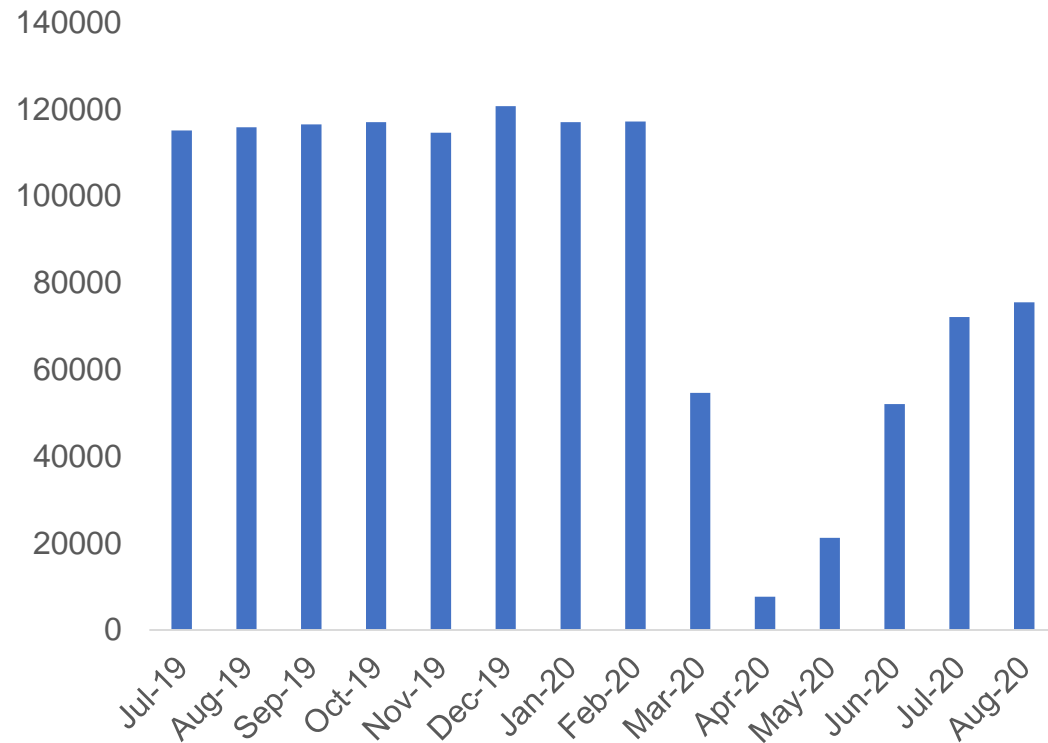
# *Recovering:* Manufacturing Rebuilding



Source: Federal Reserve Board of Governor's, Industrial Production Index, <https://www.federalreserve.gov/releases/g17/Current/default.htm>

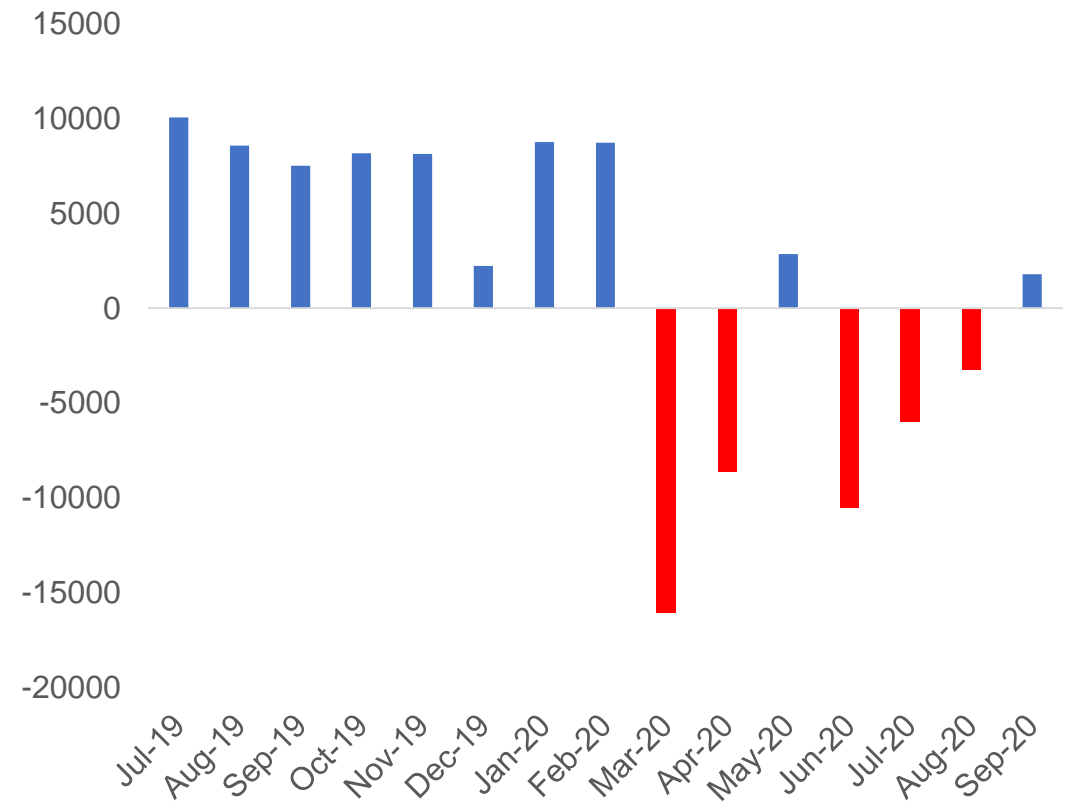
# *Recessionary:* Air Travel Down, Aircraft Orders Canceled

Consumer Spending on Air Transportation



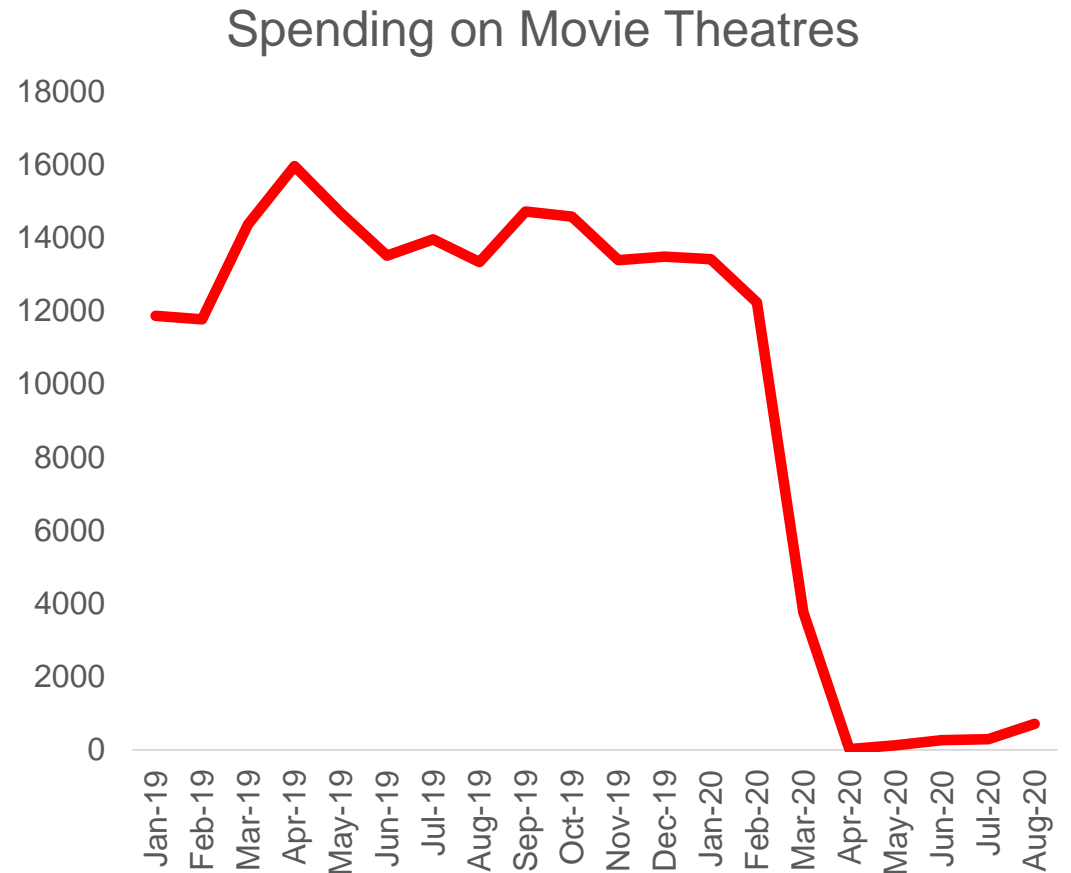
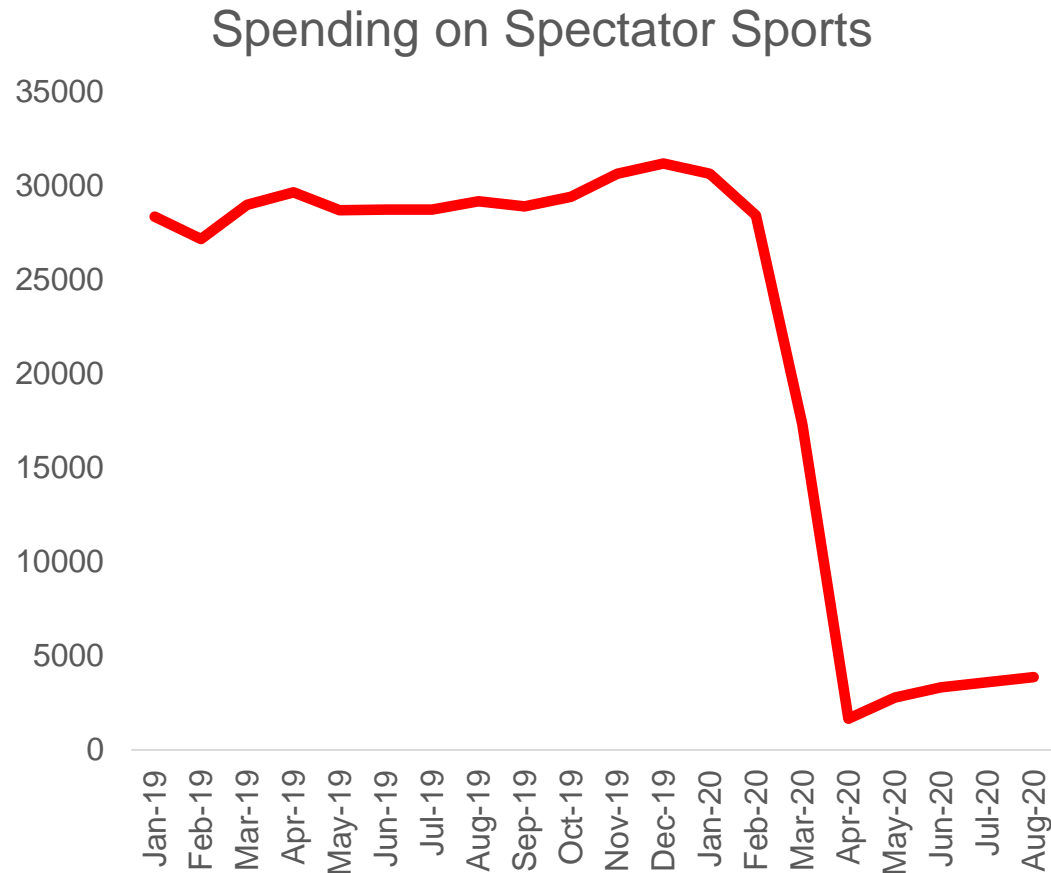
Source: U.S. Bureau of Economic Analysis, Consumer Spending Detailed Tables

New Orders Civilian Aircraft \$M



U.S. Bureau of the Census, New Orders for Manufactured Goods, Release Date, October, 2020

# *Recessionary:* Mass Entertainment Closer to Zero than Last Year's Levels

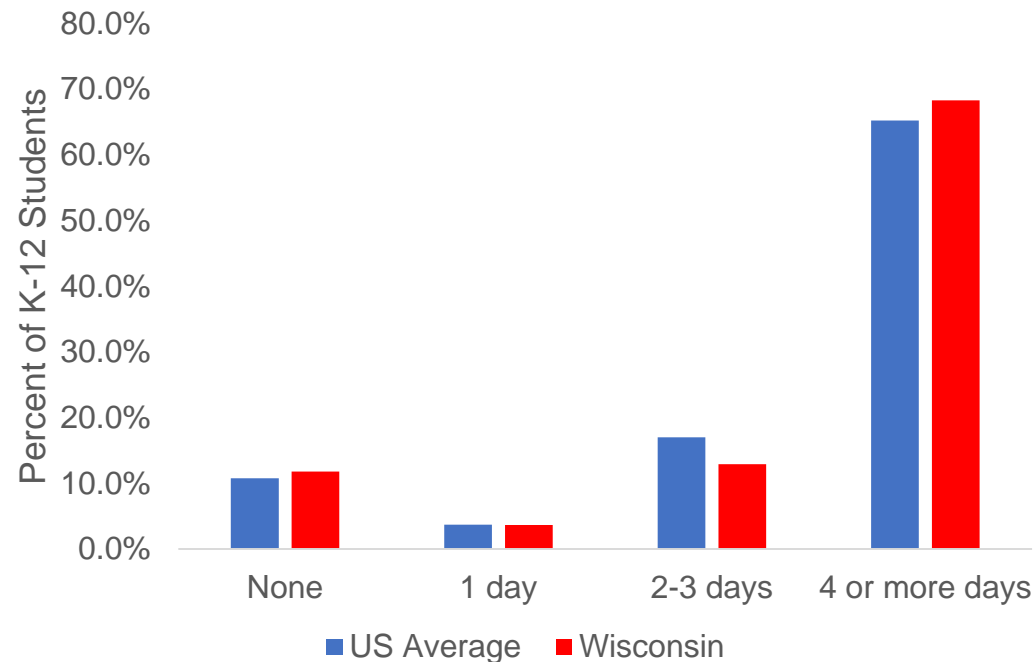


Source: U.S. Bureau of Economic Analysis, Consumer Spending Detailed Tables, <https://apps.bea.gov/iTable/iTable.cfm?ReqID=19&step=2#reqid=19&step=2&isuri=1&1921=underlying>

# *Recessionary:* The Virtual Lockdown in Local Schools

One-Third of K-12 Students Not In Full Session

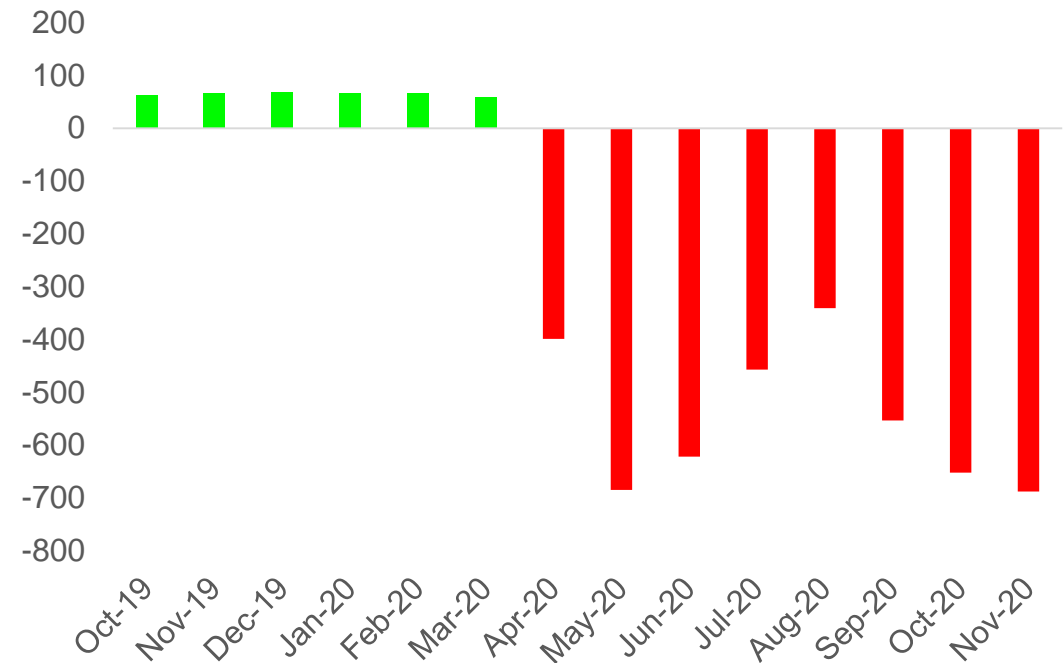
Frequency of Live Contact with Teachers



U.S. Bureau of the Census, Household Pulse Survey

Local Public Education  
Unprecedented Jobs Loss

Local Education Employment  
Change Over Prior Year in Thousands

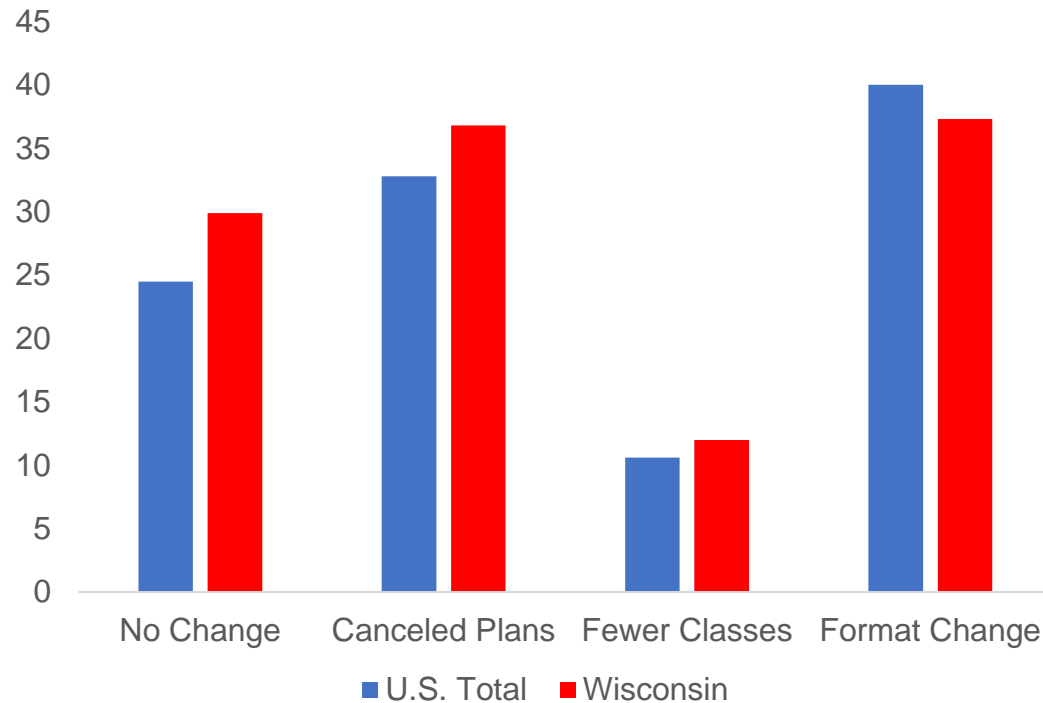


U.S. Bureau of Labor Statistics, Current Employment Statistics

# *Recessionary:* Higher Education Enrollment Shrinks.

Over 30% of Post-Secondary Students  
Cancelled Plans To Attend Fall 2020

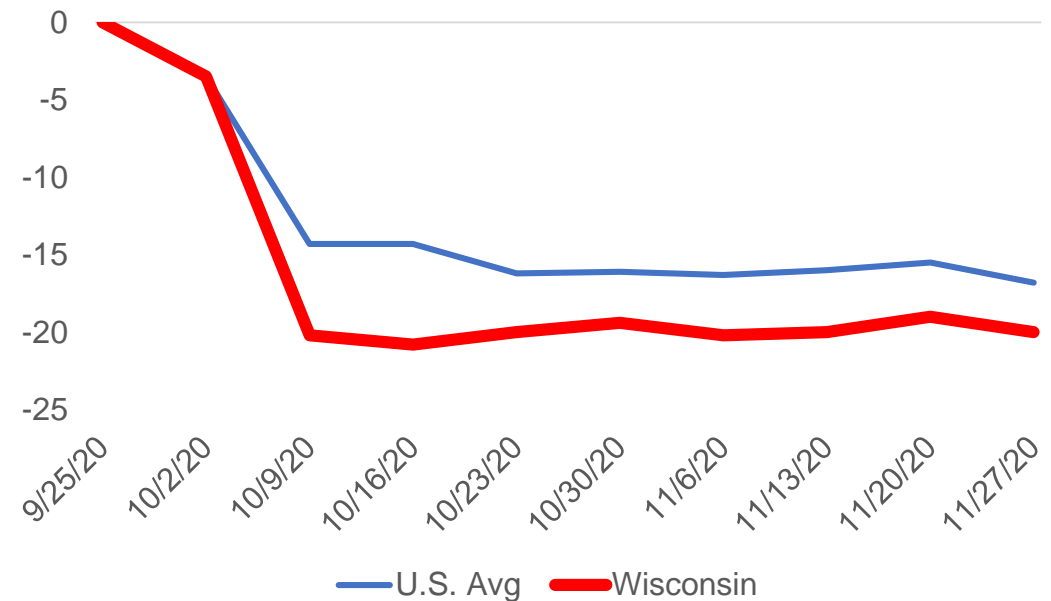
Higher Education Plans



Source: U.S. Bureau of Census, Household Pulse Survey

Prospective Students for 2021 Declining

Pct Change in FAFSA Application  
From Prior Year

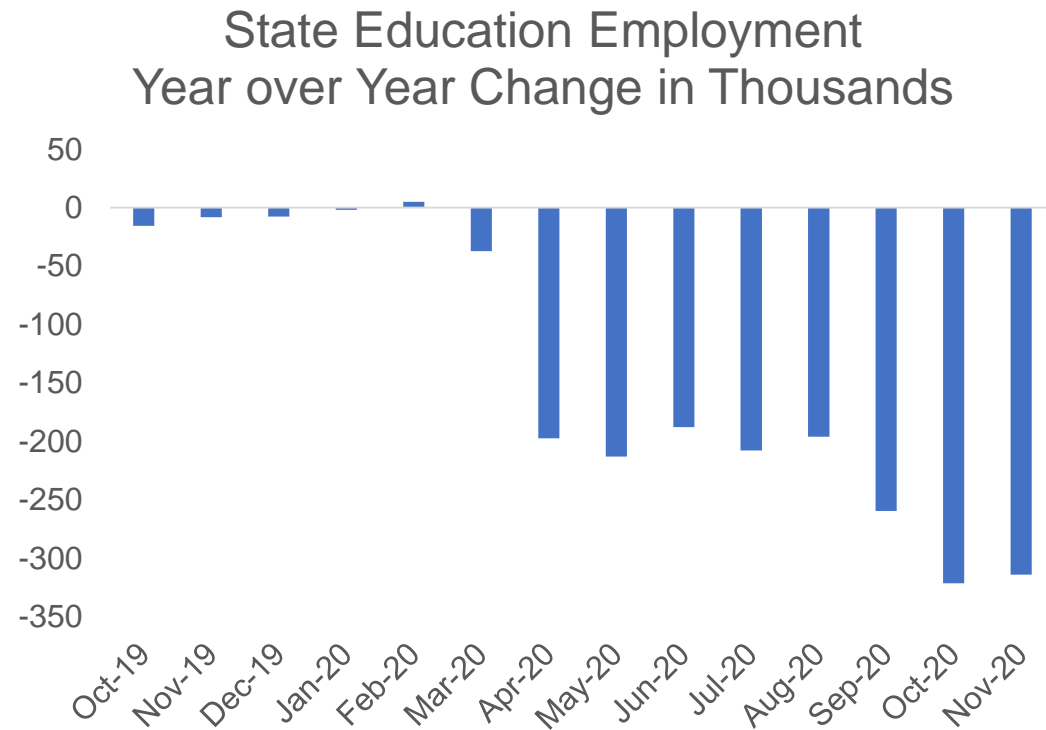


Source: National College Access Network

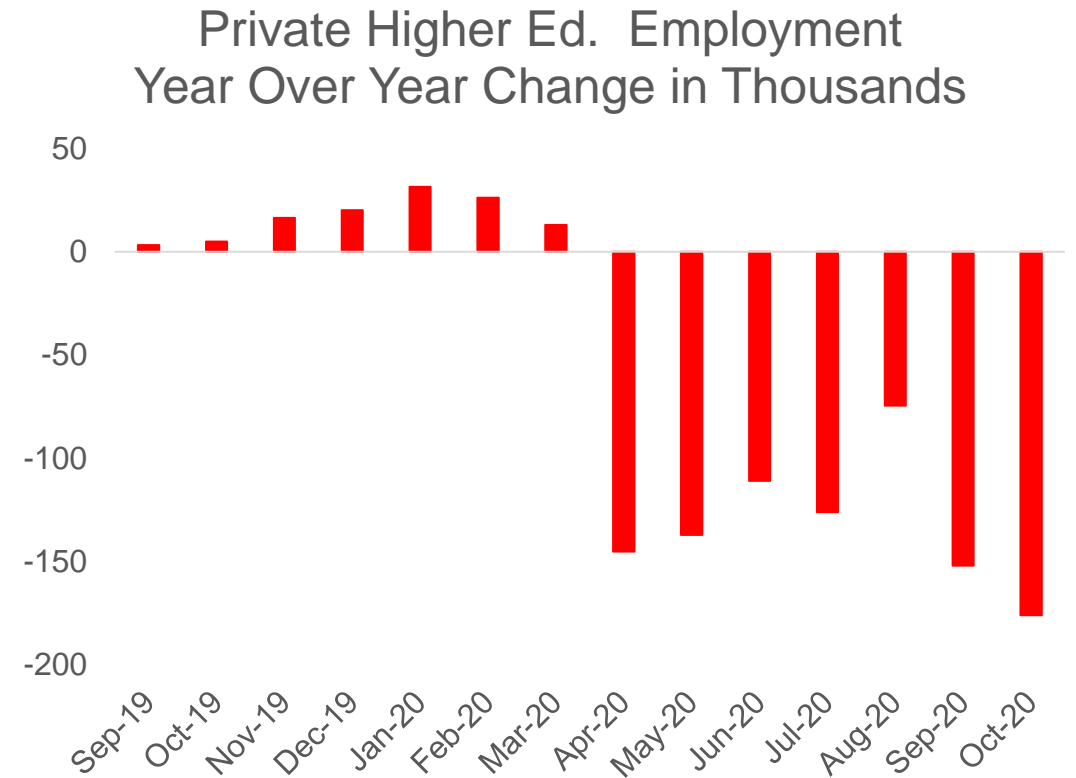


# *Recessionary:* As Higher Education Enrollment Shrinks, Job Losses Follow

## State Higher Education Job Losses Widening

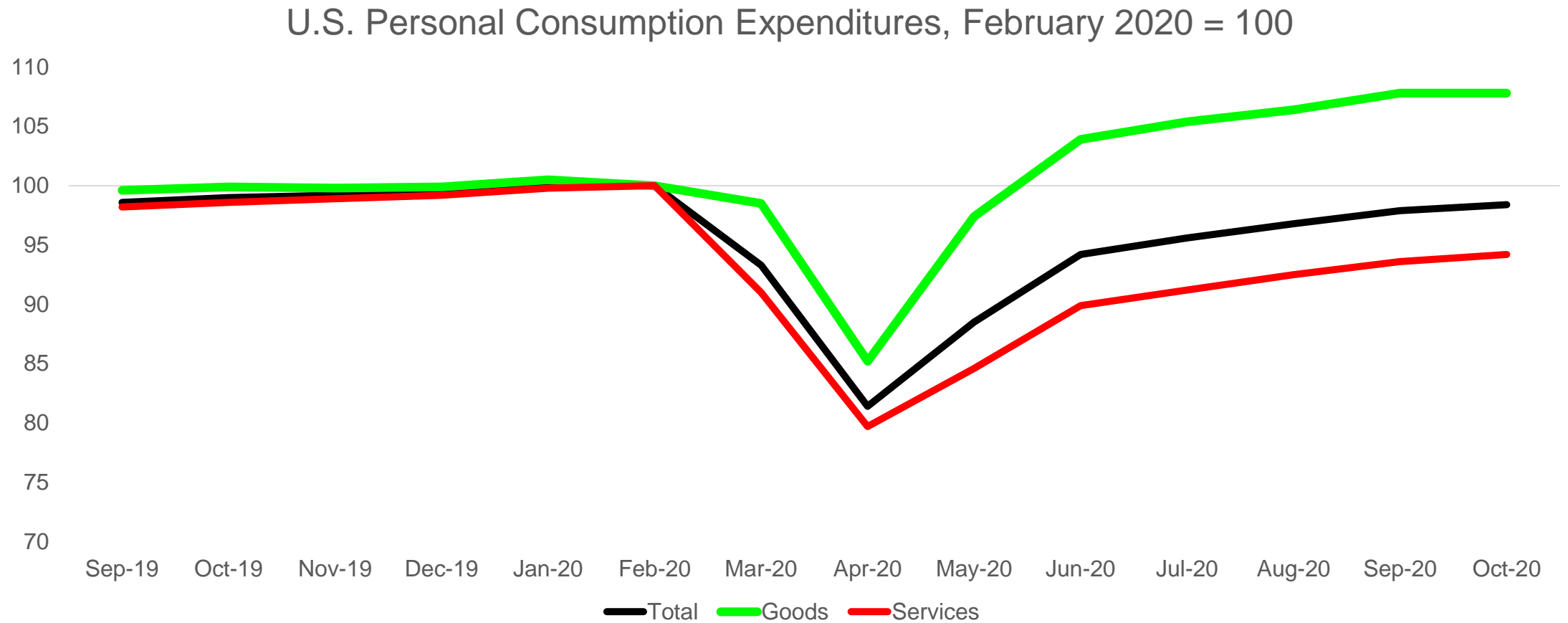


## As Are Private Higher Education Job Losses



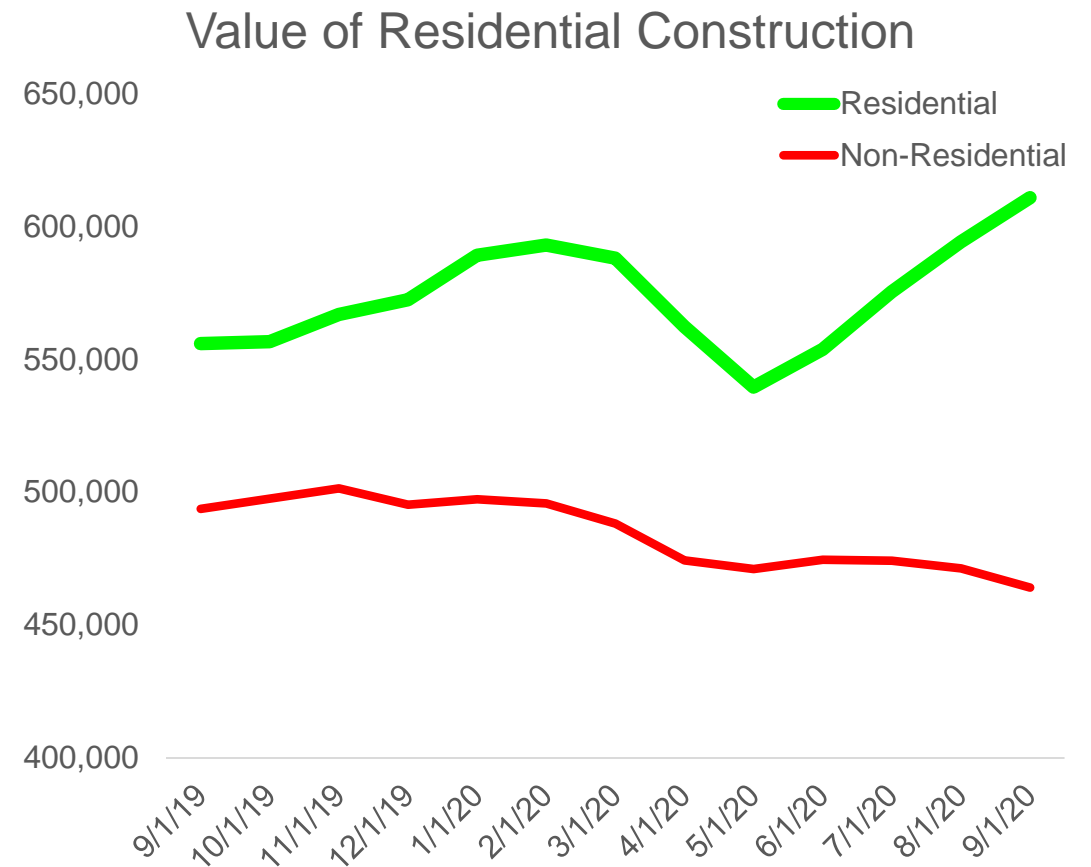
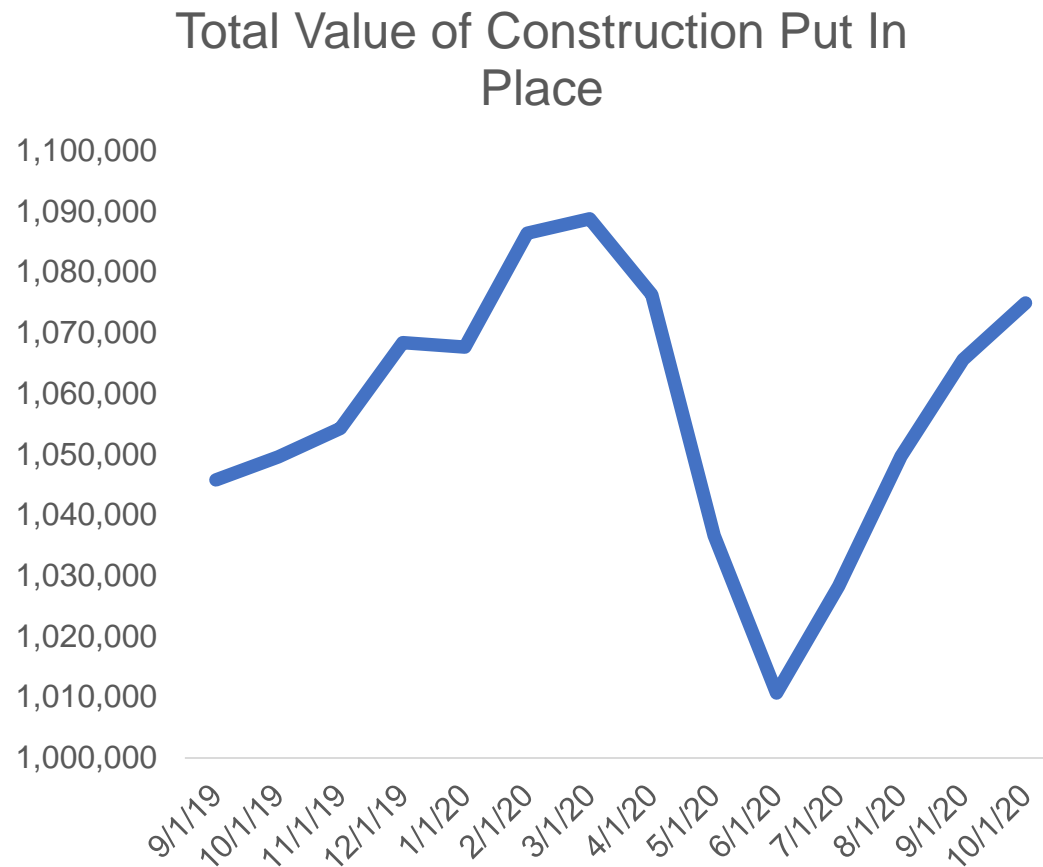
Source: U.S. Bureau of Labor Statistics, Current Employment Survey

# The Economy's Fault Line Lies Between Goods and Services



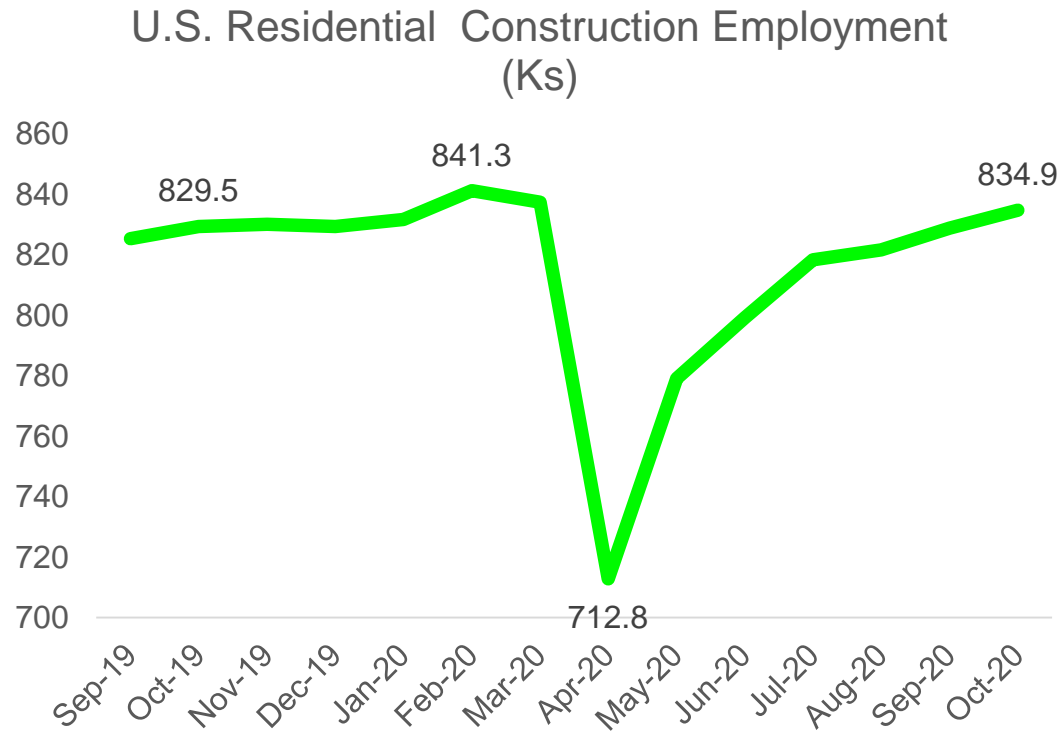
# *Divide Within Recovering Industries:*

## Construction: Residential v. Nonresidential

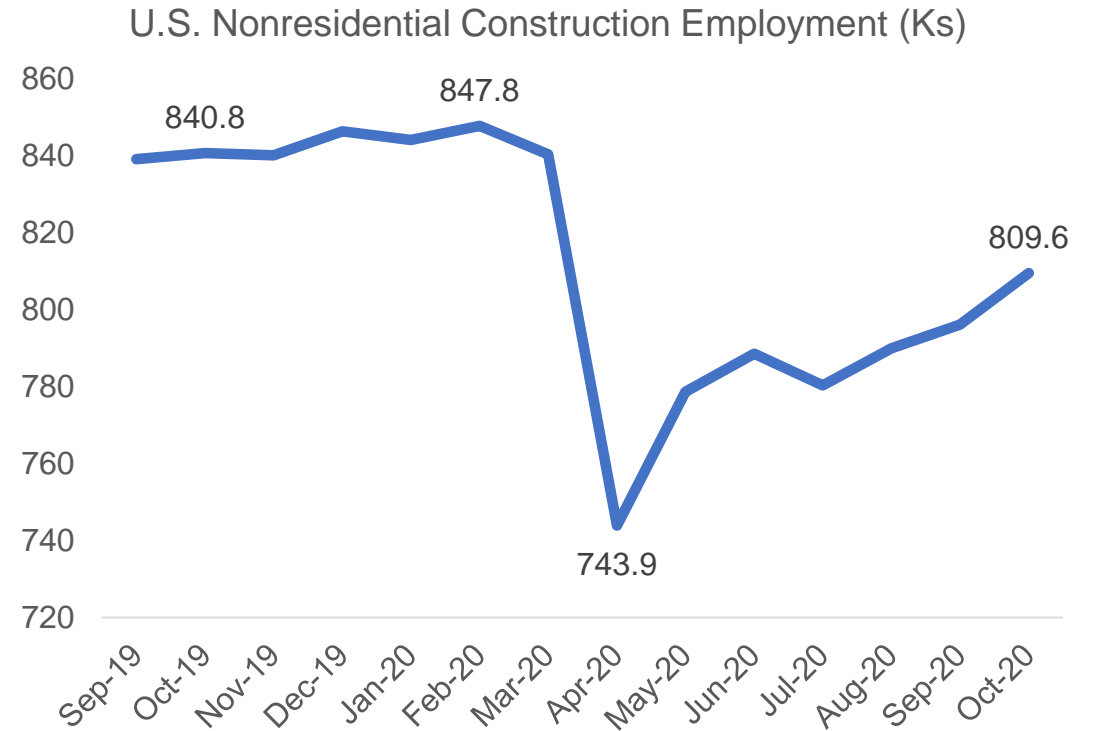


# The Construction Industry Split Reflected in Employment Data

## Oct 2020 Residential Construction Employment Gain over Oct 2019

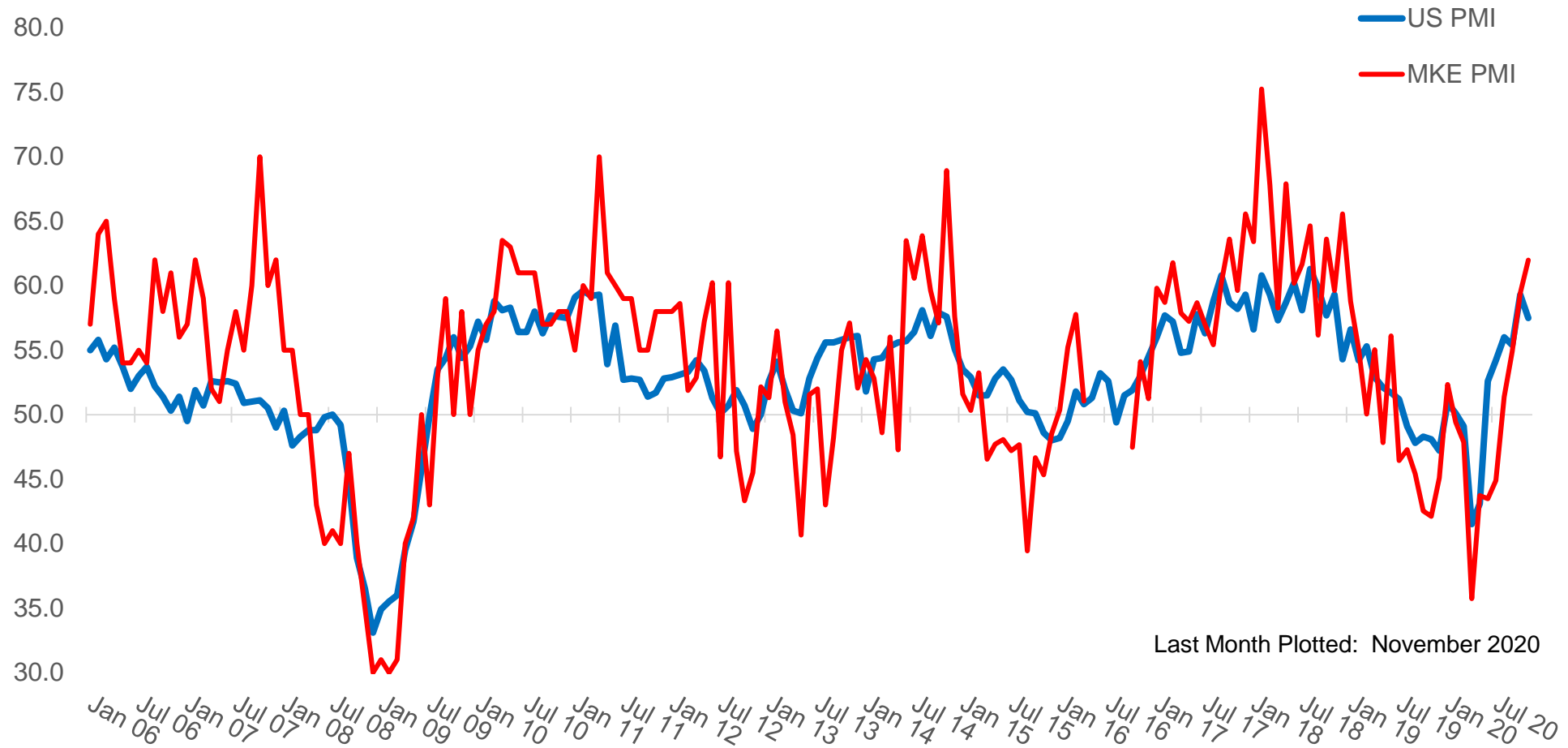


## Oct 2020 Nonresidential Construction Employment Lags Oct 2019



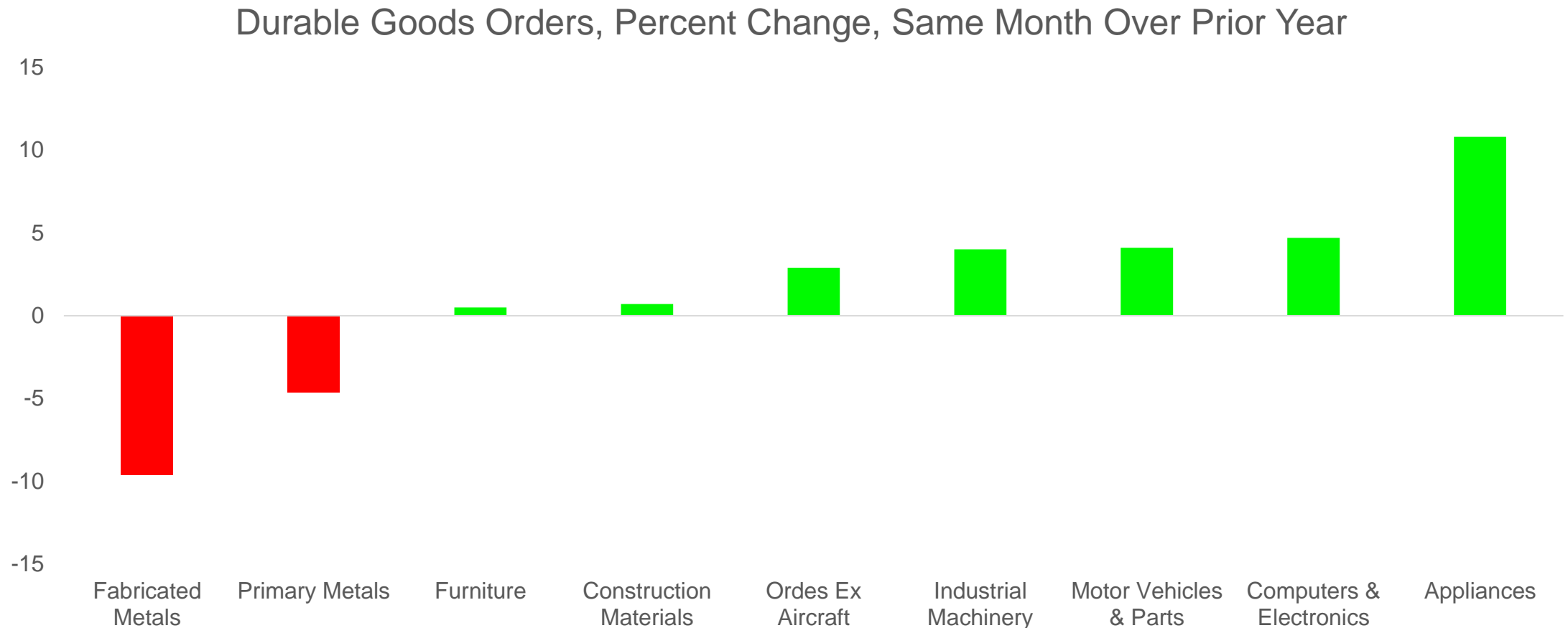
# *Divide Within Recovering Industries:* Wisconsin Manufacturing Moves Back to Expansion

Purchasing Manufacturers' Index--Manufacturing



Source: Institute for Supply Management; Marquette University Center for Supply Management

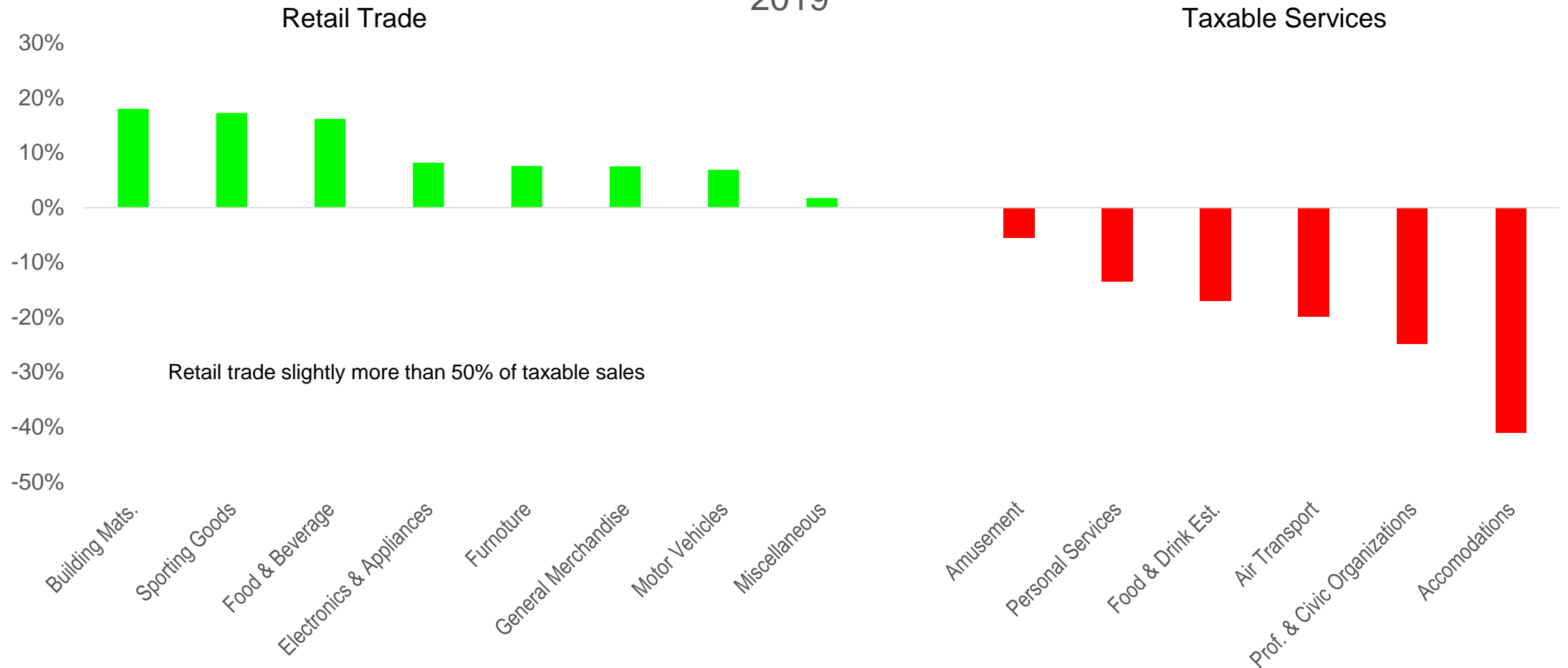
# *Divide Within Recovering Industries:* Manufacturing Prospects Depend on the Industry



U.S. Bureau of the Census, Manufacturers' New Orders, October 27, 2020, <https://www.census.gov/manufacturing/m3/adv/pdf/durgd.pdf>

# Sales Tax Collections Reflect the Divide

Percent Change in Sales Taxes by Industry, September 2020 over September 2019

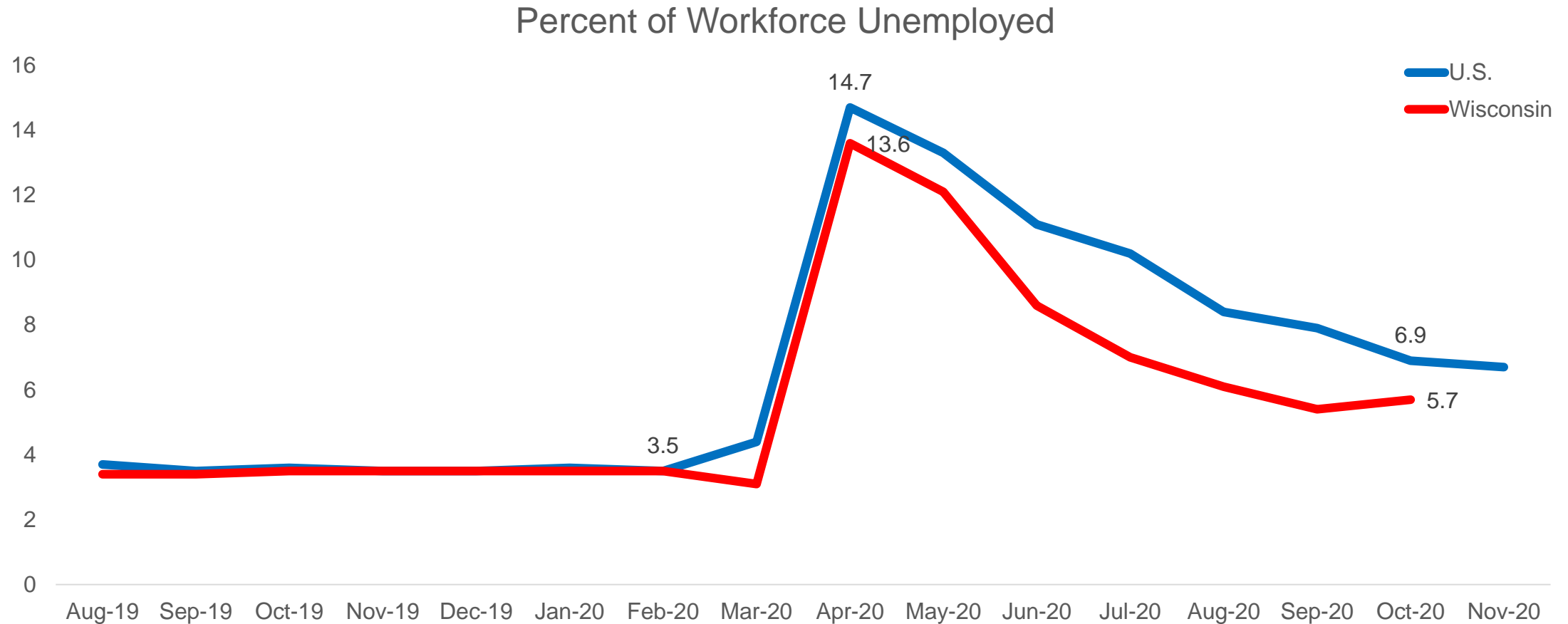


Retail trade slightly more than 50% of taxable sales

Source: Wisconsin Department of Revenue, Sales Tax By Industry, <https://public.tableau.com/profile/research.policy#!/vizhome/MonthlyStateandCountySalesandUseTax/Story2>

# U.S. and Wisconsin Unemployment Rates Down Sharply from April Peak

Wisconsin's Unemployment Rate 2.5 Points Below U.S. Average



Source: U.S. Bureau of Labor Statistics, Current Population Survey, Release November 6,, 2020  
and Local Area Unemployment Statistics, Release October 20, 2020



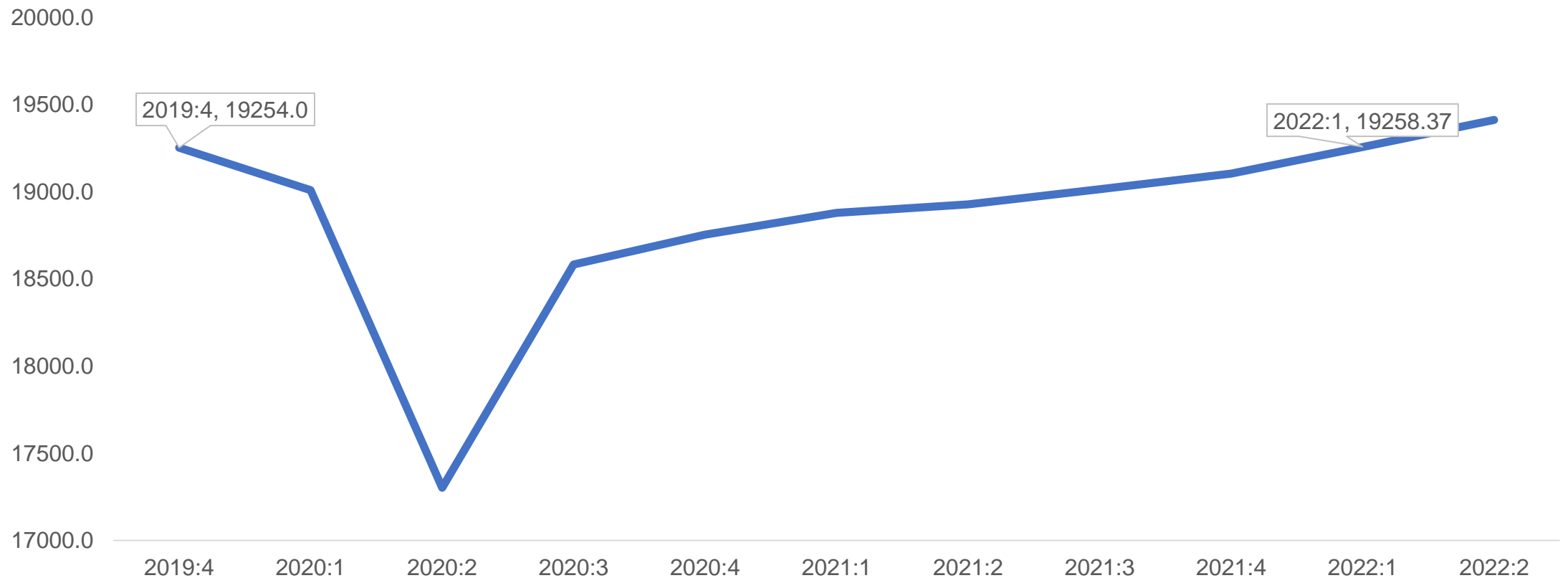
# Divide Visible in Wisconsin Employment

Change in Wisconsin Employment, September 2020 over September 2019							
Up Over Last Year		Decline to -5%		Down -5% to -10%		Down -10%	
Industry	% Chg Over PY	Industry	% Chg Over PY	Industry	% Chg Over PY	Industry	% Chg Over PY
RT General Merchandise	12.1%	Printing	-0.7%	Local Education	-5.6%	Information	-14.3%
Heavy Construction	7.6%	Paper	-1.0%	Wood Products	-5.7%	Private Colleges	-18.0%
Food Manufacturing	6.0%	CONSTRUCTION	-1.1%	St. Govt Education	-6.1%	Electrical Equip	-19.1%
Wholesale Trade NDG	4.6%	GOODS	-3.6%	TOTAL	-6.5%	Personal Svcs	-19.9%
Services to Buildings	3.5%	TRANSPORTATION	-3.9%	PRIVATE	-6.7%	Employment Svcs	-20.5%
RT Dept Stores	2.3%	State Gov't	-3.9%	Fabricated Metals	-7.2%	Leisure & Hospitality	-23.1%
Trucking	1.3%	Health Care	-4.0%	SERVICES	-7.9%	Full Svc Restaurants	-26.6%
Machinery	0.6%	MANUFACTURING	-4.4%			Entertainment	-26.7%
		Plastics	-5.0%			Accommodations	-28.3%
						Drinking Places	-50.4%

Source: Author Calculation, U.S. Bureau of Labor Statistics, State and Metro Area Employment, Hours, and Earnings, <https://www.bls.gov/sae/>

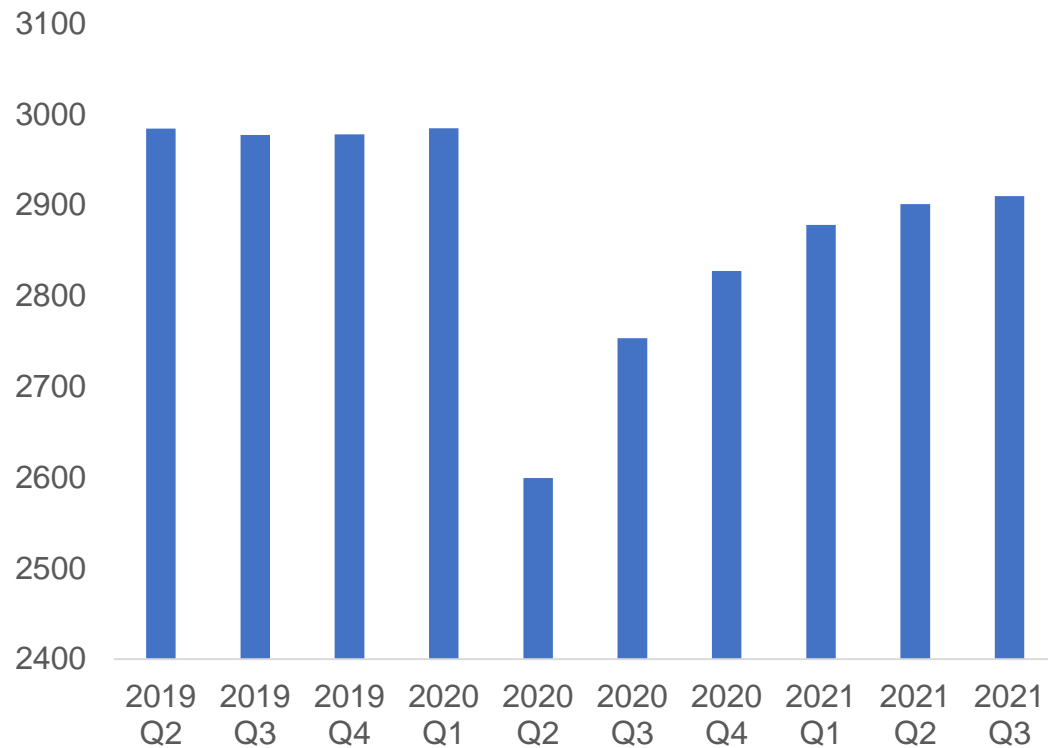
# *Outlook:* Real GDP Reaches Full Recovery By 2022 Q1 Expansion Thereafter

Real GDP in Billions of Dollars

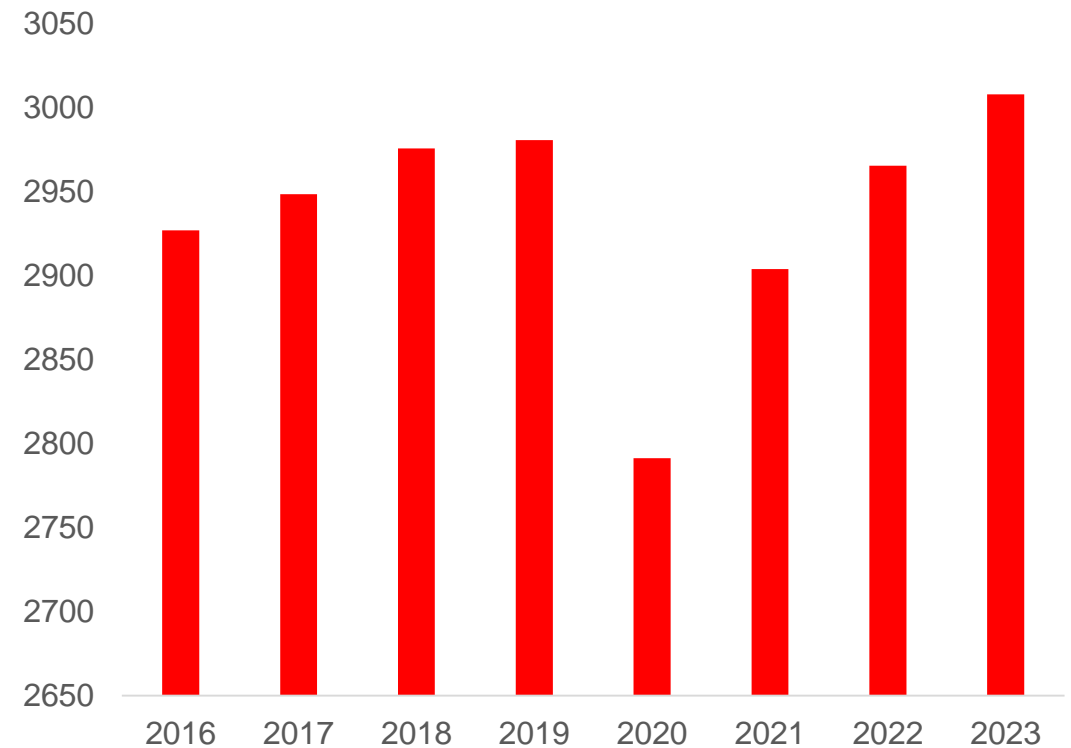


# Outlook: Wisconsin Employment Rebounding Recovered by Late 2022

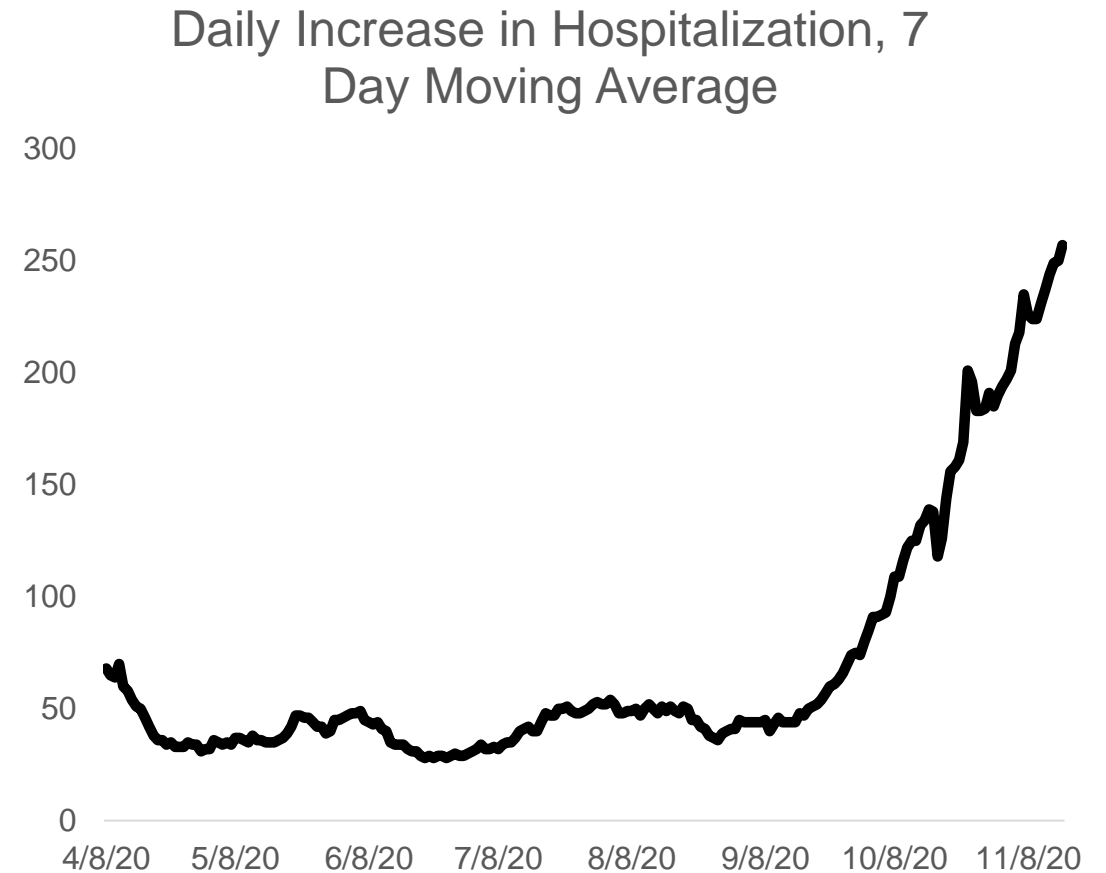
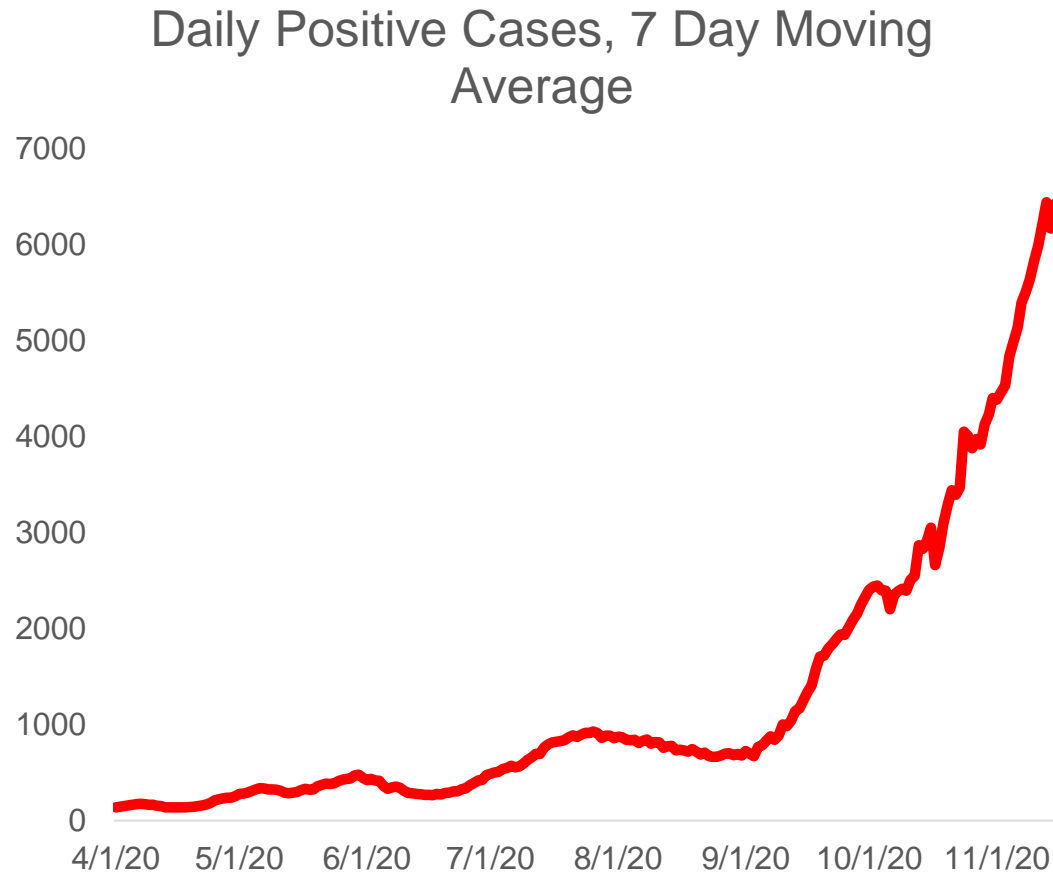
Wisconsin Non-Farm Employment  
by Quarter



Wisconsin Nonfarm Employment  
Annual Average



# *Risks to Forecast:* The Exploding Volume of COVID Cases in Wisconsin



Source: Author Calculations. Wisconsin Department of Health Services, <https://www.dhs.wisconsin.gov/outbreaks/index.htm>

# *Risk to Forecast:* Stimulus Funding Exhausted Without a Refresh

- Original allocation nearly exhausted.
  - State of Wisconsin share of CARES allocation: \$2.0 billion
  - \$1.1 billion supported health care, expanded testing, and creation of Alternate Care Facility
  - \$0.5 billion provided economic support
- Without some form of second round,
  - Small businesses in challenged industries at risk
  - Long term unemployed rent payment and health care at risk
  - Education at risk

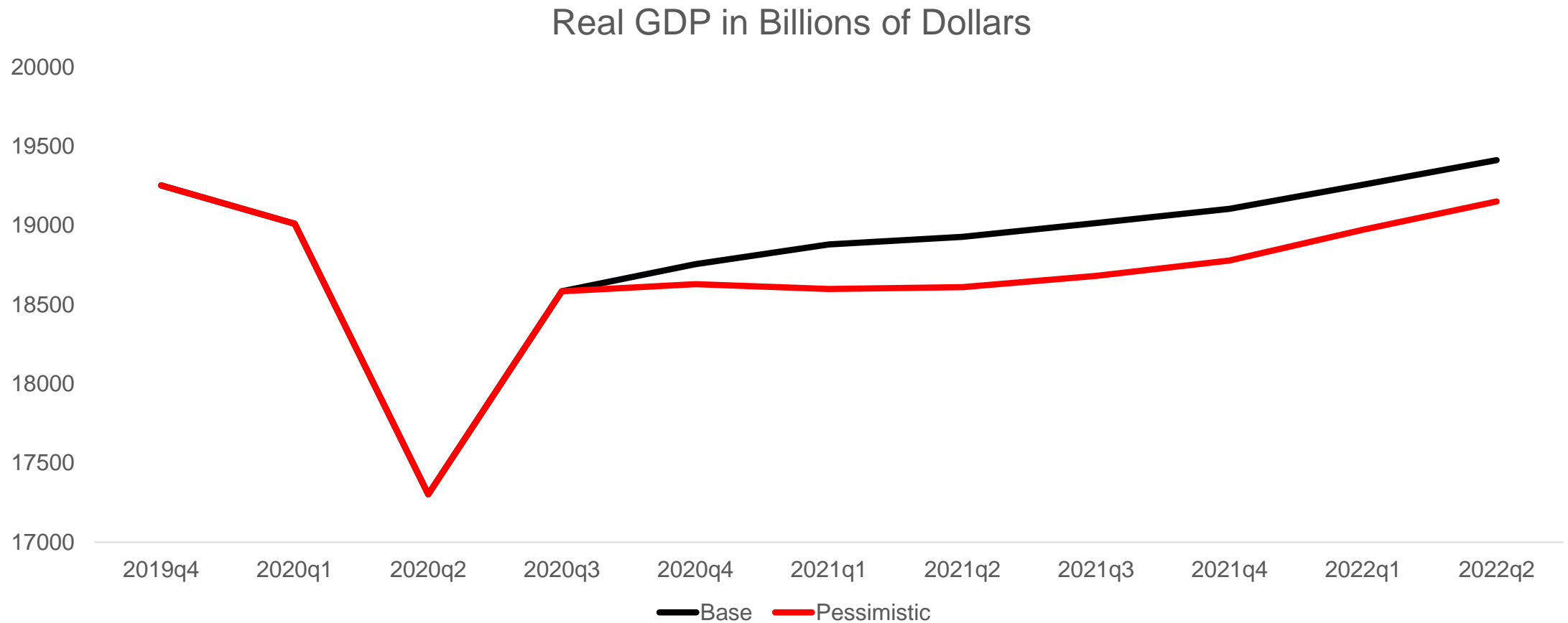
# Stimulus Funds Lifted Wisconsin in 2020 Q2

Change Wisconsin Personal Income in Millions of Dollars at Seasonally Adjusted Rates

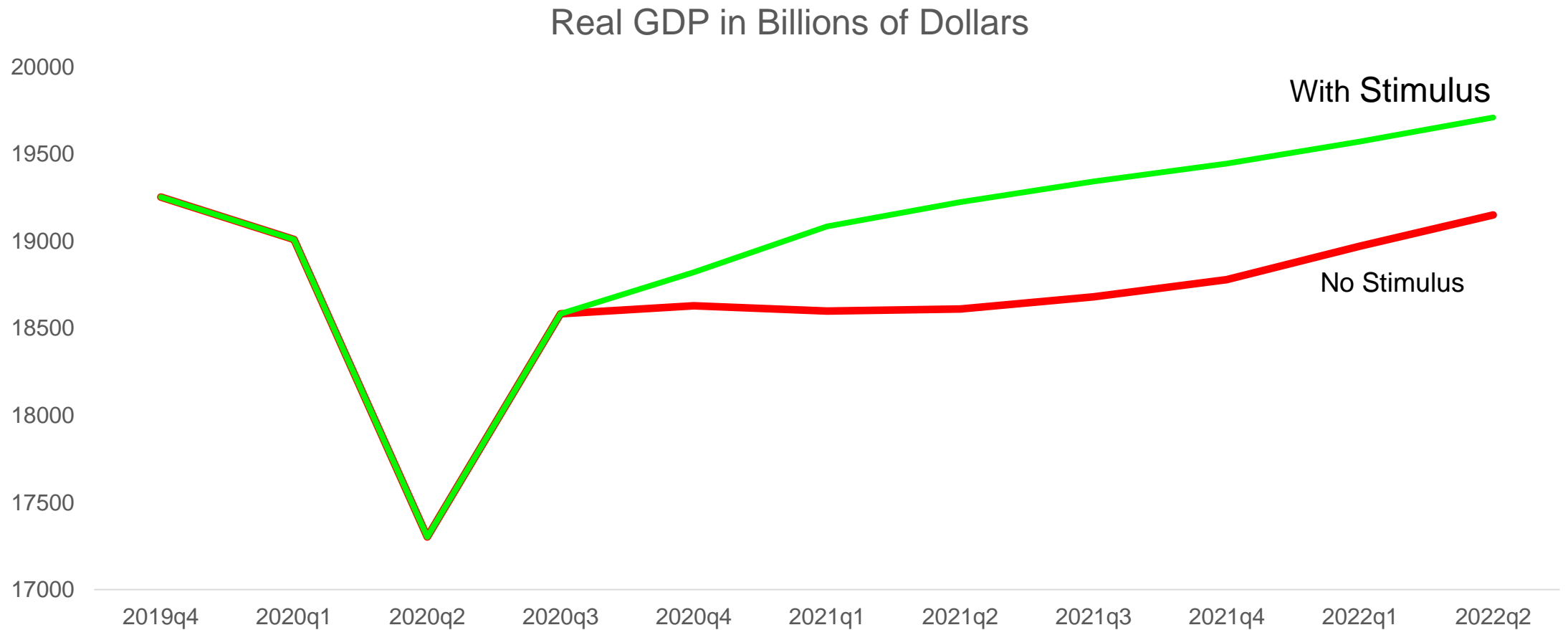
Total	\$21, 516.9	Stimulus Funds	\$37,121.8
		Increase in Medicare reimbursement rates	174.9
Work Earnings	-16,207.2	Pandemic Emergency UC	87.3
Farm Income	-668.1	Pandemic Unemployment Assistance	112.8
Proprietors Income	-1,259.0	Pandemic UC Payments	8,433.9
		Economic impact payments	20,635.0
		Paycheck Protection Program loans to NPISH	360.0.
		Provider Relief Fund to NPISH	3,018.1
		Farm: Coronavirus Food Assistance Program	1,127.7
		Farm: Paycheck Protection Program loans	228.4
		Nonfarm: Paycheck Protection Program loans	3,303.7

Source: U.S. Bureau of Economic Analysis, Regional Economic Accounts, <https://www.bea.gov/system/files/2020-10/Covid-Workbook.pdf>

# *Risks to Forecast:* Rising COVID Cases and No Stimulus Bill Leads to Double-Dip in 2021Q1



# *Developments to Watch:* Vaccine Rollout PLUS Added Federal Stimulus Strengthens Expansion





# New North Regional Data

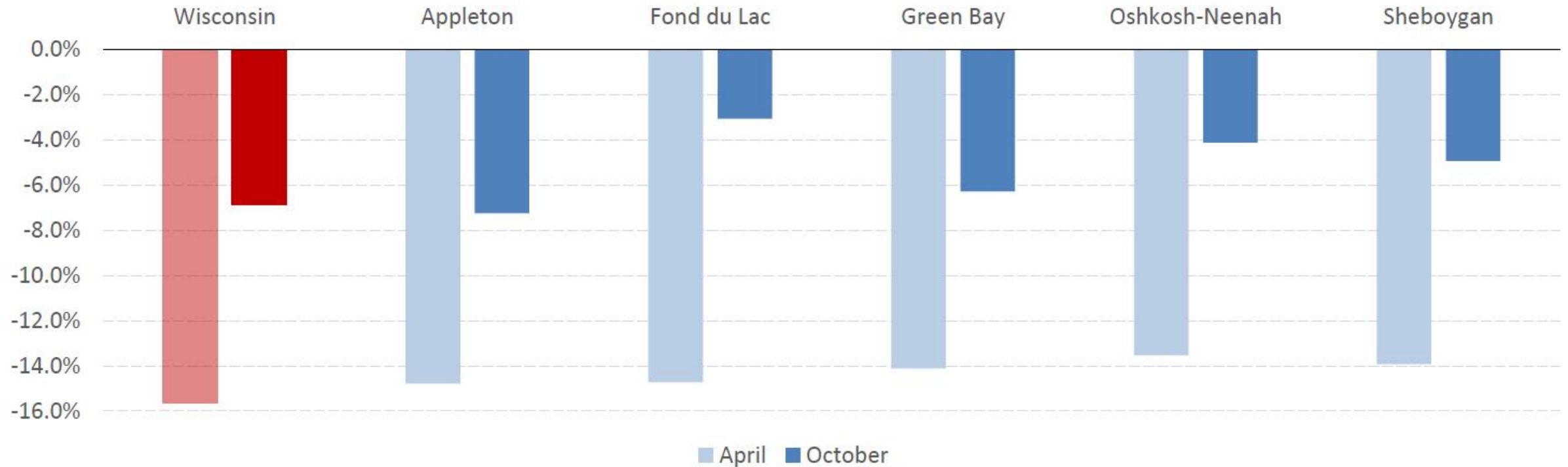
Wisconsin Department of Revenue –  
Division of Research & Policy

Emily Camfield, Economist  
WI Dept. of Revenue



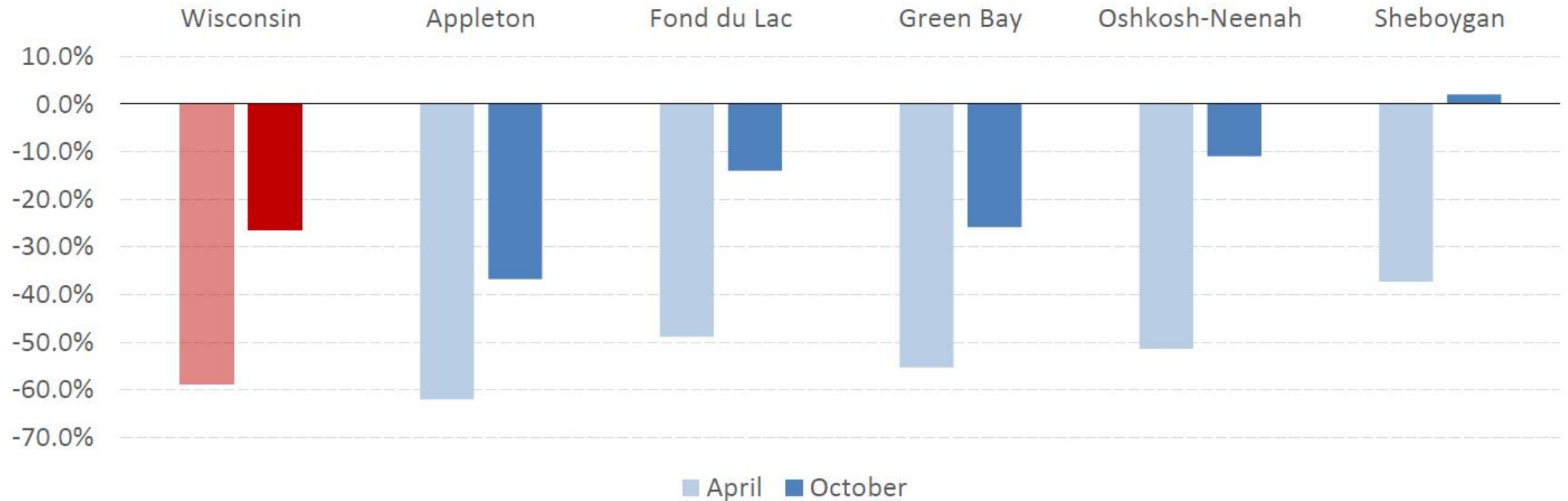
# Employment Has Recovered Some of Its Losses

Total Employment - Y/Y Change



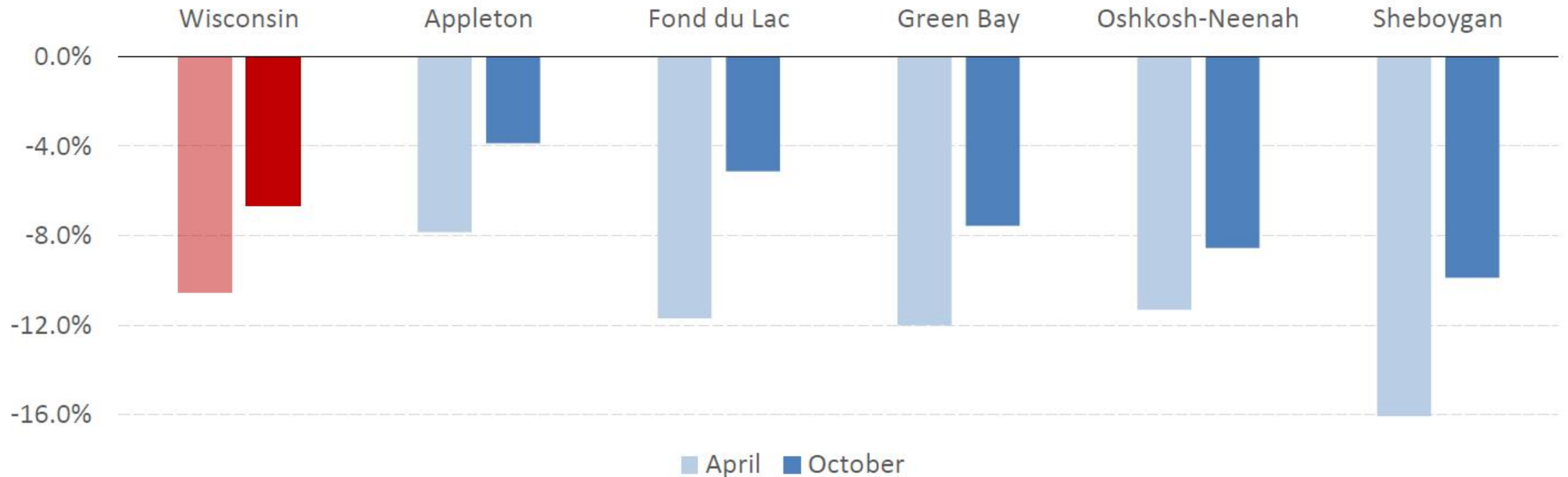
# Some Industries More Impacted Than Others

Leisure & Hospitality - Y/Y Change



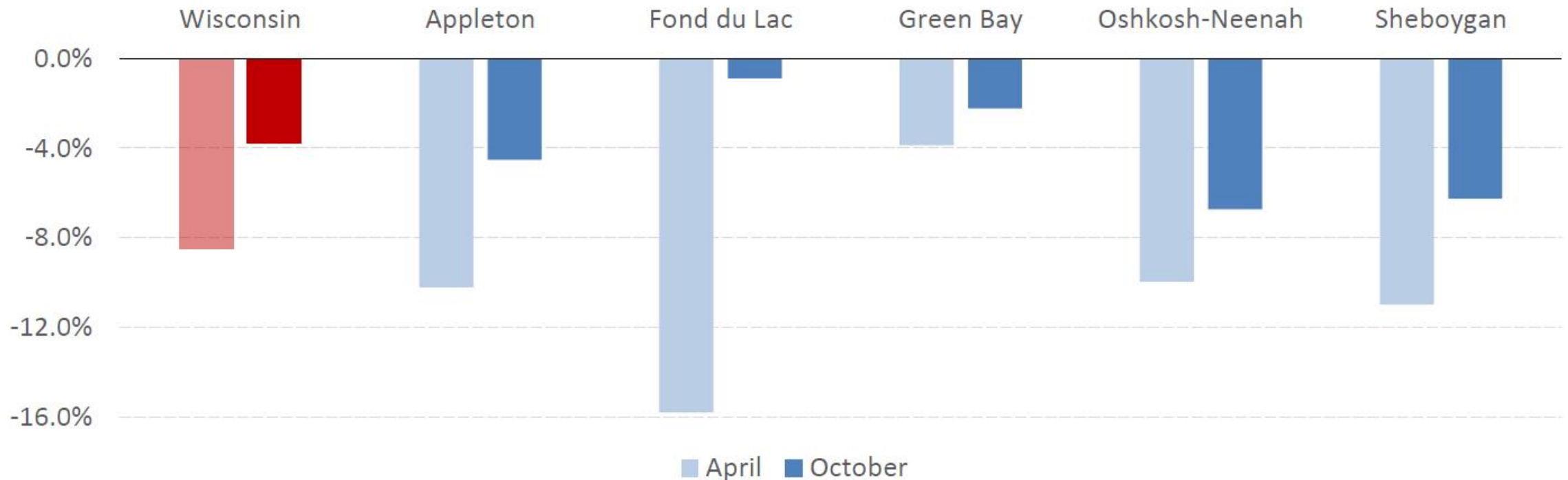
# Employment Losses Seen in Every Sector

Private Education & Health - Y/Y Change



# Manufacturing Has Fared Better Than Many Sectors

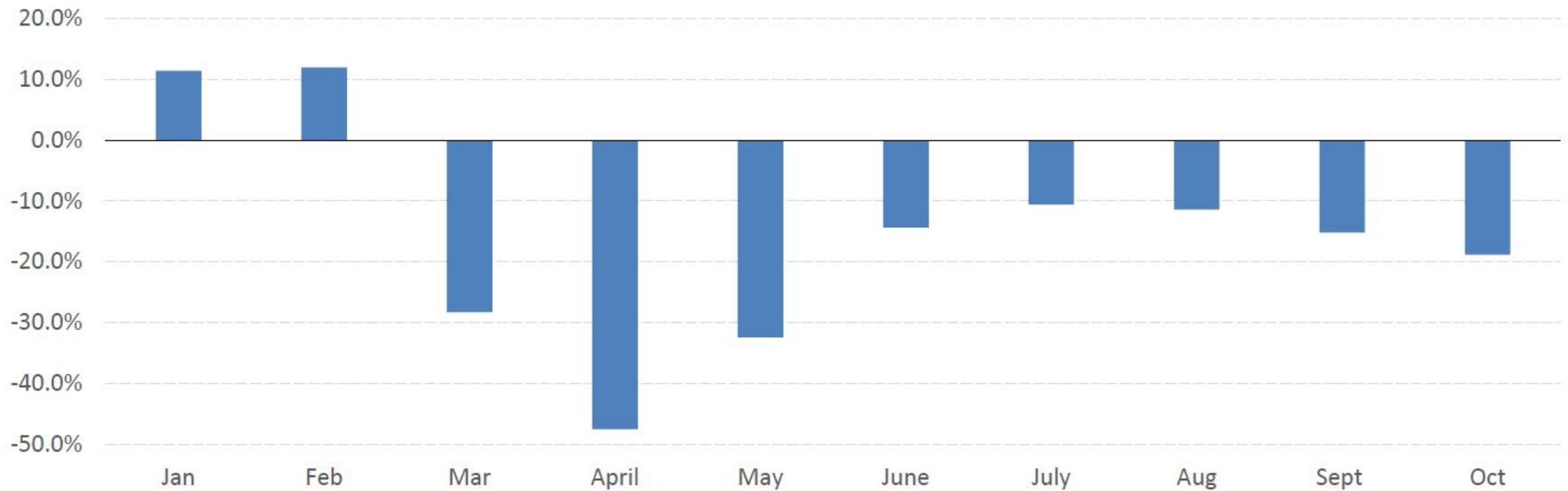
Manufacturing - Y/Y Change





# Monthly Change in Restaurants/Bars

Y/y Change in Sales Tax Revenues: Restaurants/Bars

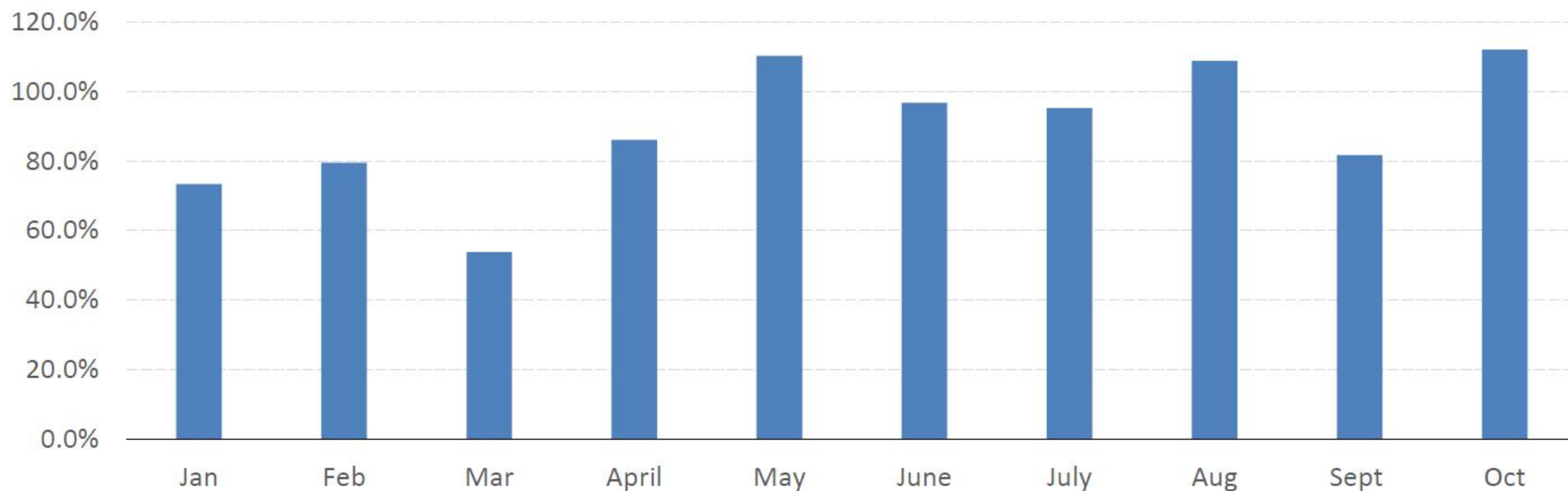


Source: Wisconsin Department of Revenue

\*Incl. all New North Counties that had a county sales tax in both 2019 and 2020

# Monthly Change in Online Shopping

Y/y Change in Sales Tax Revenues: in Nonstore Retailers



Source: Wisconsin Department of Revenue

\*Incl. all New North Counties that had a county sales tax in both 2019 and 2020

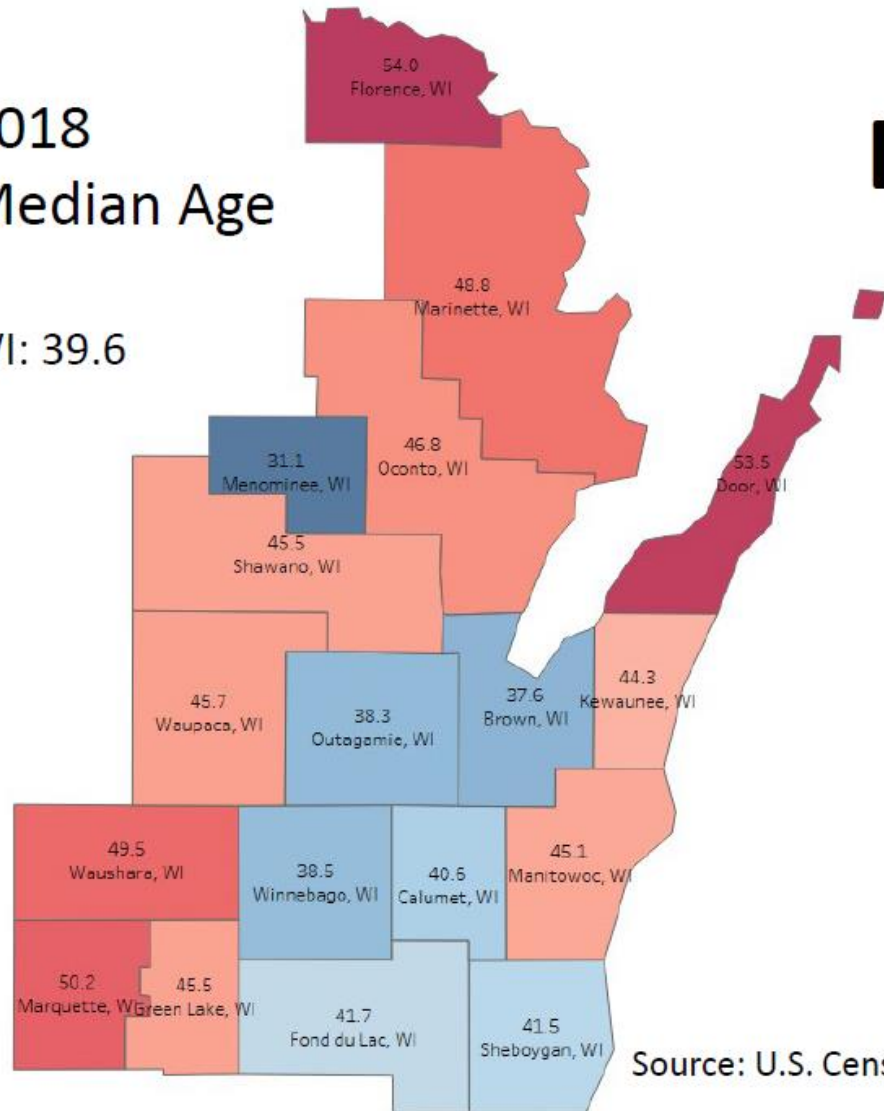


# **Longer Term Trends**



## 2018 Median Age

WI: 39.6



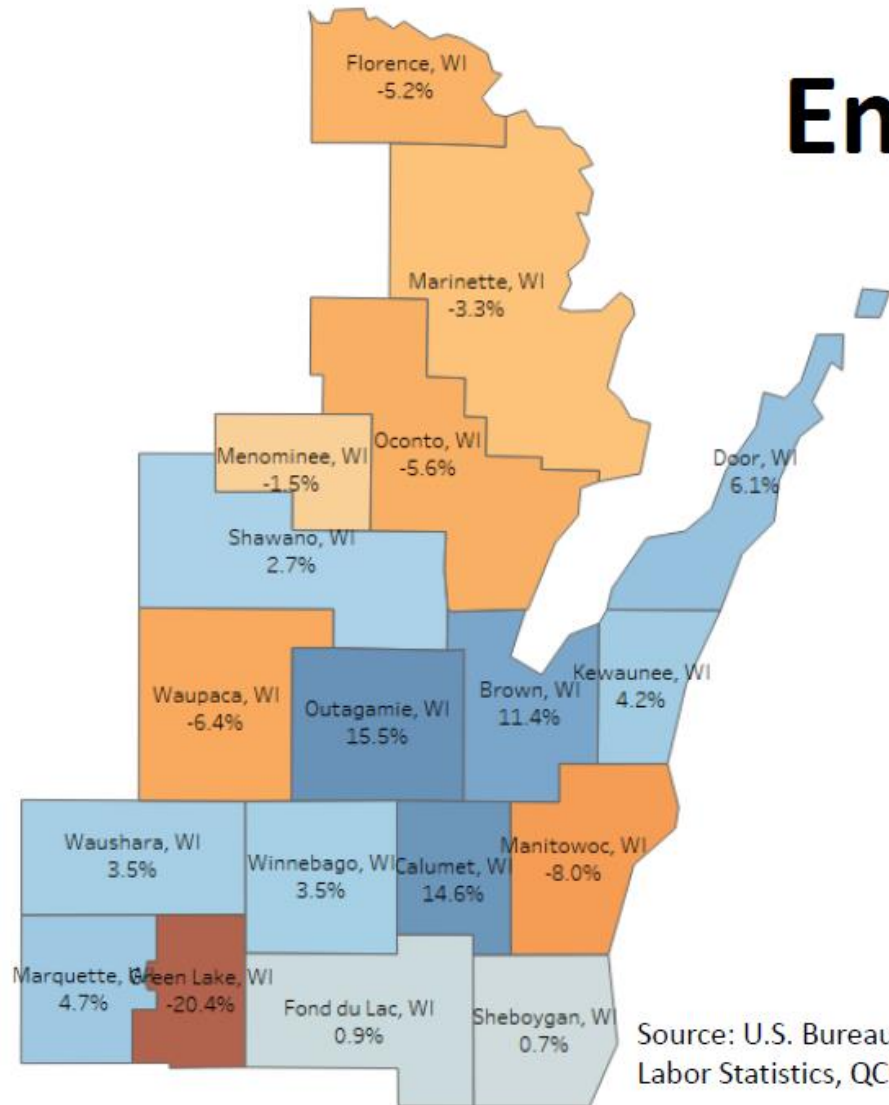
Source: U.S. Census Bureau

## Demographic Challenges: High Median Age Blue: Younger Red: Over 50

- Counties with younger populations have a greater share of the population available for work
- Older populations have smaller share working

# Employment Change Between 2000 and 2019

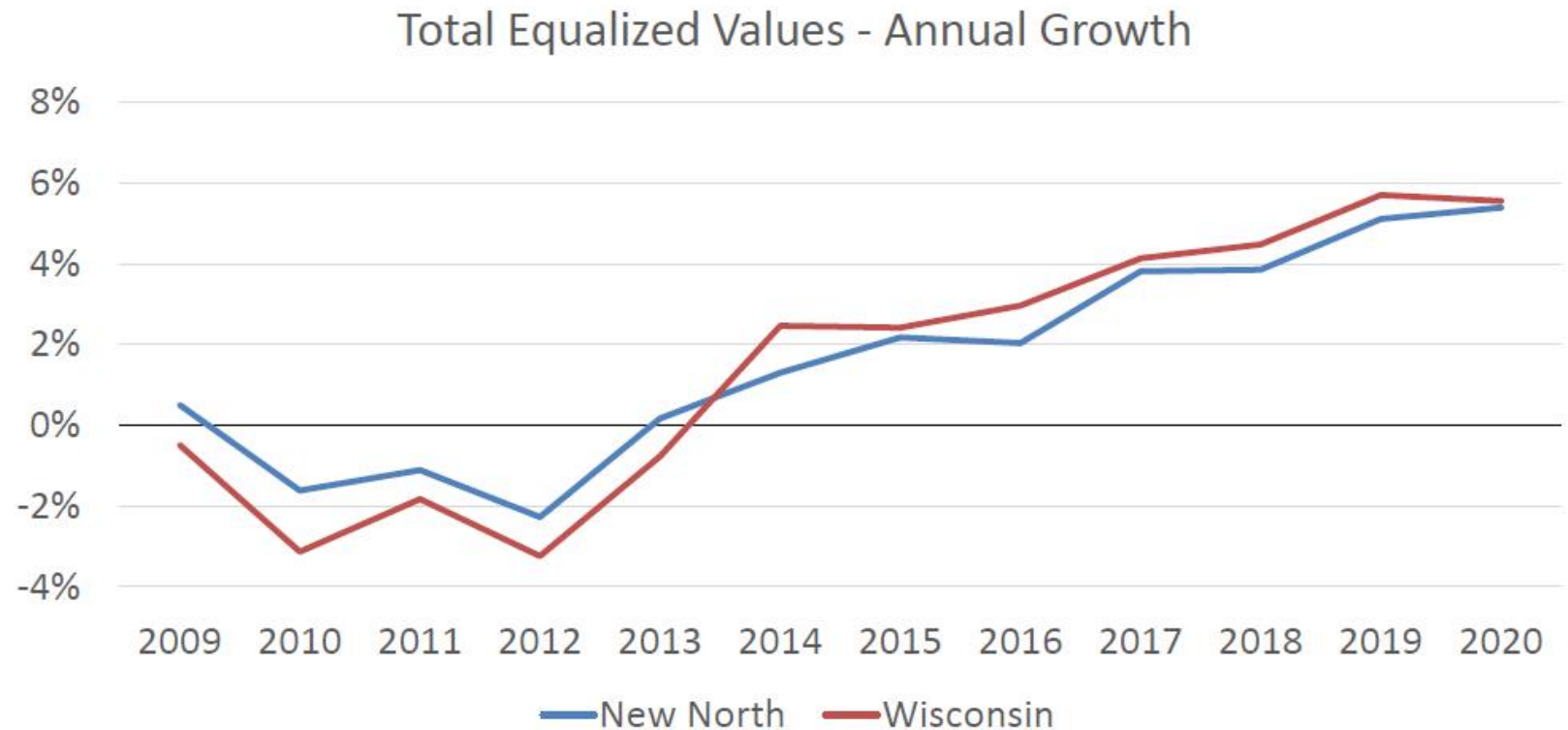
- Some Counties seeing long-term employment declines
- For comparison, Wisconsin employment has increased 5.7%



Source: U.S. Bureau of Labor Statistics, QCEW

# Equalized Values - Total

- 2008-2020:
  - Wisconsin: +19.2%
  - New North: +20.7%

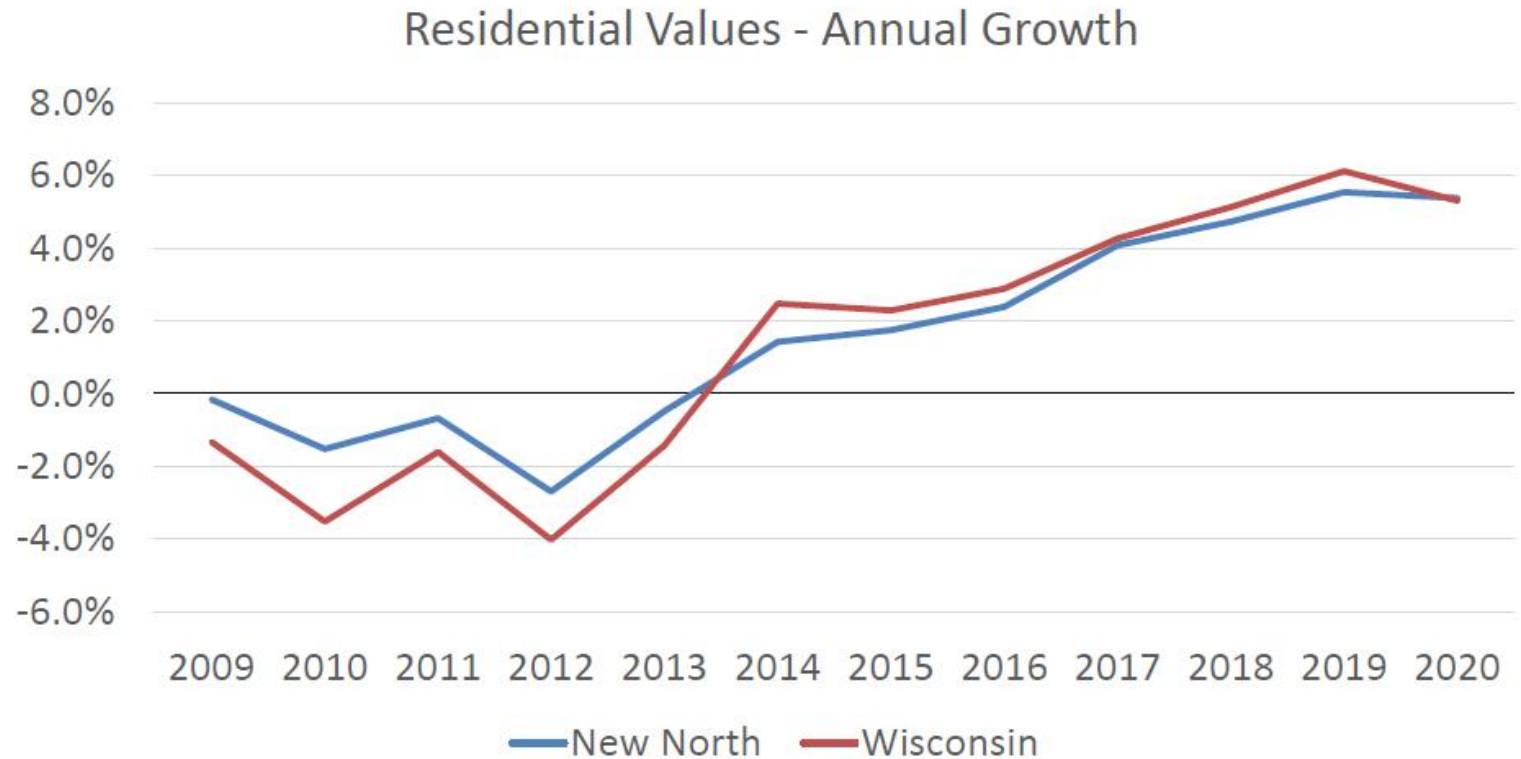


Source: Wisconsin Department of Revenue



# Equalized Values - Residential

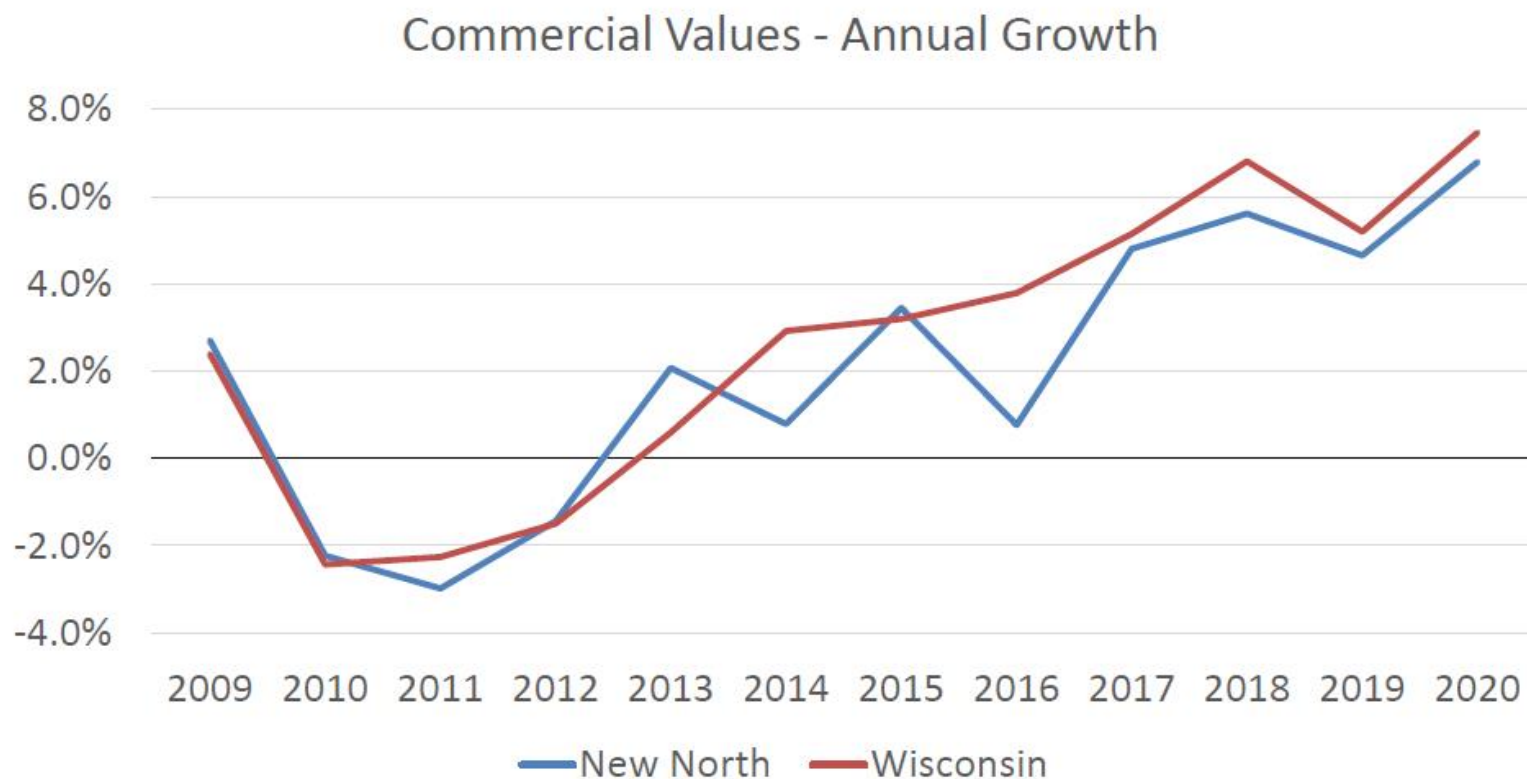
- 2008-2020:
  - Wisconsin: +17.1%
  - New North: +21.1%



Source: Wisconsin Department of Revenue

# Equalized Values - Commercial

- 2008-2020:
  - Wisconsin: +35.4%
  - New North: +27.4%



Source: Wisconsin Department of Revenue



# Questions/Comments?

- [doreconomists@Wisconsin.gov](mailto:doreconomists@Wisconsin.gov)
- <https://www.revenue.wi.gov/Pages/Report/Home.aspx>

# Economic Analysis of COVID-19 in Wisconsin: A Dynamic Look at Alternative Data

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Director of the Center for Business and Economic Analysis

St. Norbert College



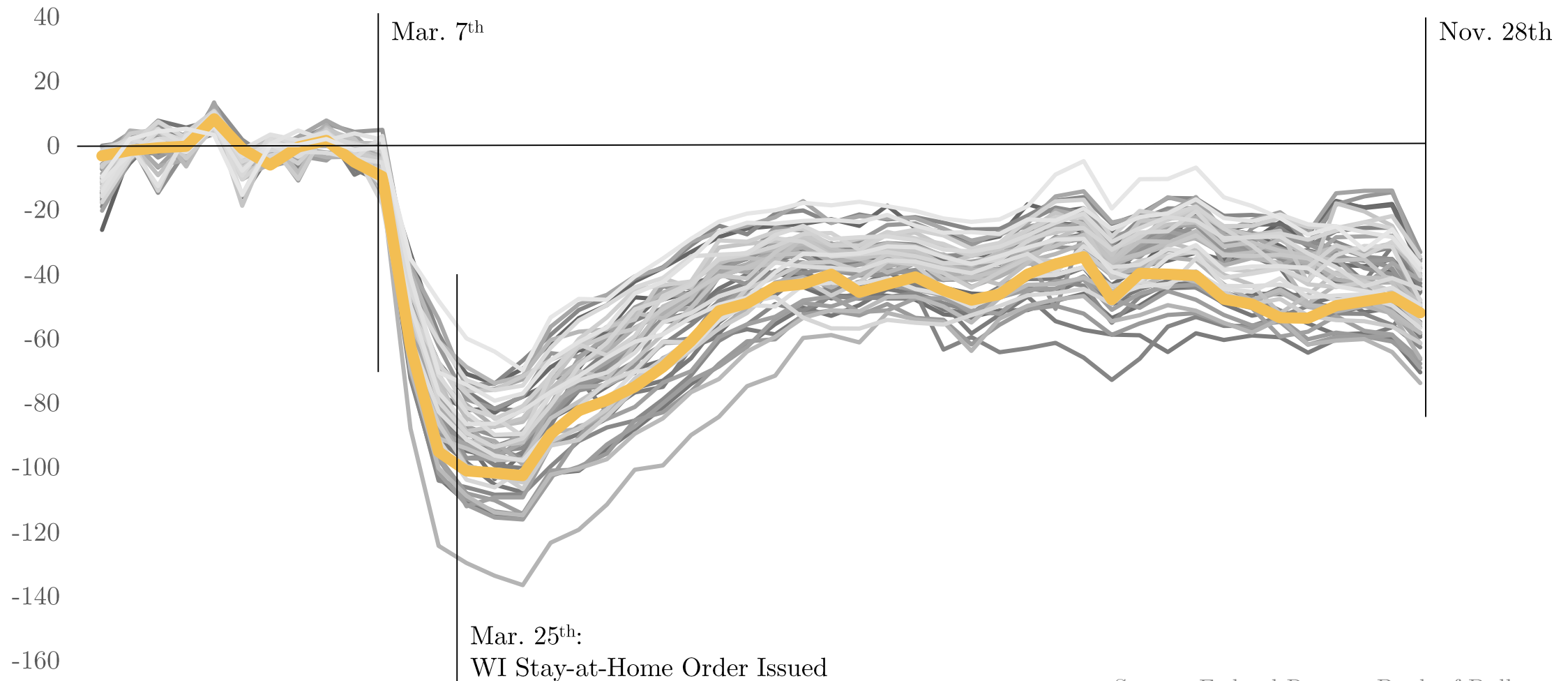
# Overview

- Alternative Data
- Supply-side Dynamics in Wisconsin
  - Industry Variation
  - Labor Market Divide
- Demand-side Dynamics in Wisconsin
  - Income Variation
  - Household Behavior Changes



# Alternative Data Example: Mobility and Engagement Index

Real-time tracking for WI highlights fall in activity with stunted recovery along with other states.

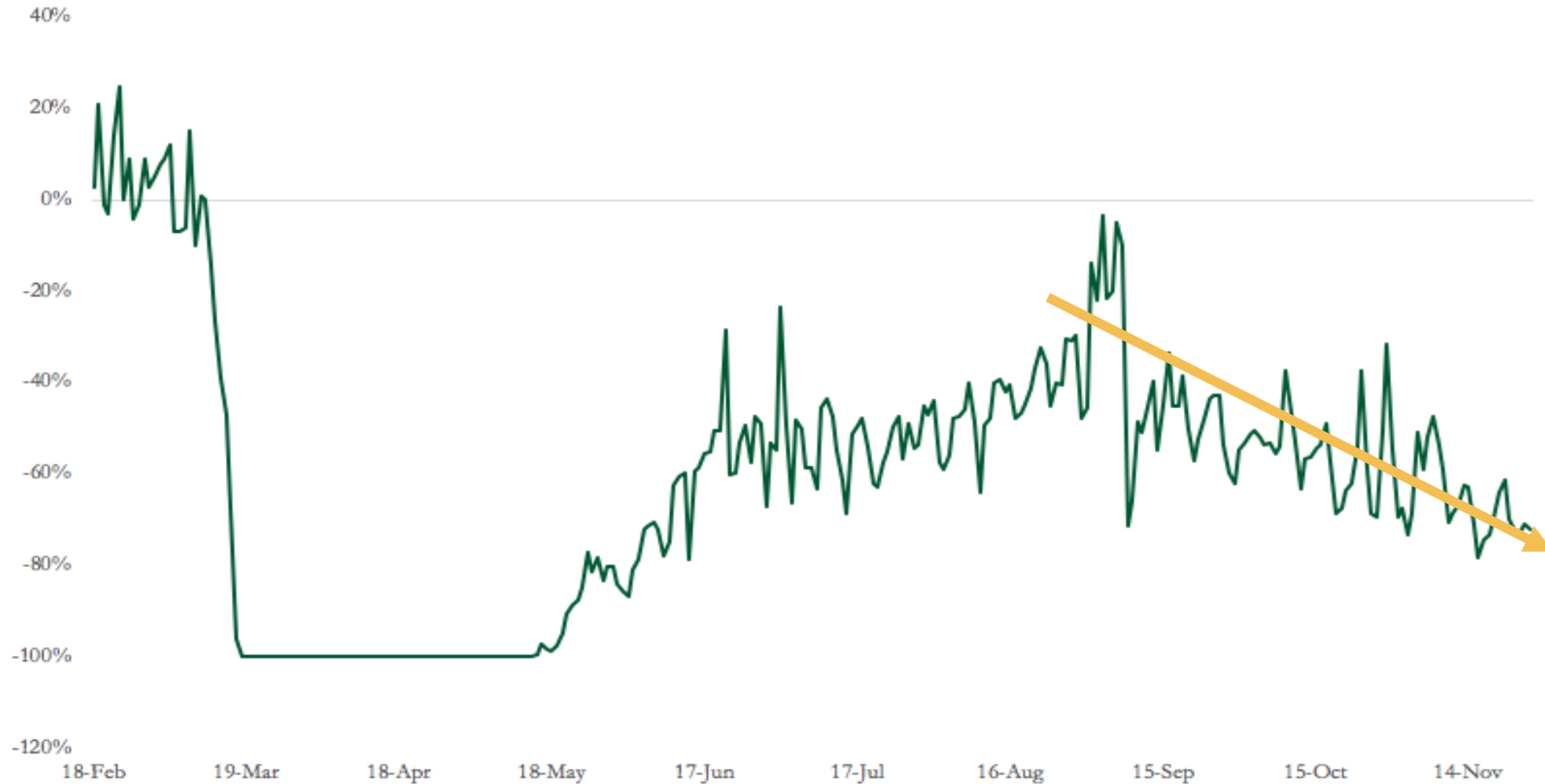


Source: Federal Reserve Bank of Dallas,  
SafeGraph

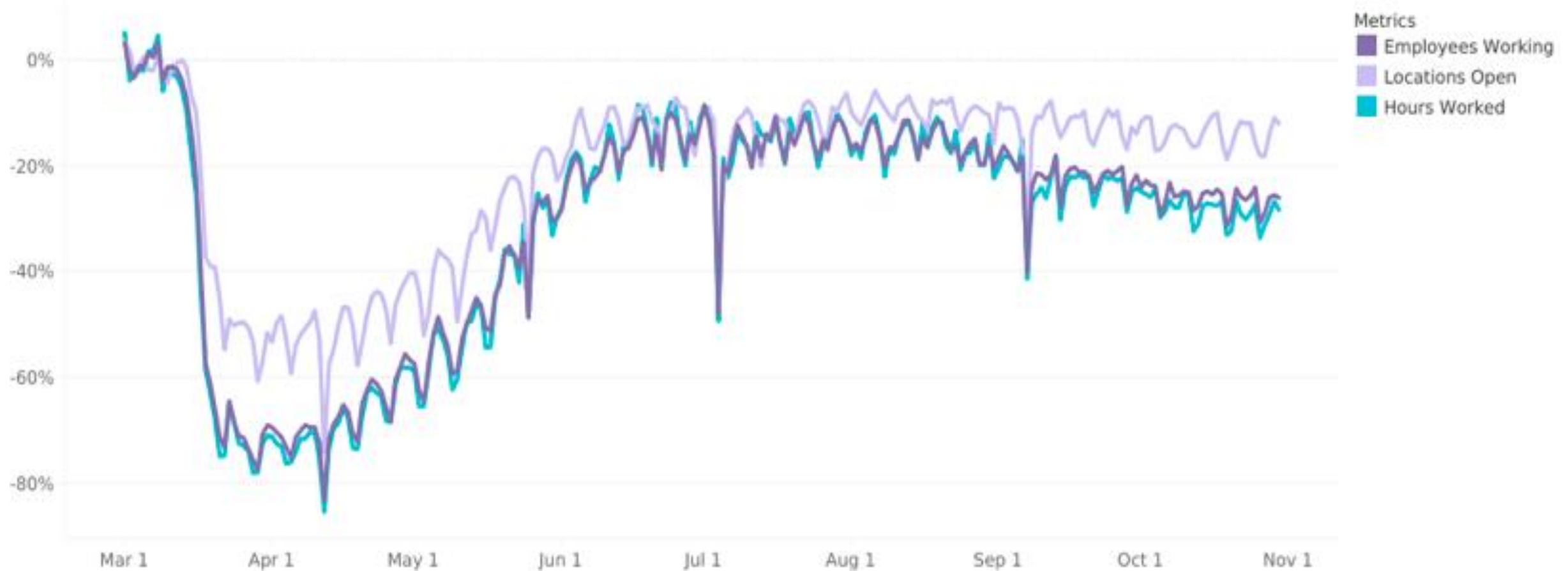
# Overview

- Supply Side Effects in Wisconsin
  - Industry
  - Employment
  - Small Business
- Demand Side Effects in Wisconsin
  - Income
  - Household Behavior

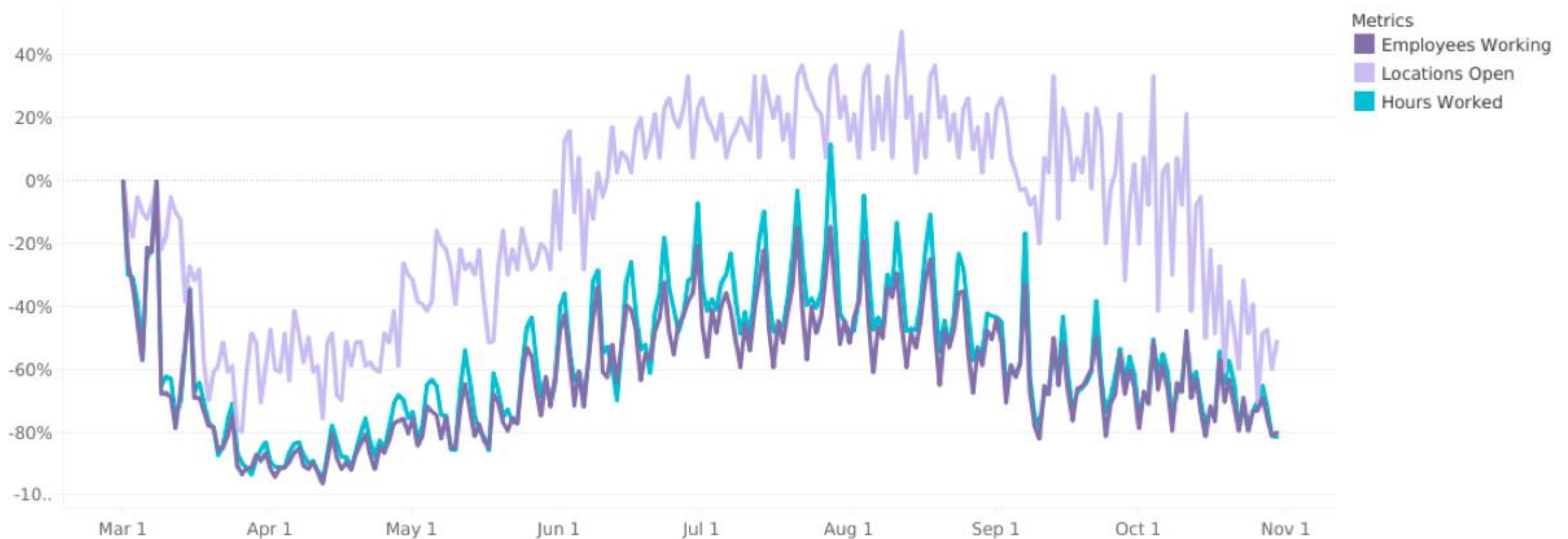
# WI OpenTable Reservations: Trending downward again in recent weeks corresponding to COVID-19 spread



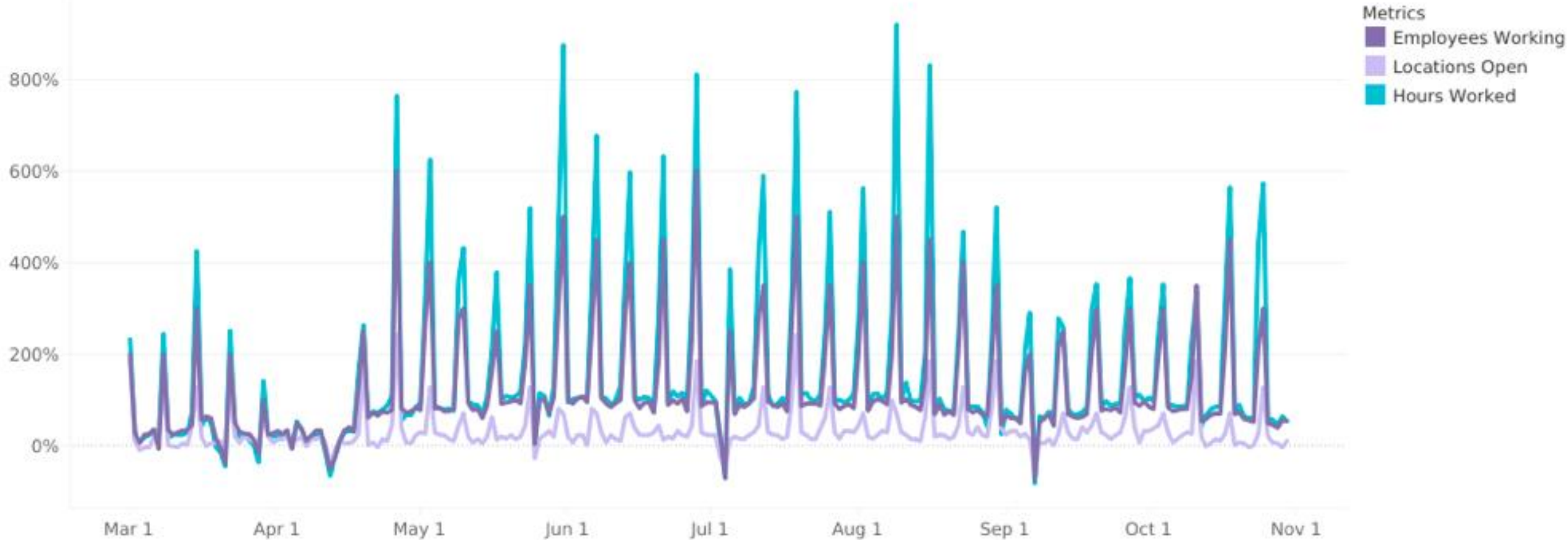
# WI Food & Service Industries: Less workers and less hours worked in recent months via time-card and payroll data



# Leisure and Entertainment Industries: Recent downward trend with notable decline in open locations



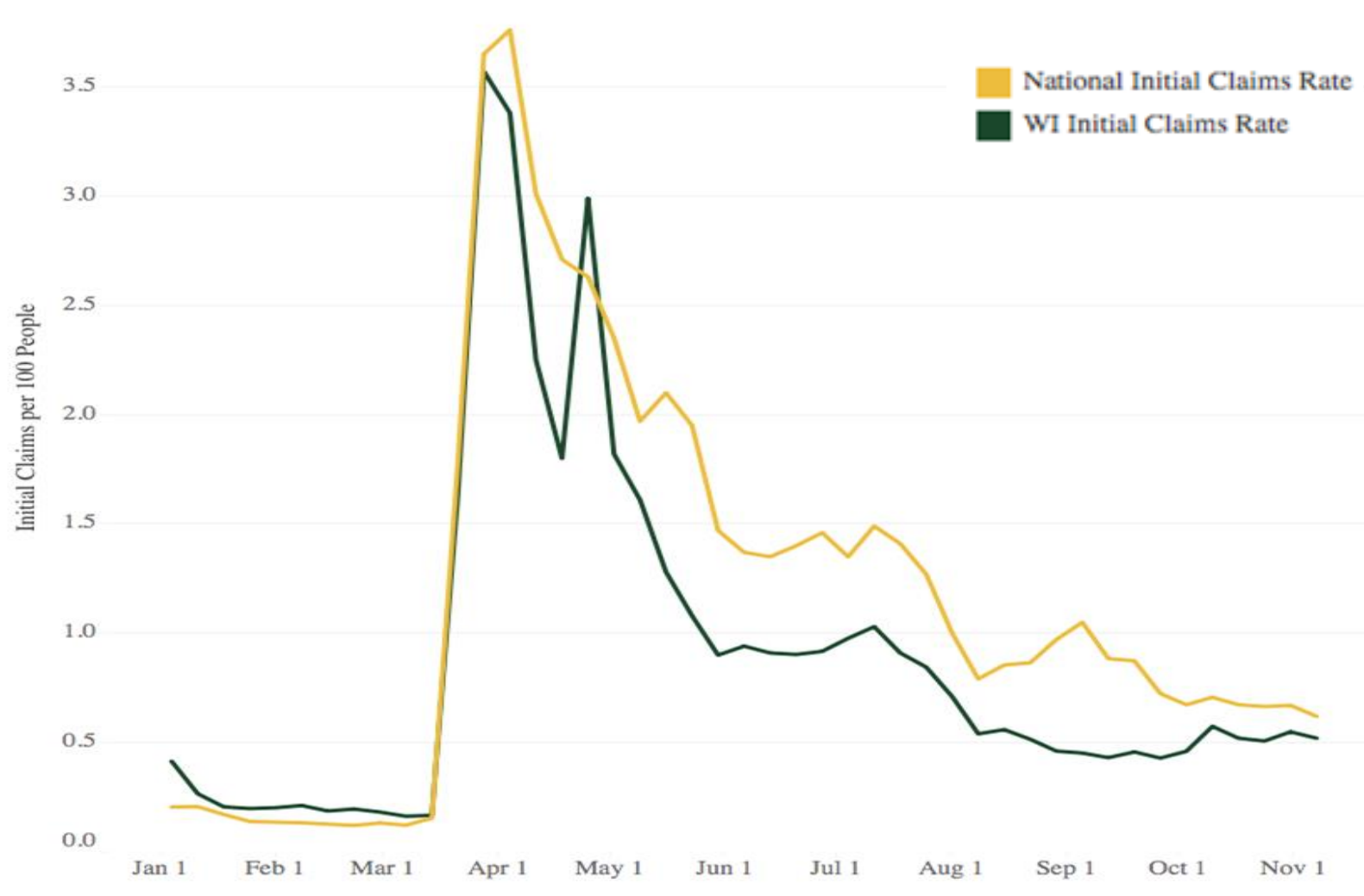
# Home and Repair Industries: A different story with increasing hours worked and employees working



# Overview

- Supply Side Effects in Wisconsin
  - Industry
  - Employment
  - Small Business
- Demand Side Effects in Wisconsin
  - Income
  - Household Behavior

# Initial Unemployment Claims Rate: WI fares better than the national average, but follows same historic trend

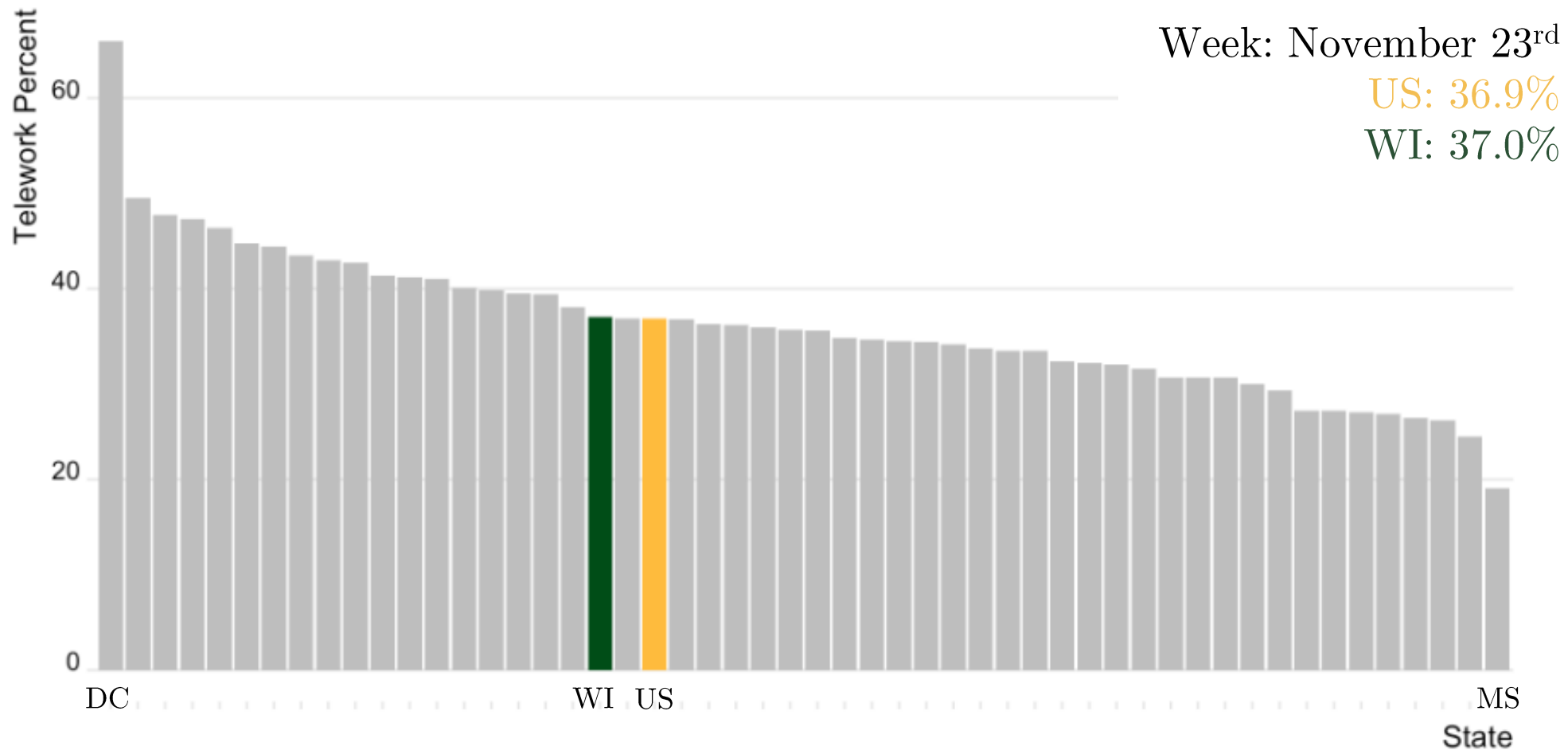


October 2020:  
Unemployment Rate  
US: 6.9%  
WI: 5.7%

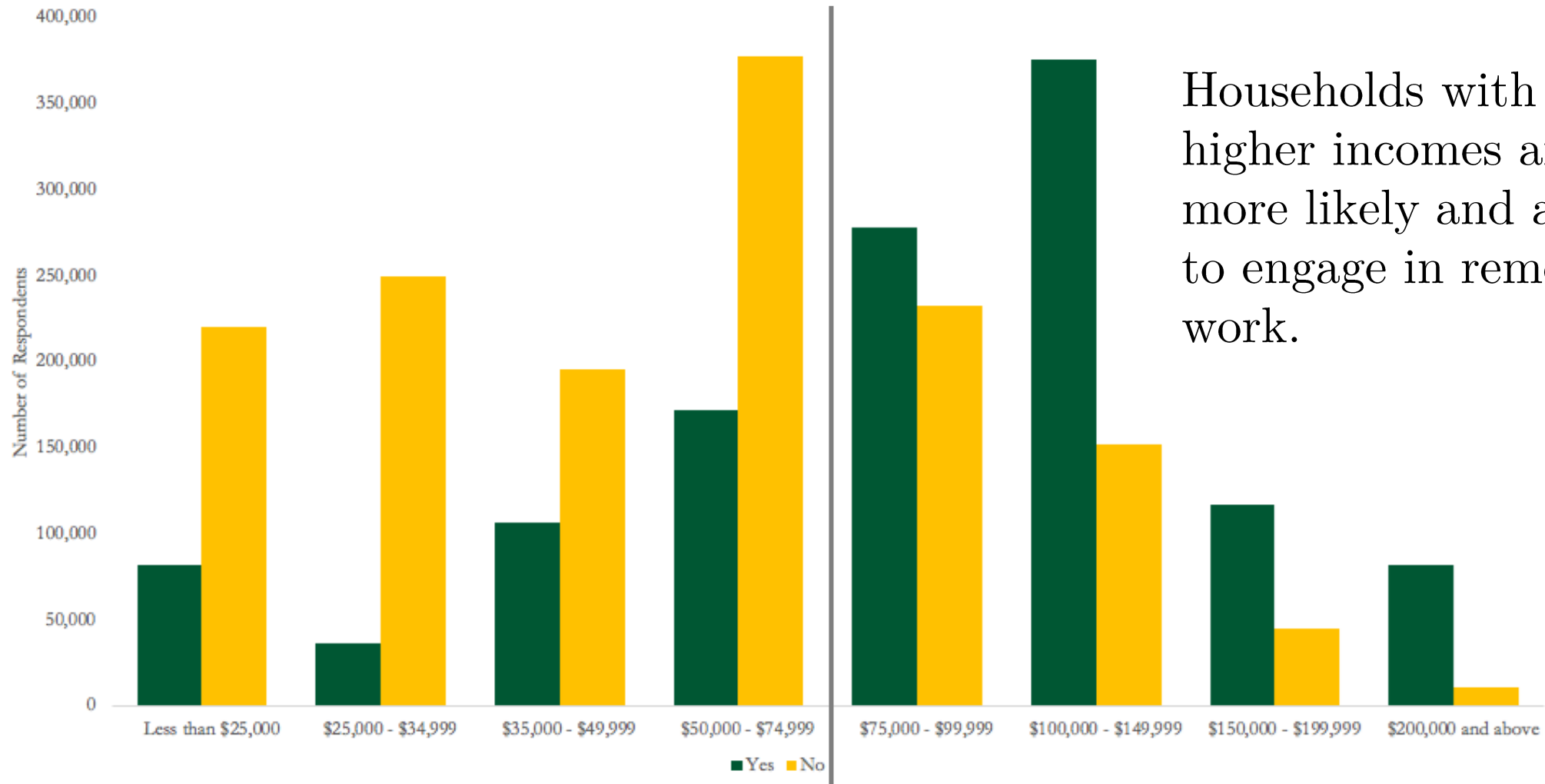


# Labor Market Divide:

Those who can remote work and those who cannot...

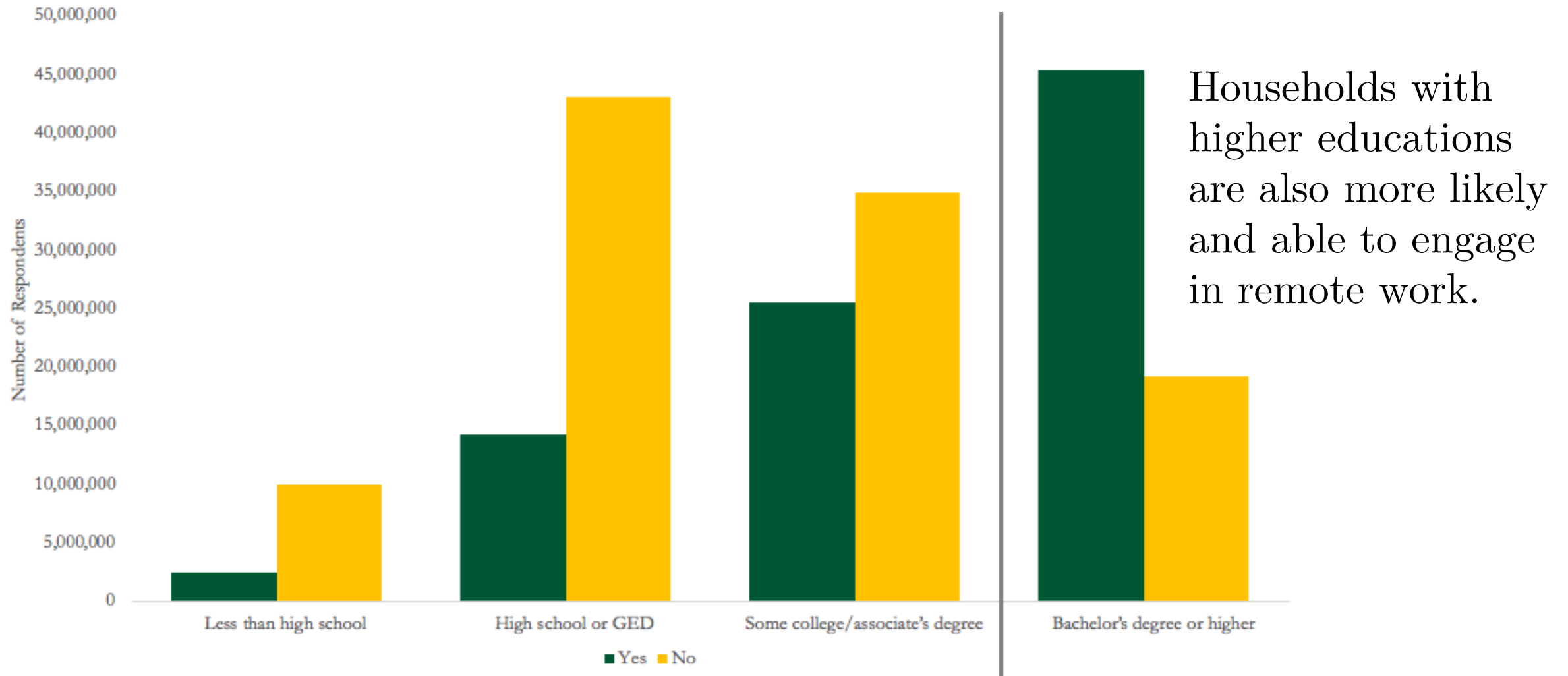


# WI Remote Work & Annual Income: Adults that substituted some or all of their in-person work for telework by annual income

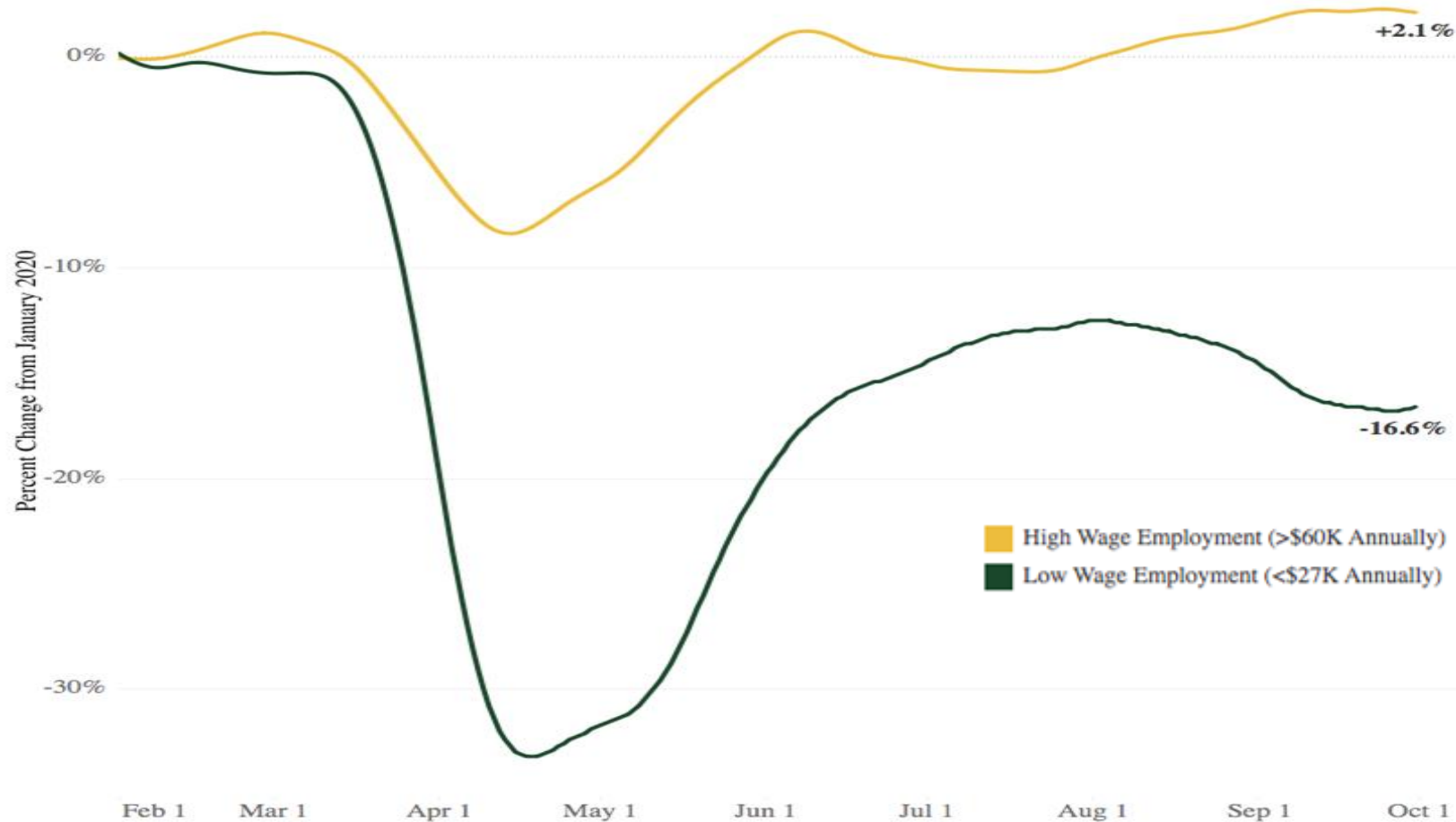


Households with higher incomes are more likely and able to engage in remote work.

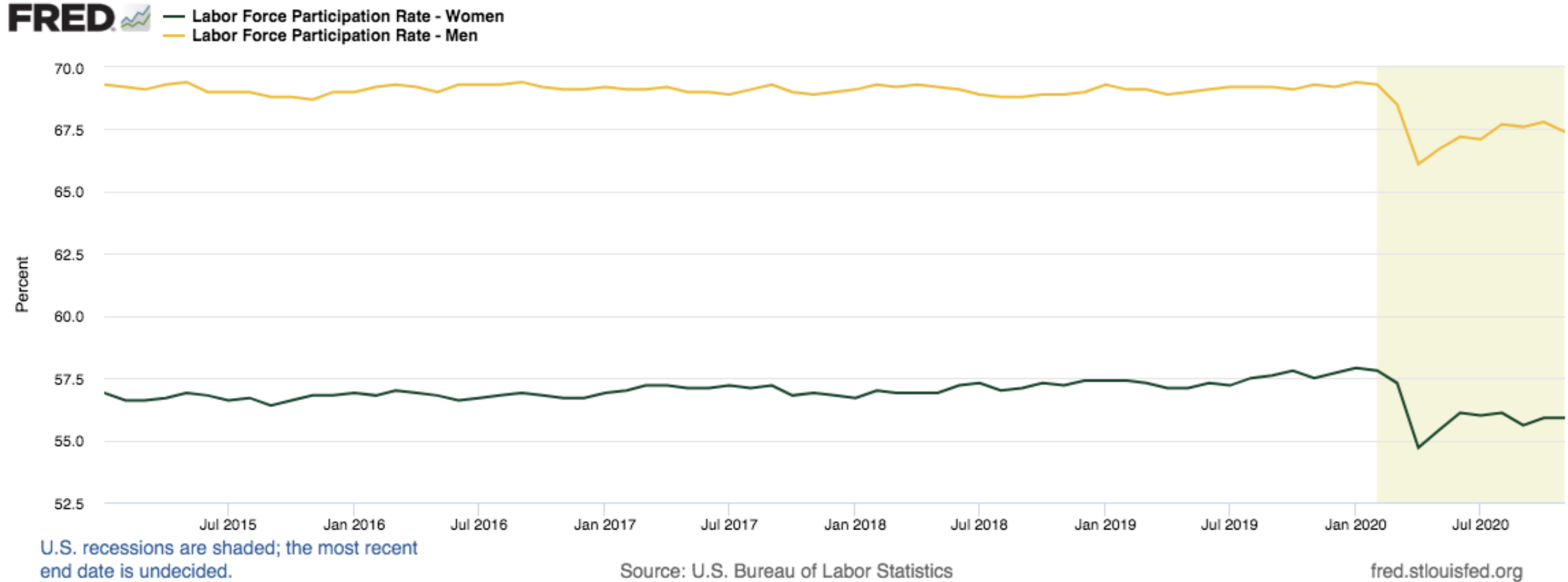
# WI Remote Work & Education: Adults that substituted some or all of their in-person work for telework by annual income



WI Employment by Wage: This divide extends to employment opportunities across income levels with low wage workers bearing the burden



# Labor Force Participation Rate

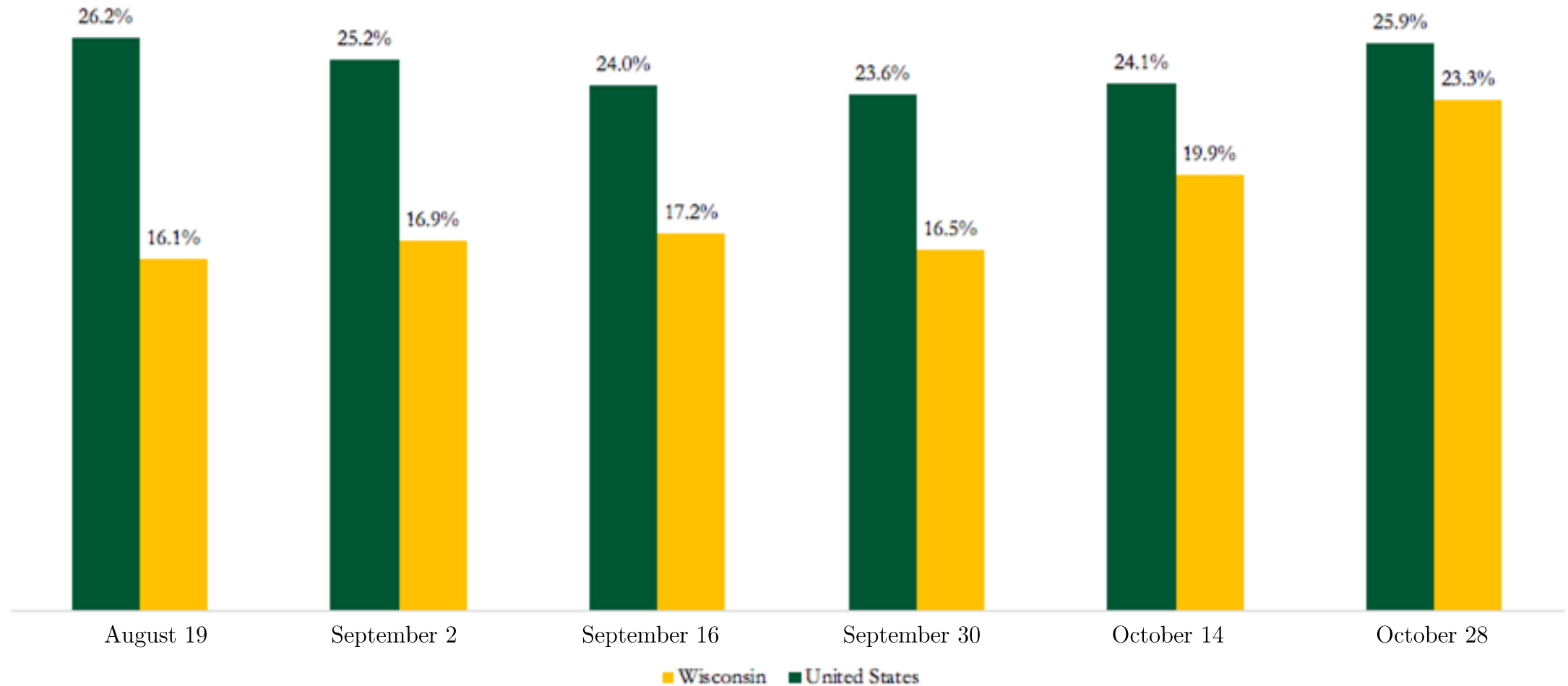


# Overview

- Supply Side Effects in Wisconsin
  - Industry
  - Employment
  - Small Business
- Demand Side Effects in Wisconsin
  - Income
  - Household Behavior

# Expected Loss in Employment Income

Percentage of adults who expect someone in their household to have a loss in employment income in the next 4 weeks



# Wage Gap Widens During Pandemic

- 41% of women in WI have reported themselves as unemployed in the last 7 days (as of November 9th)
- Mothers with young children were four to five times more likely to leave work or reduce hours
- Female unemployment reached double digits for the first time since 1948



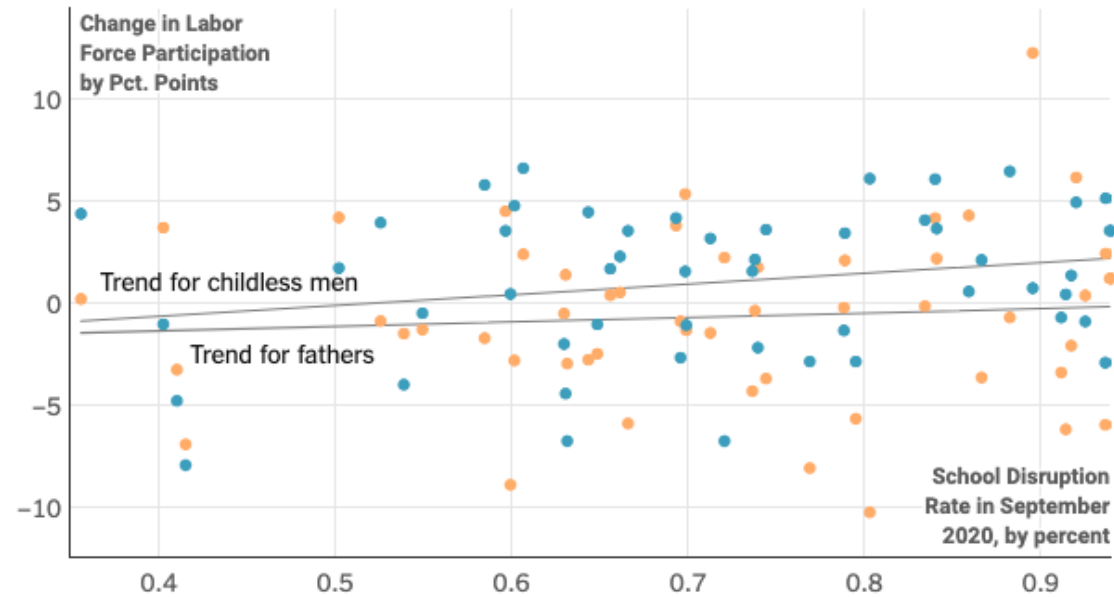
# COVID-19, School Closures & Labor Force Participation

LFP has fallen for families with children with women exceedingly leaving the workforce

## Childless Men Were More Likely to Keep Working

State change in labor force participation rate, July-Sept. 2020 versus July-Sept. 2019.

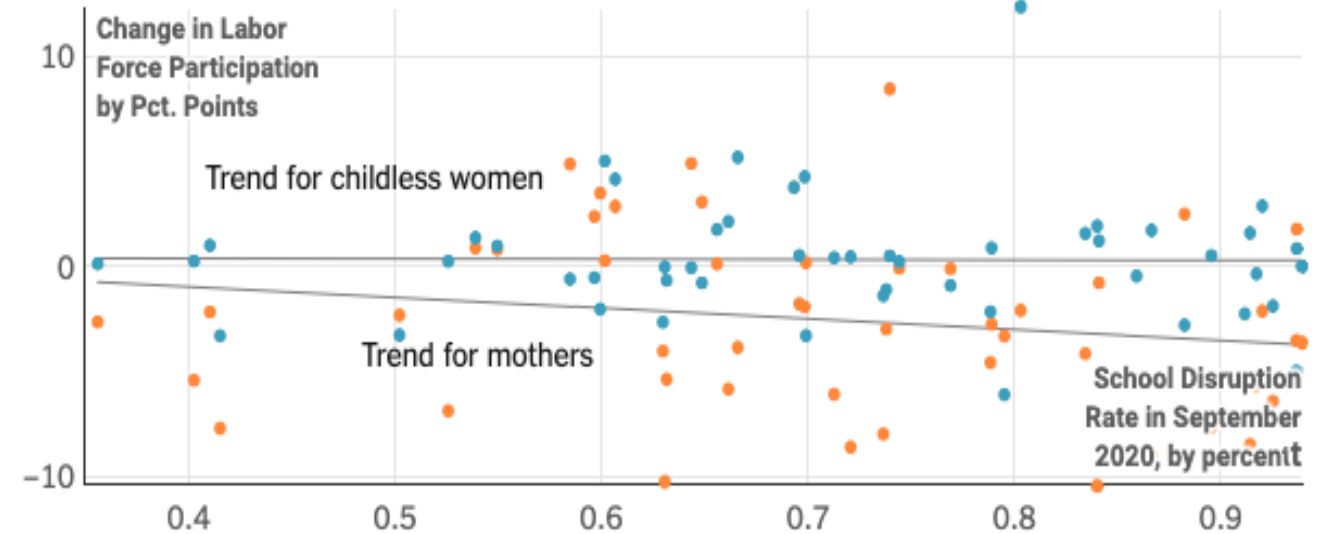
■ Childless Men ■ Fathers



## Mothers' Labor Force Growth More Sensitive to Closures

State change in participation rate, July-Sept. 2020 versus July-Sept. 2019.

■ Childless Women ■ Mothers



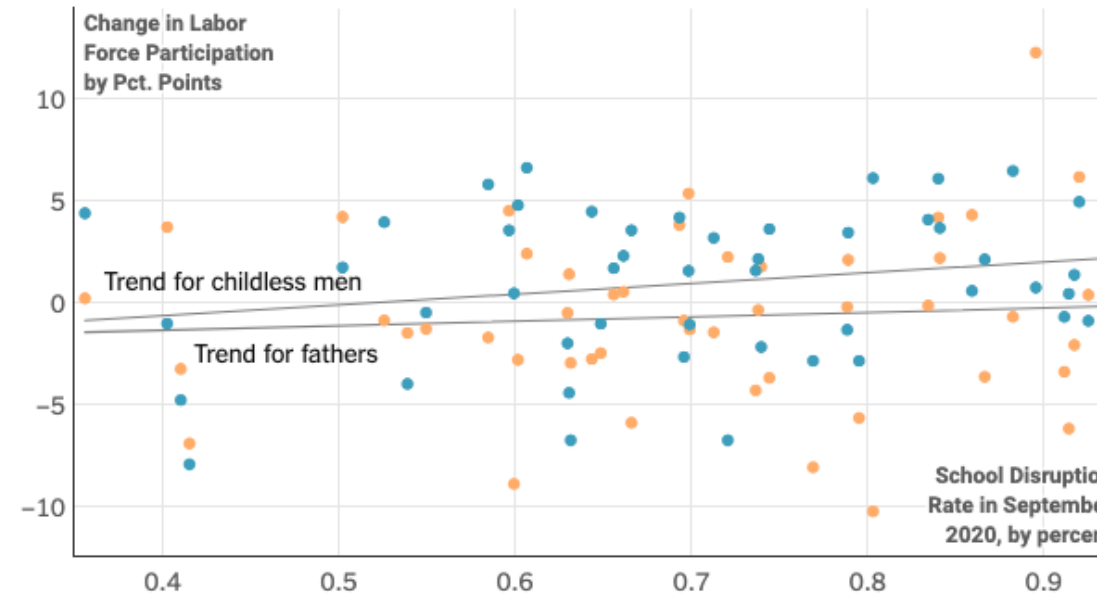
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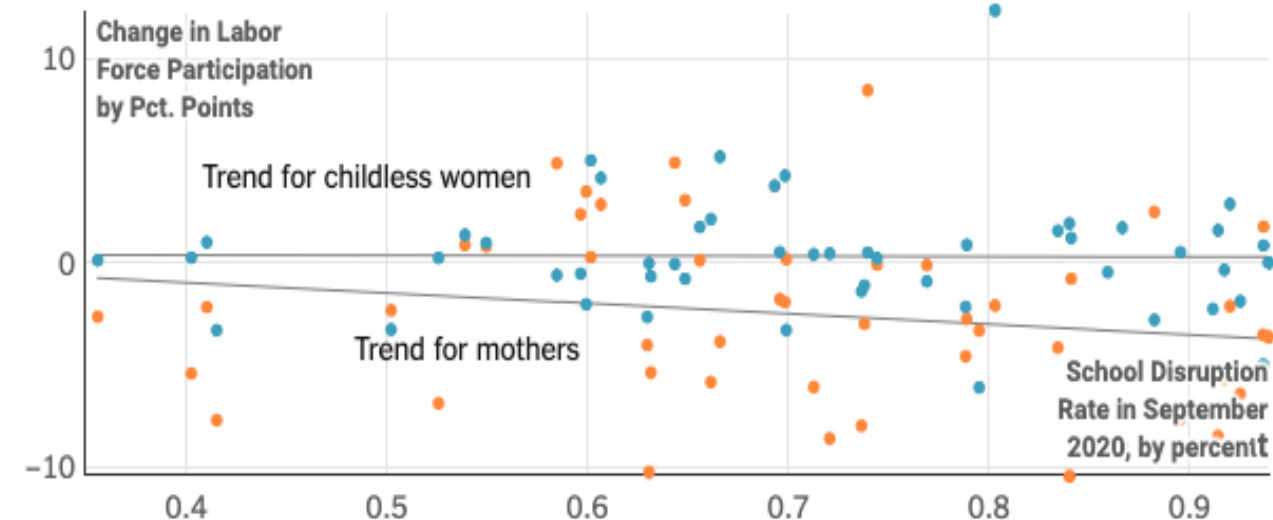
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## Mothers' Labor Force Growth More Sensitive to Closures

State change in participation rate, July-Sept. 2020 versus July-Sept. 2019.

■ Childless Women ■ Mothers

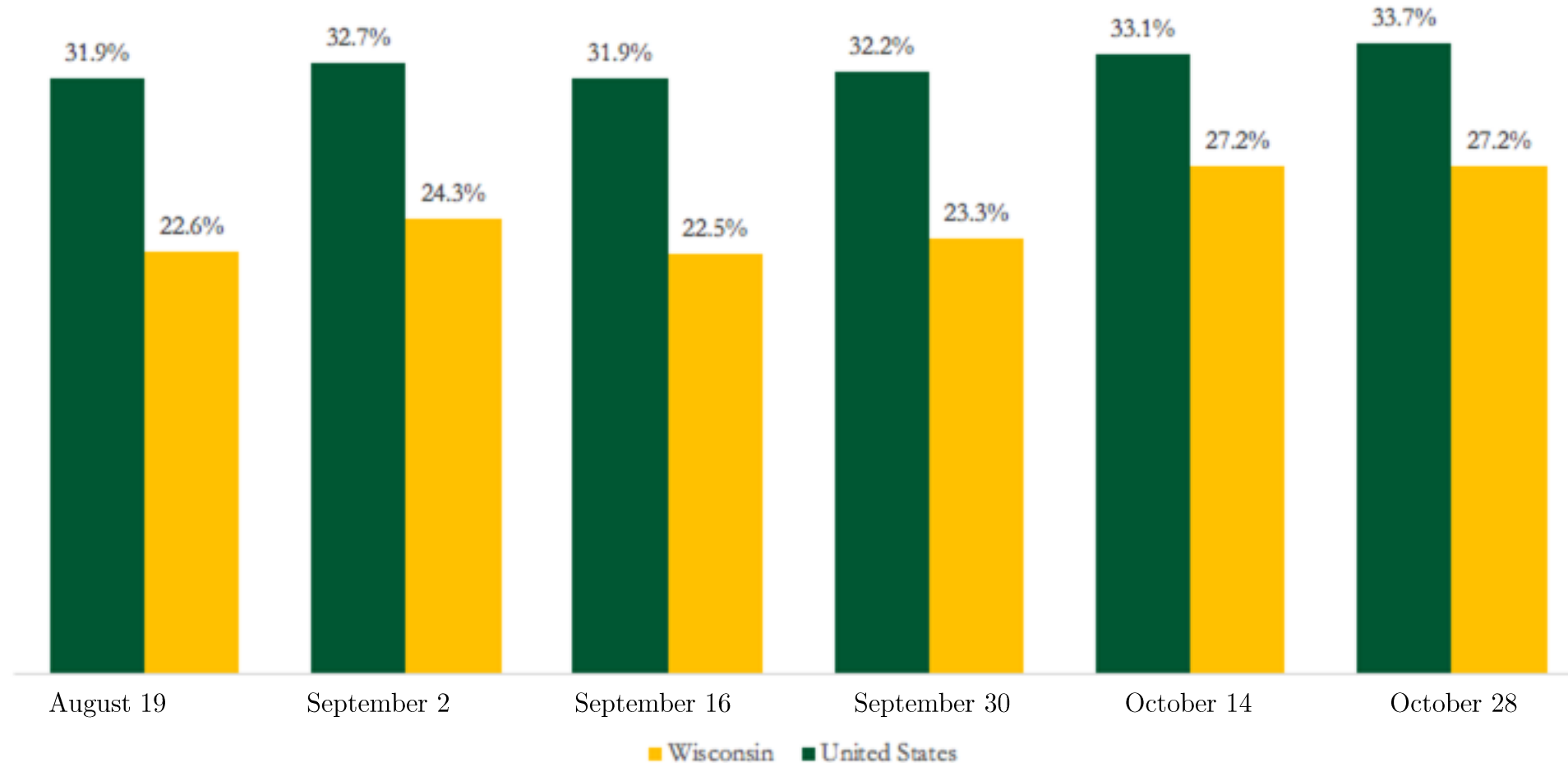


# Overview

- Supply Side Effects in Wisconsin
  - Industry
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- Demand Side Effects in Wisconsin
  - Income
  - Household Behavior

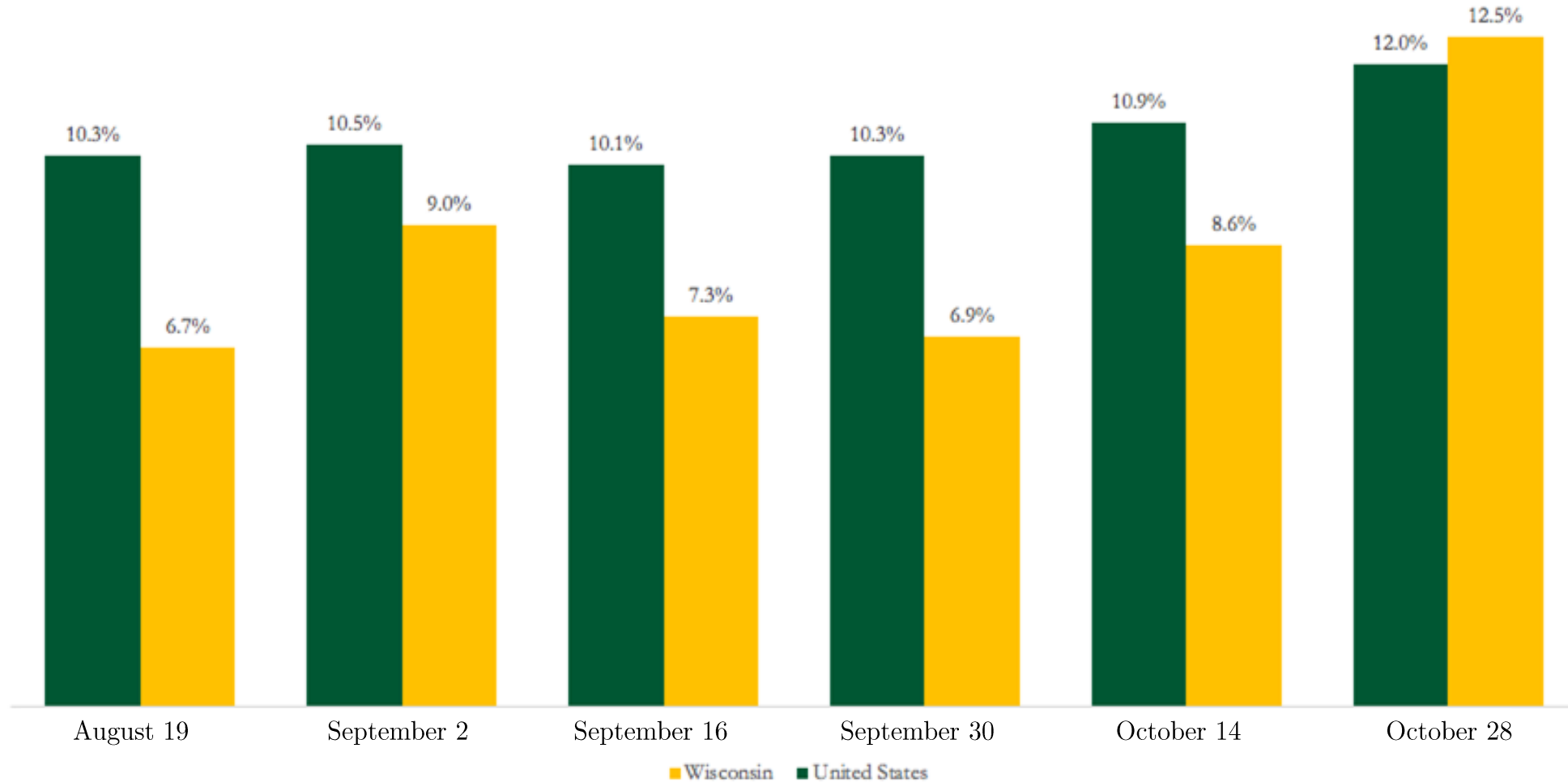
# Difficulty Paying for Household Expenses

Percentage of adults living in households where it has been somewhat or very difficult to pay for usual household expenses during the coronavirus pandemic



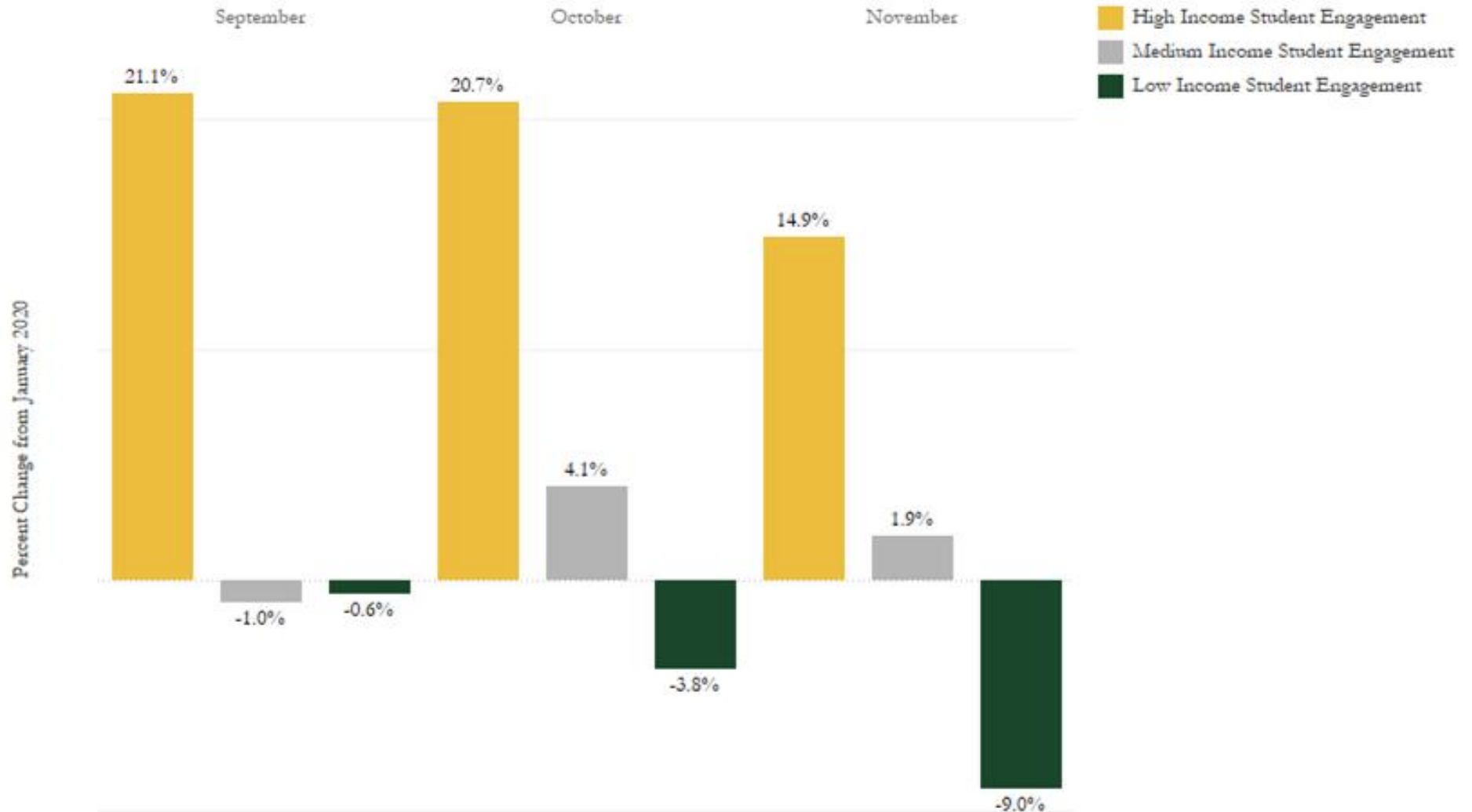
# Food Scarcity in WI has been trending

Percentage of adults in households where there was either sometimes or often not enough to eat in the last 7 days

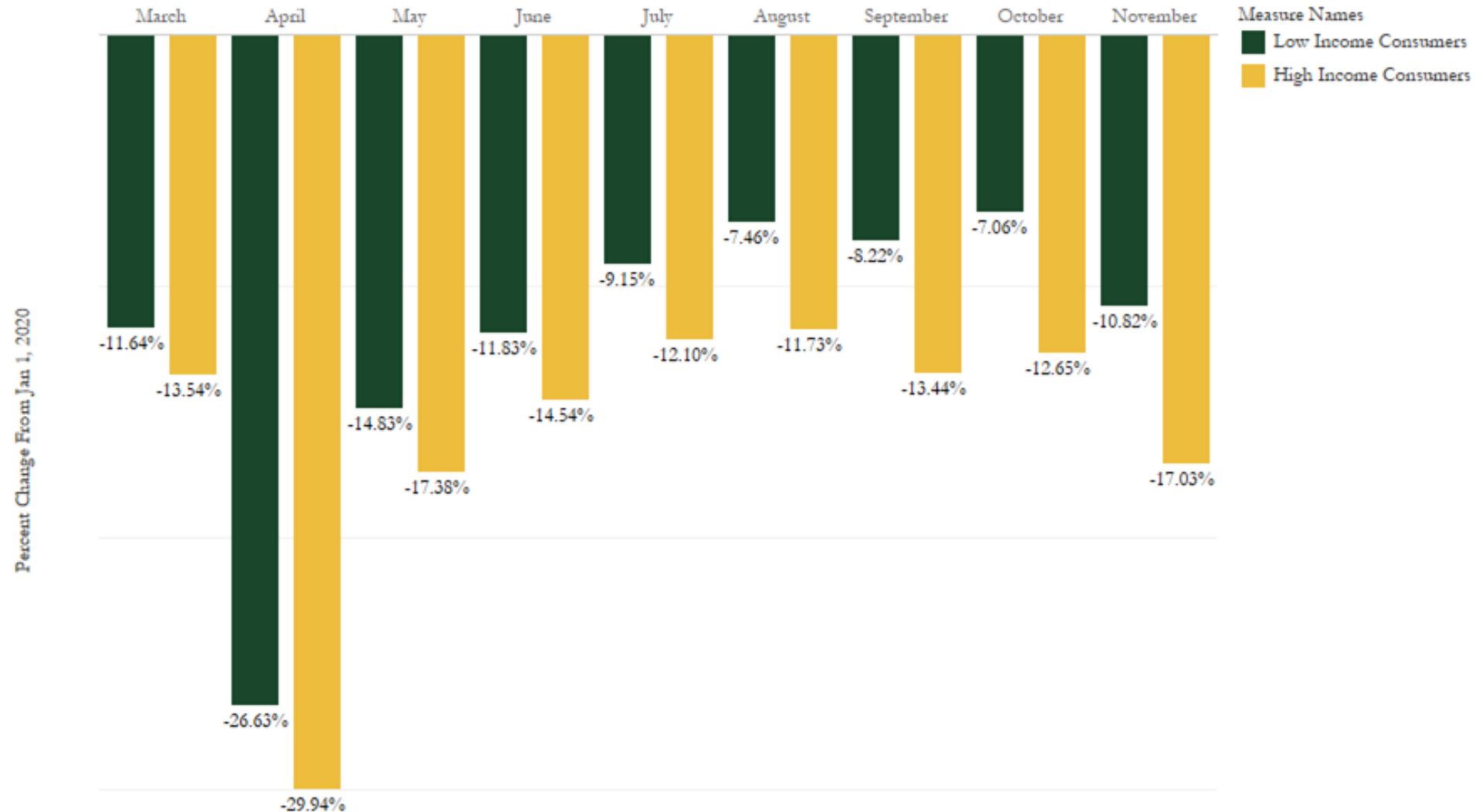


# Student Online Participation by Income:

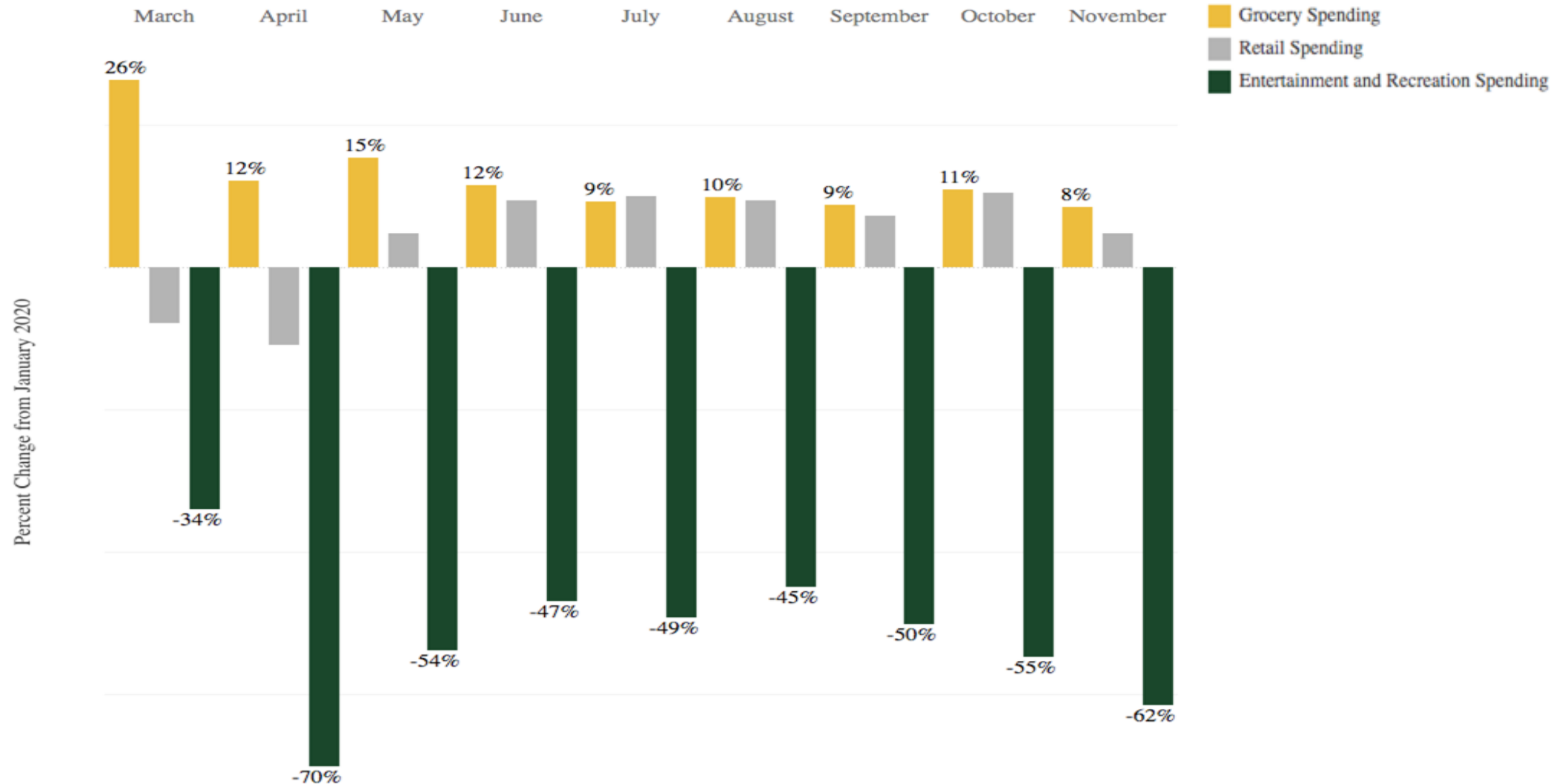
## The divide continues across income levels



# Change in Consumer Spending by Income: High income consumers pulled back more than low income on a percentage basis.

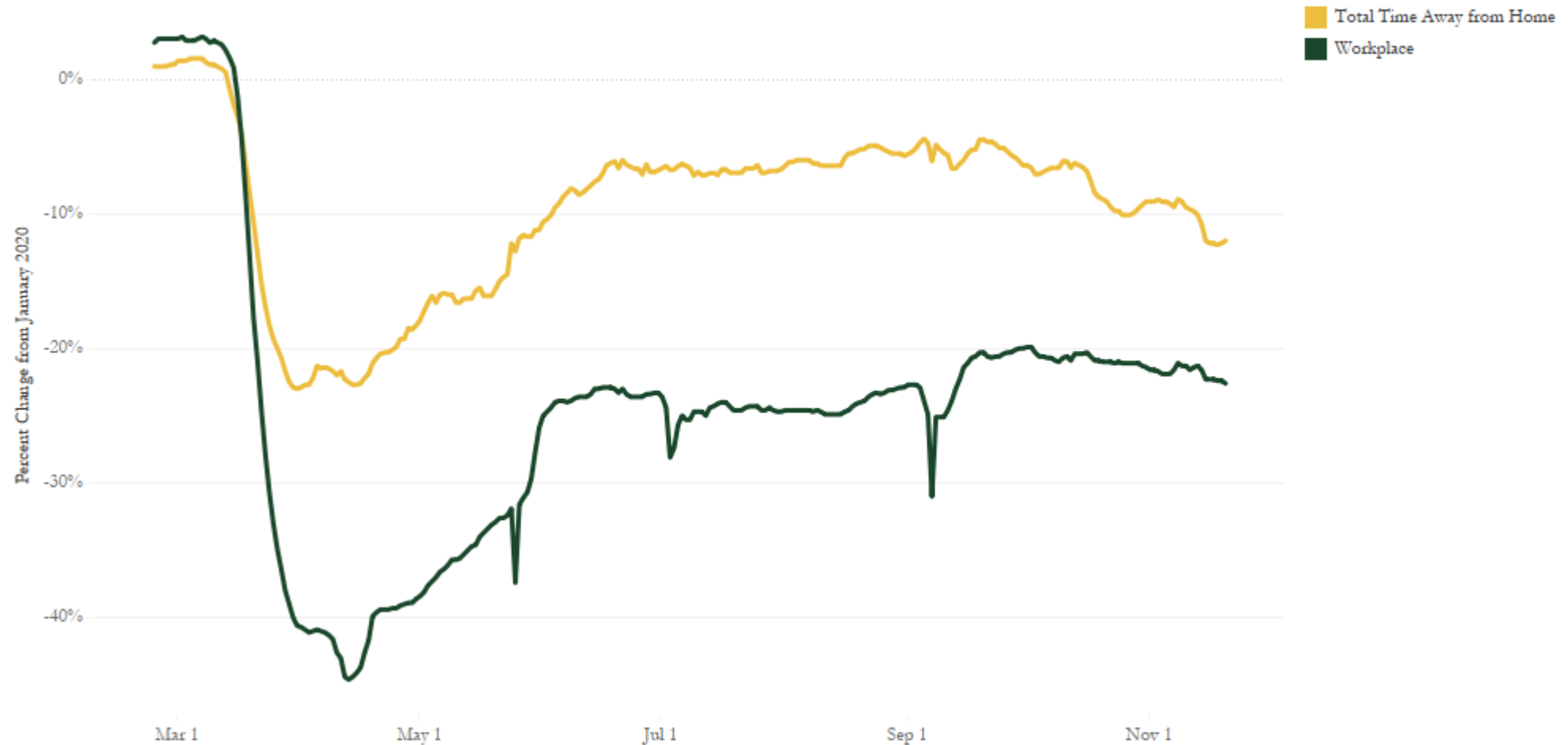


# Change in Consumer Spending: Consumers substituting for necessities over entertainment






# WI Time Spent Outside the Home: Time spent in the workplace dropped significantly



# WI Time Spent Outside the Home: Trending towards free parks from retail recreation






# Key Takeaways

The economic recovery to the COVID pandemic is underway in WI


- HOWEVER, the recovery experience is very divided across many aspects in the economy both in the state and region.
  - Across & Within Industry Variations
  - Labor Market Variations
  - Income & Household Behavior Variations



# Key Takeaways

The economic recovery to the COVID pandemic is underway in WI


- HOWEVER, the recovery experience is very divided across many aspects in the economy both in the state and region.
  - Across & Within Industry Variations
    - Goods vs. services divide
      - Revived industries (e.g. retail, housing, auto)
      - Rebounding industries (e.g. health care, industrial production, personal services)
      - Recessionary industries (e.g. travel, tourism, entertainment, education)



# Key Takeaways

The economic recovery to the COVID pandemic is underway in WI

- HOWEVER, the recovery experience is very divided across many aspects in the economy both in the state and region.
  - Labor Market Variations
    - Remote work divide (e.g. education and income)
    - Employment
    - Regional variation in median age



# Key Takeaways

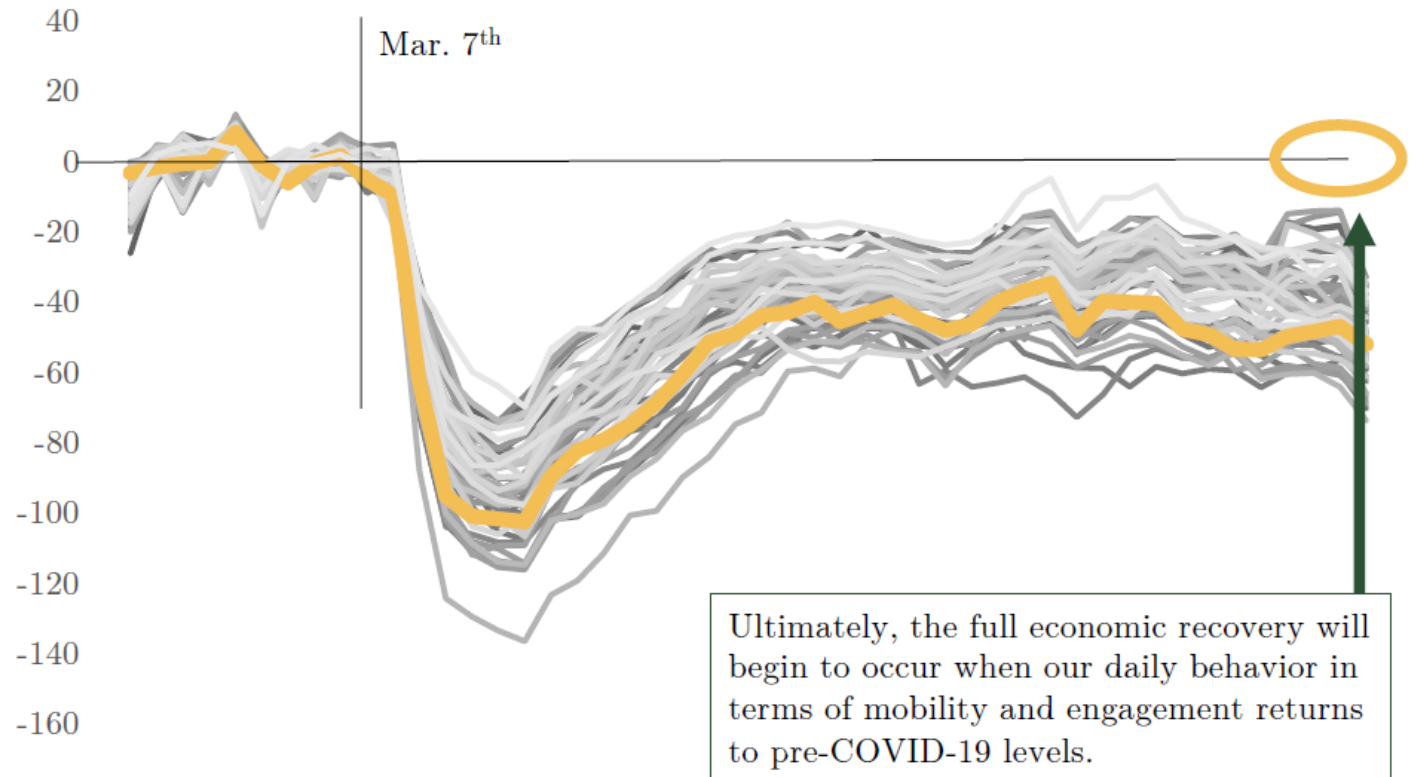
The economic recovery to the COVID pandemic is underway in WI

- HOWEVER, the recovery experience is very divided across many aspects in the economy both in the state and region.
  - Income & Household Behavior Variations
    - WI fares better than US average for employment income losses
    - Labor force participation divide for families with children and across genders is a challenging trend
    - High-income vs. low-income household divide
    - Consumer spending & behavioral changes

# Key Takeaways

- Wisconsin Economic Outlook
  - Real GDP recovering in early 2022
  - Employment recovering by late 2022
- Risks to Outlook
  - Stimulus
  - COVID-19

Federal Reserve Bank of Dallas Economic and Mobility Index



Source: Federal Reserve Bank of Dallas, SafeGraph



# Economic Intel for Wisconsin and the New North Region

Thank You



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BUSINESS & ECONOMIC  
ANALYSIS