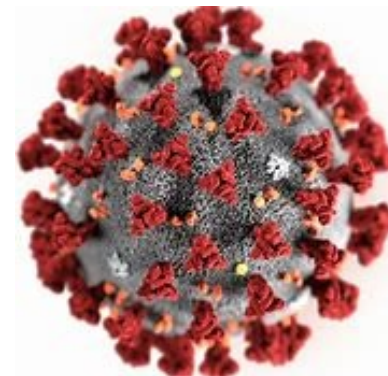


Fiduciary Education Foundation

Economic & Demographic Impacts of COVID-19

September 19, 2021

Presented by
Renee D. Laychur, CFA



Once Upon a Time

The U.S. Economy was Experiencing the Longest Expansion in American History and had been Growing for 11 ½ Years

Unemployment was at a 50 Year Low at 3.5% - There were More Jobs Available than Unemployed People

Since the end of the Great Recession 10 Years Earlier Stocks were Experiencing an 11-year Bull Market – In 2019 the S&P 500's Return was Over 30%

And Corona was a Good Tasting Beer from Mexico that you Drank with a Lime

LIFE WAS GOOD!



And Then

The New York Times

DEC. 31

Chinese authorities treated dozens of cases of pneumonia of unknown cause.

JAN. 11

China reported its first death.

JAN. 23

Wuhan, a city of more than 11 million, was cut off by the Chinese authorities.

JAN. 30

The W.H.O. declared a global health emergency.

FEB. 2

The first coronavirus death was reported outside China.

FEB. 29

The United States reported a death.

Life - March 7, 2020



And Then

The New York Times

MARCH 11

Coronavirus Has Become a Pandemic W.H.O. Says

MARCH 15

The C.D.C. recommended no gatherings of 50 or more people in the U.S.

MARCH 26

The United States led the world in confirmed cases.

APRIL 2

Cases topped a million, and millions lost their jobs.



March 20, 2020 - The Shutdown



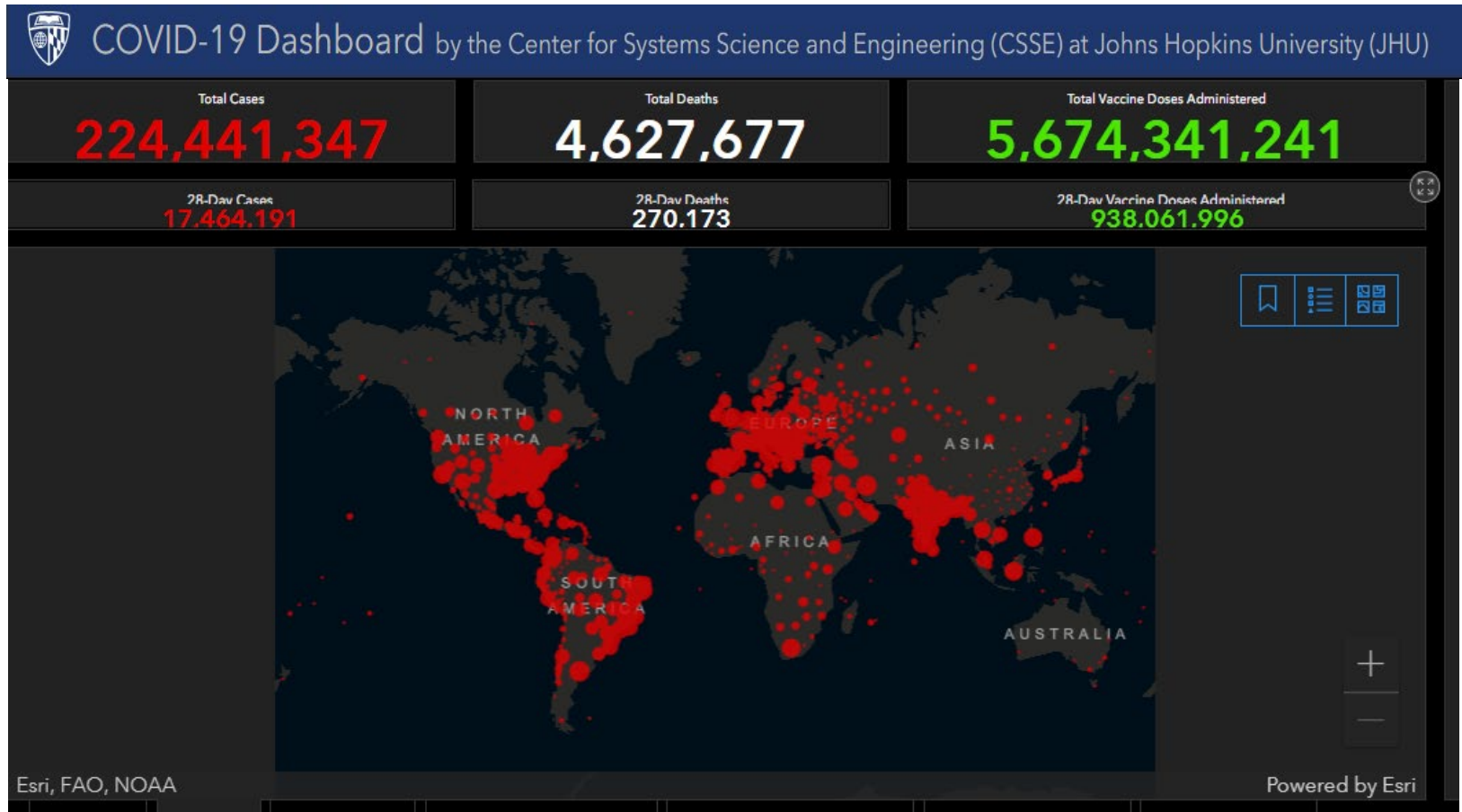
pandemic noun

an outbreak of a disease that occurs over a wide geographic area (such as multiple countries or continents) and typically affects a significant proportion of the population : a pandemic outbreak of a disease

1918 Spanish Flu Pandemic

- Pandemic Began in Early Spring 1918 and Ended Late Spring 2019
- Three Waves – 2nd and 3rd were Worst
- Highest Mortality Rates was Men 18 to 40
- Strongest Immune System Most Likely to Die
- Struck Soldiers in World War I and Spread due to the War
- 50 Million Deaths Worldwide
- 675,000 Deaths in U.S. Represented .6% of Population
- Highest Mortality Rates PA, MD, and NJ – Pittsburgh, Scranton, and Philadelphia
- More U.S. Deaths than Soldiers Killed in WWI and WWII Combined

COVID Data

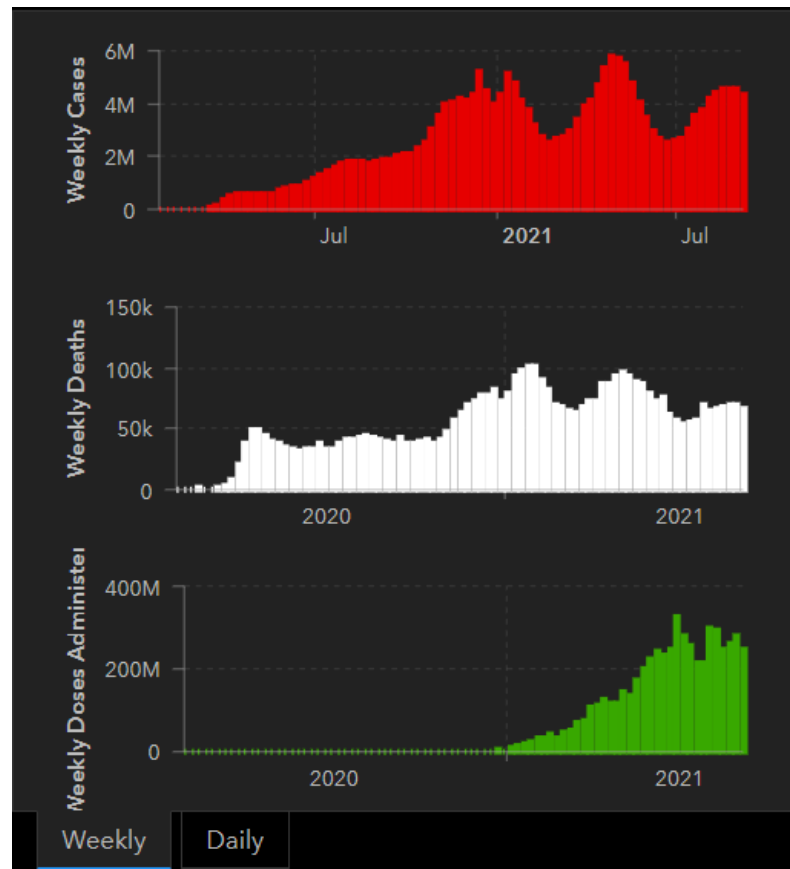


Source: Johns Hopkins

COVID Data



COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)



Source: Johns Hopkins

Black Swans, Butterflies, and Mothmen



an unpredictable or unforeseen event, typically one with extreme consequences.

Dictionary.com



COVID-19

“This is like a hurricane
hitting the whole country.”

David Cutler

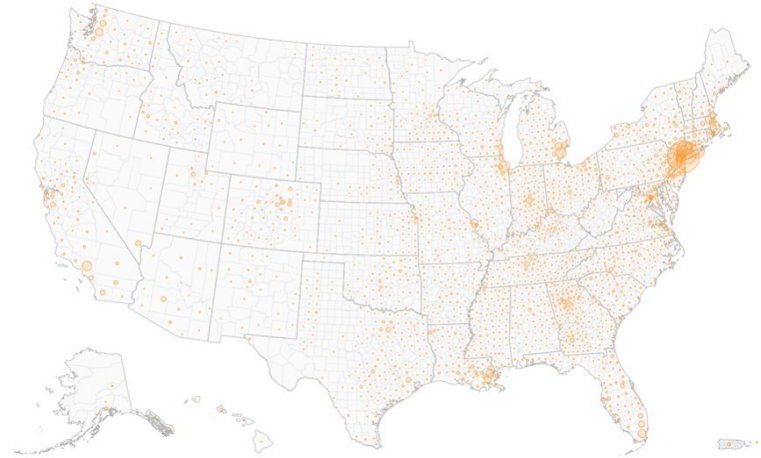
Otto Eckstein Professor of Applied Economics
Harvard University

COVID-19

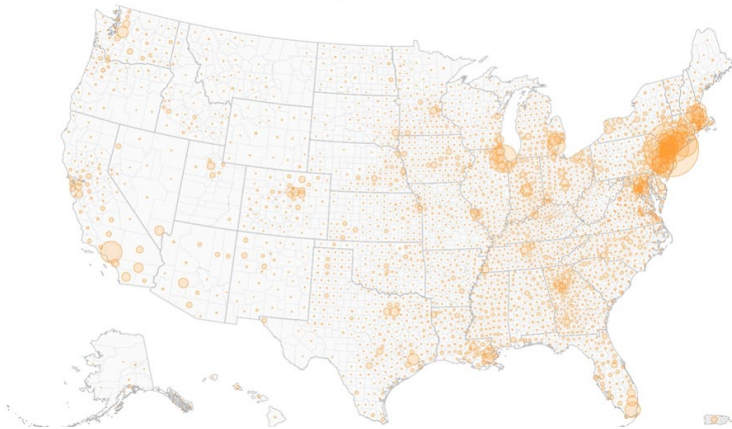
March 06, 2020



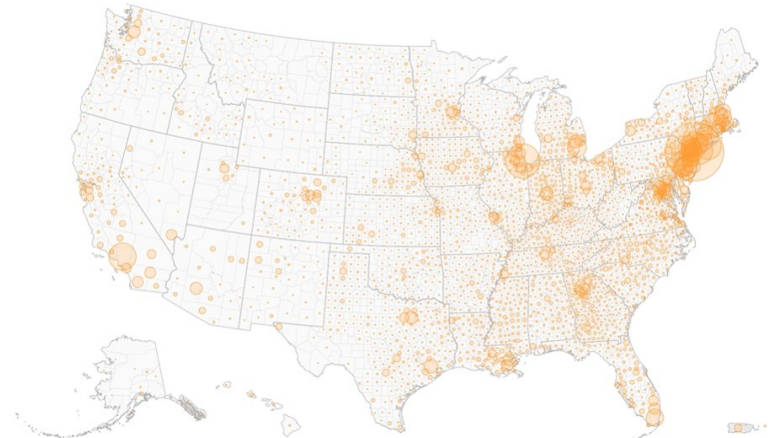
April 02, 2020



May 04, 2020



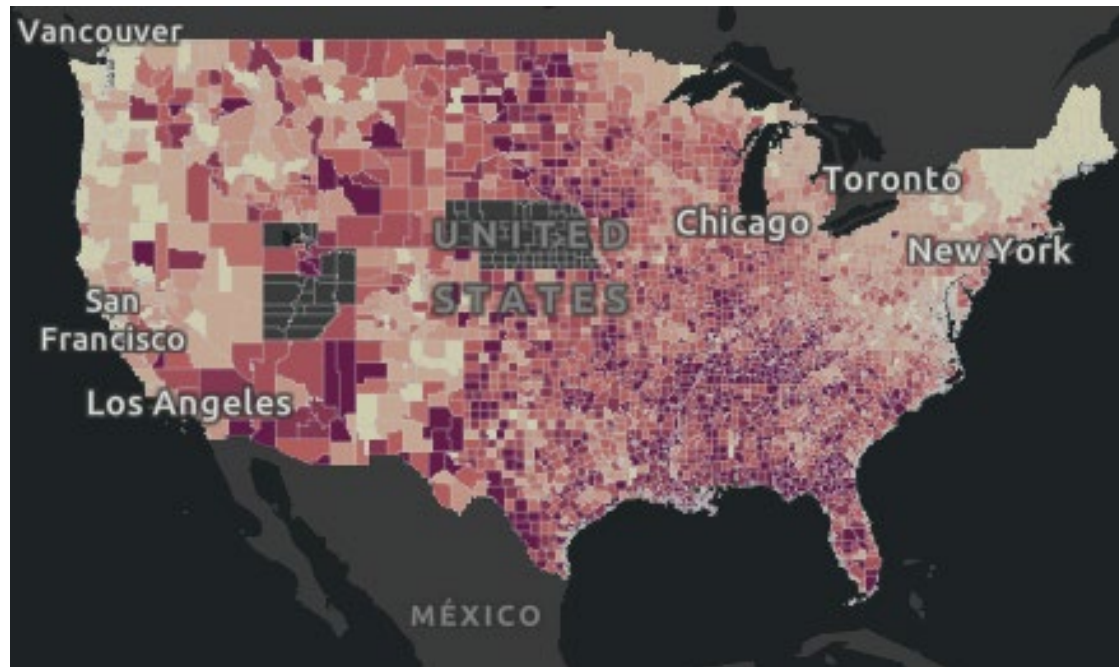
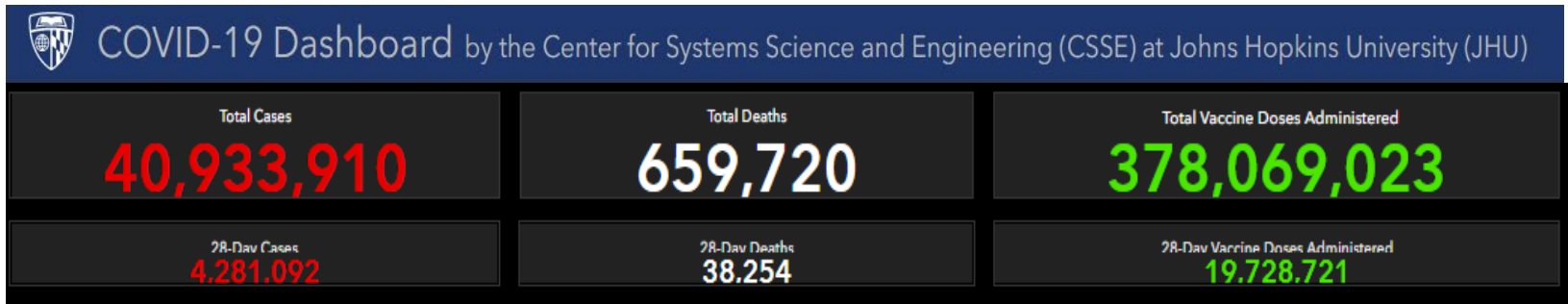
May 20, 2020



SOURCE Johns Hopkins University

CREDIT Mitchell Thorson/USA TODAY

COVID Data – U.S. Cases as of 9/12/2021

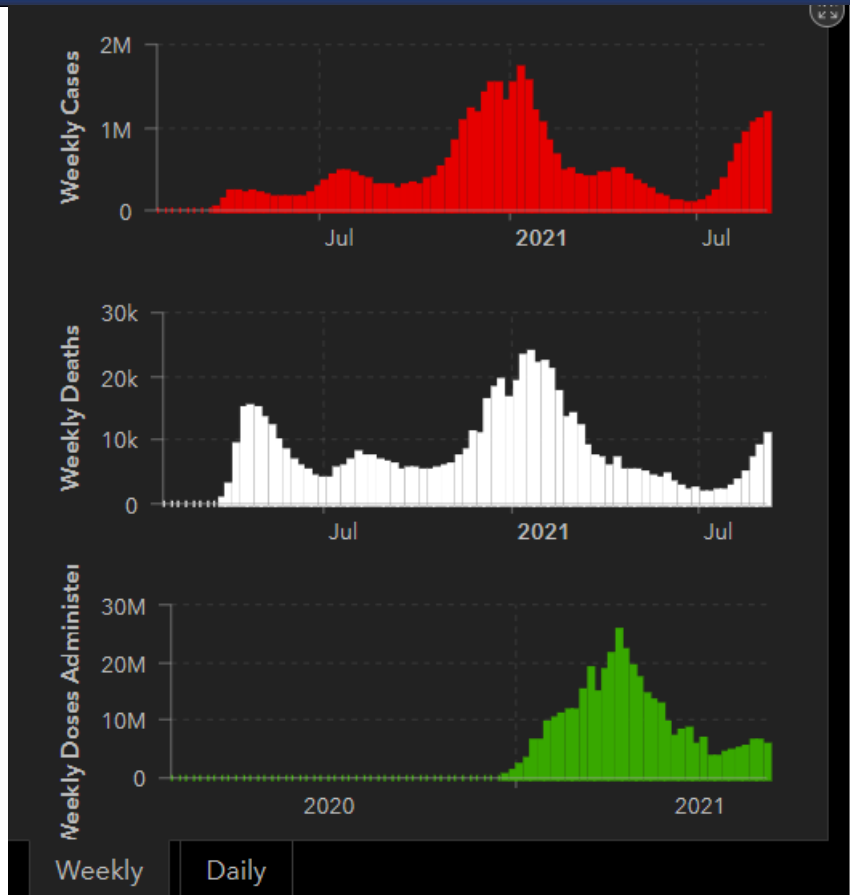


Source: Johns Hopkins

COVID Data – U.S. Weekly Data as of 9/12/2021

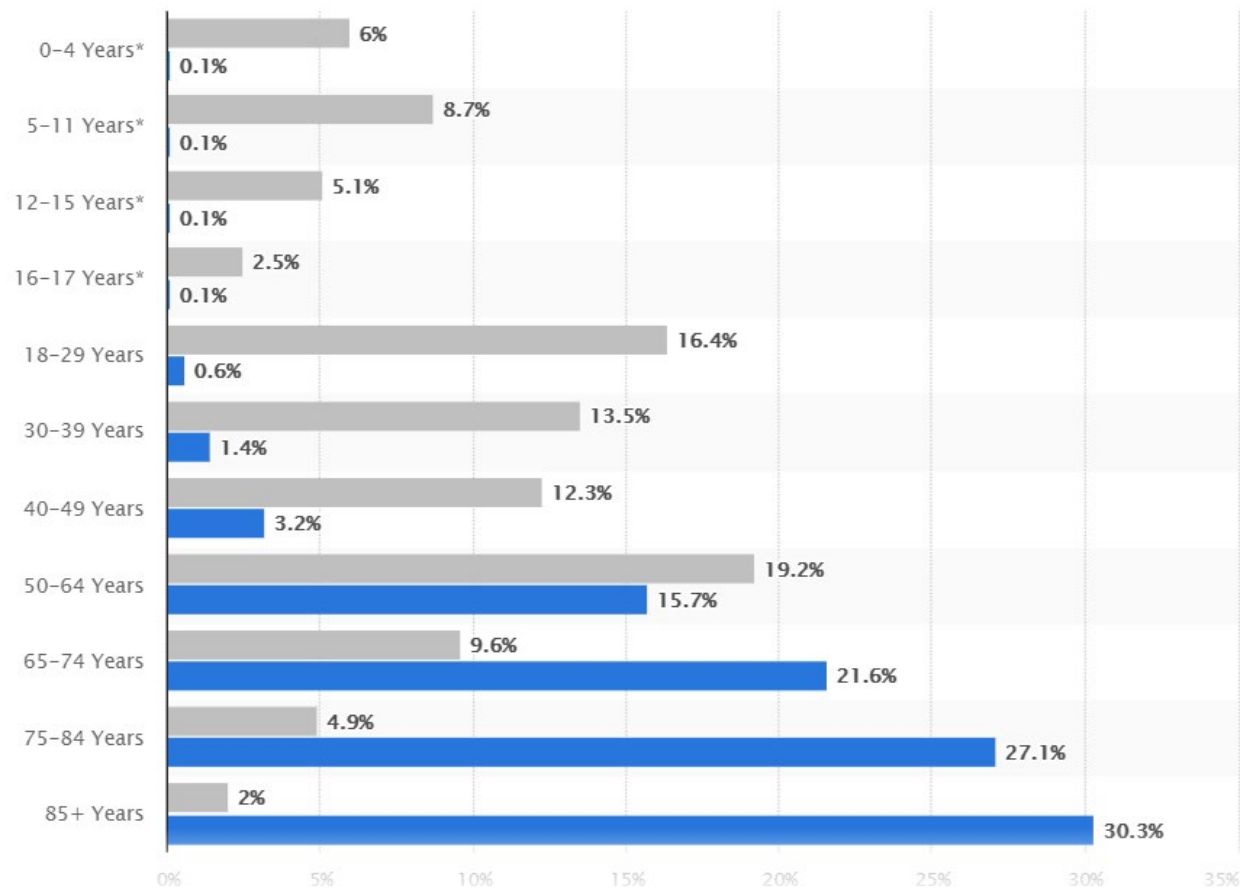


COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)



Source: Johns Hopkins

COVID Deaths by Age Group as of September 9, 2021



Source: Statista

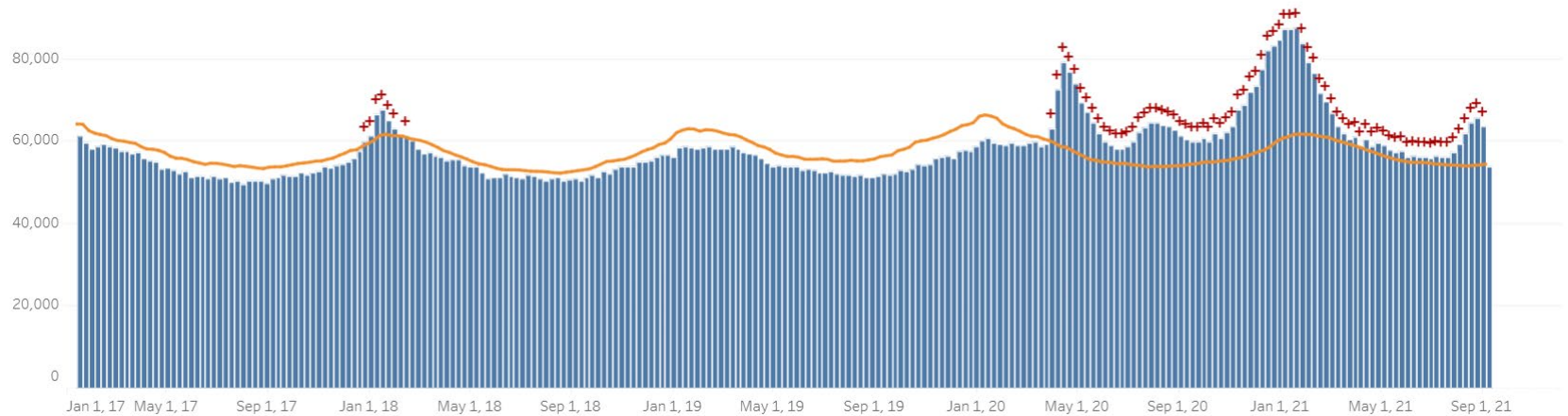
COVID-19 – Excess Deaths

Select a jurisdiction:

United States

- + indicates observed count above threshold
- Predicted number of deaths from all causes
- upper bound threshold for excess deaths

Weekly number of deaths (from all causes)



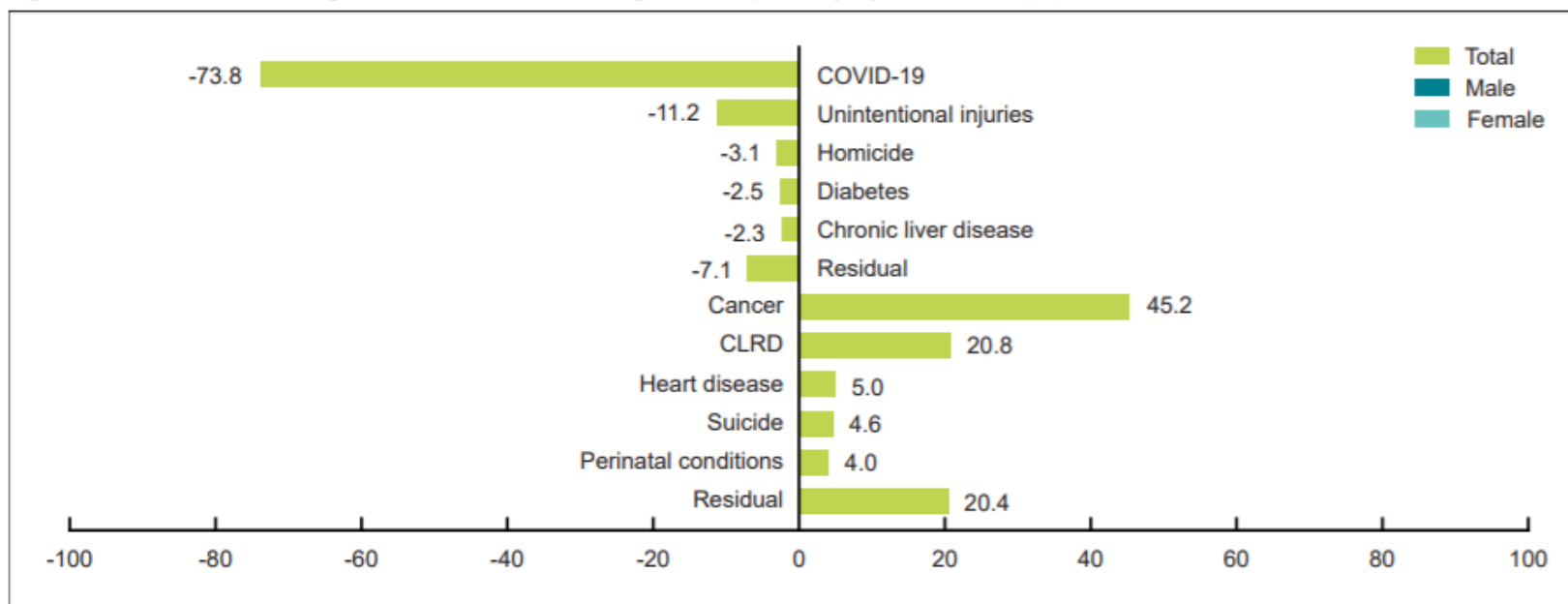
+ a b l e a u

🔗 📄 🖨

Source: Center for Disease Control and Prevention

Mortality

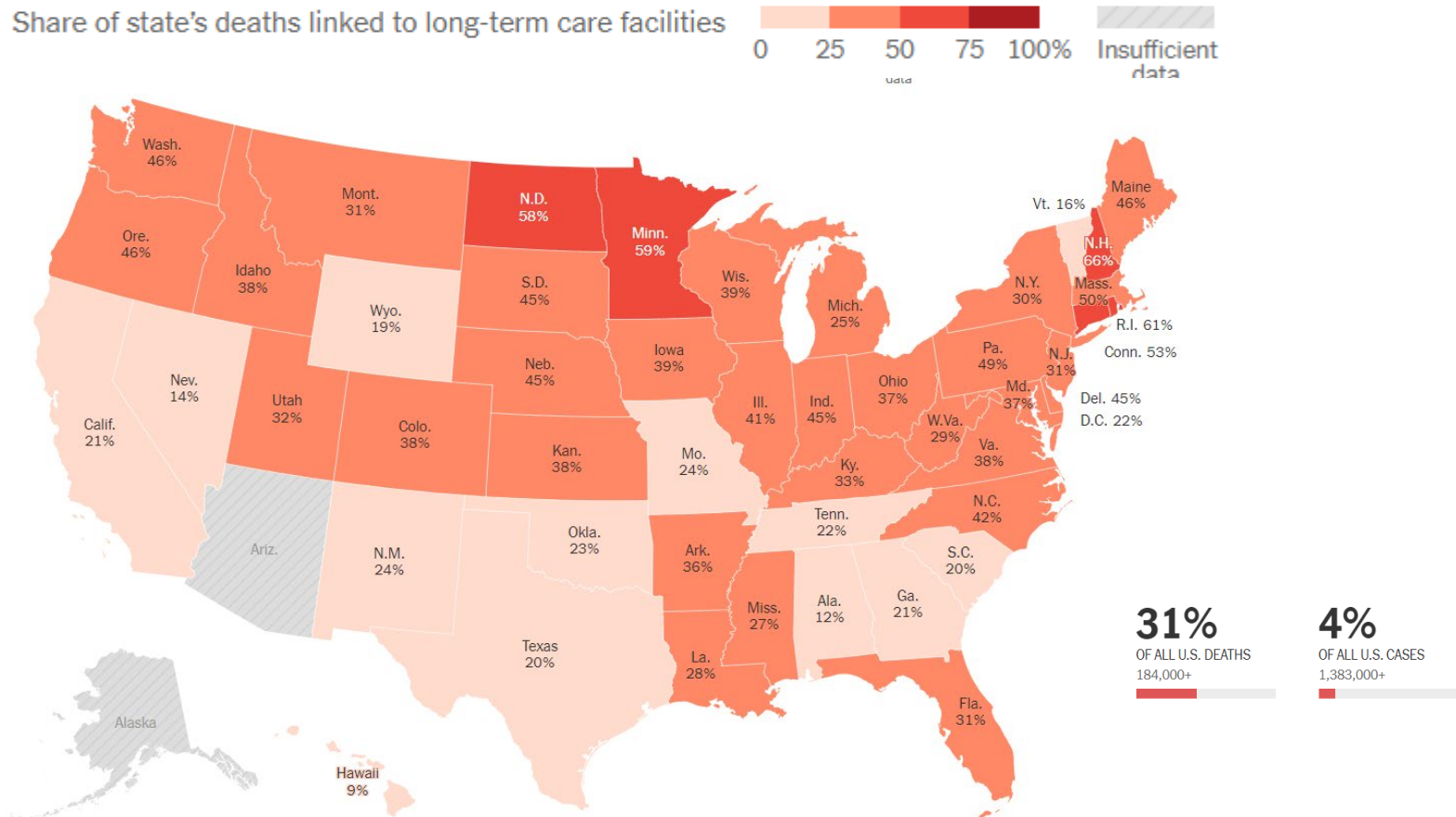
Figure 5. Contribution of leading causes of death to the change in life expectancy, by sex and total population: United States, 2019–2020



Source: Vital Statistics Rapid Release July 2021, Provisional Life Expectancy Estimates for 2020 : <https://www.cdc.gov/nchs/products/index.htm>

COVID-19

In 5 states, at least half of deaths are linked to nursing homes.



Source: New York Times, “Nearly One-Third of U.S. Coronavirus Deaths are Linked to Nursing Homes”, June 1, 2021

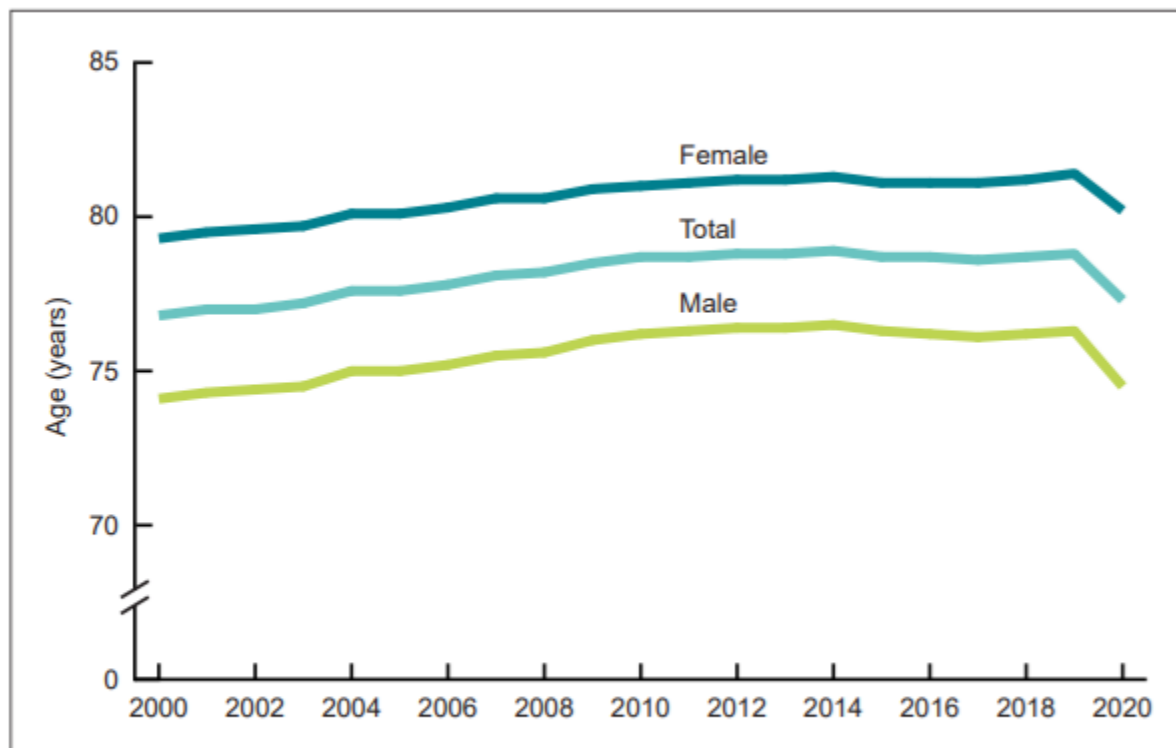
Mortality

CDC Report on July 21, 2021

- 2020 U.S. Life Expectancy at Birth Declined by 1.5 Years to 77.3
 - Males Declined from 76.3 to 74.5 Years – 1.8 Years Lower
 - Females 81.4 to 80.2 Years – 1.2 Year Decline
- 2020 Difference Between Sexes Increased from 5.1 to 5.7 Years in 2020
- Previously Narrowed to 4.8 Years
- Male Life Expectancy Declined to Lowest Level Since 2003
- Female Life Expectancy Lowest Level Since 2005

Mortality

Figure 1. Life expectancy at birth, by sex: United States, 2000–2020



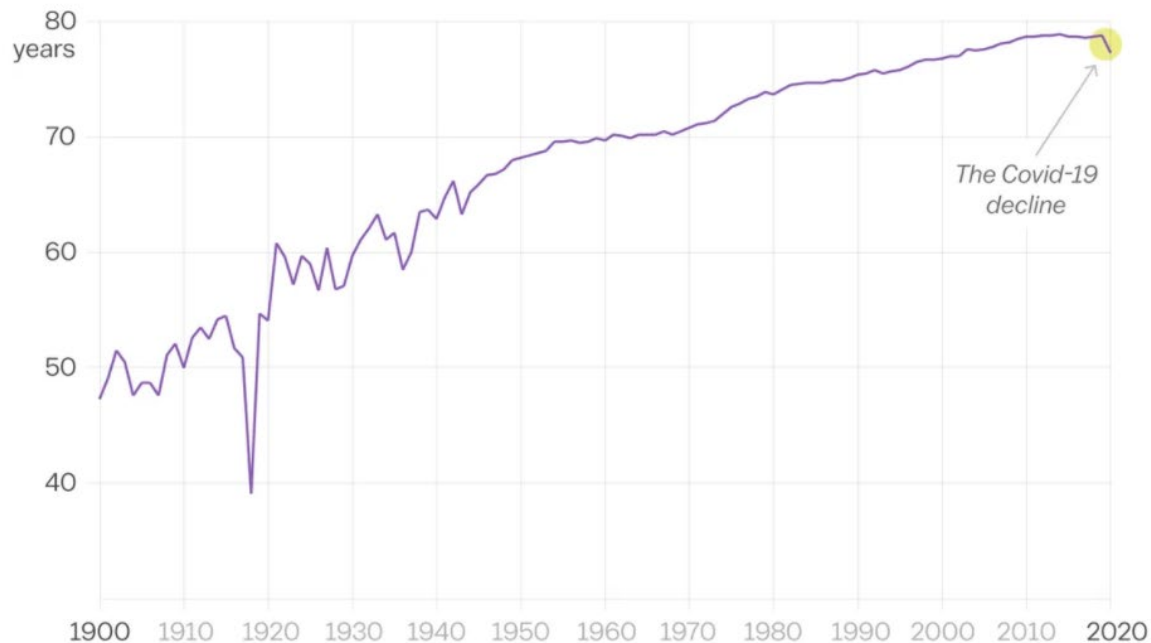
NOTES: Life expectancies for 2019 by Hispanic origin and race are not final estimates; see [Technical Notes](#). Estimates are based on provisional data for 2020. Provisional data are subject to change as additional data are received.

SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality data.

Mortality

The Covid-19 life expectancy decline, in context

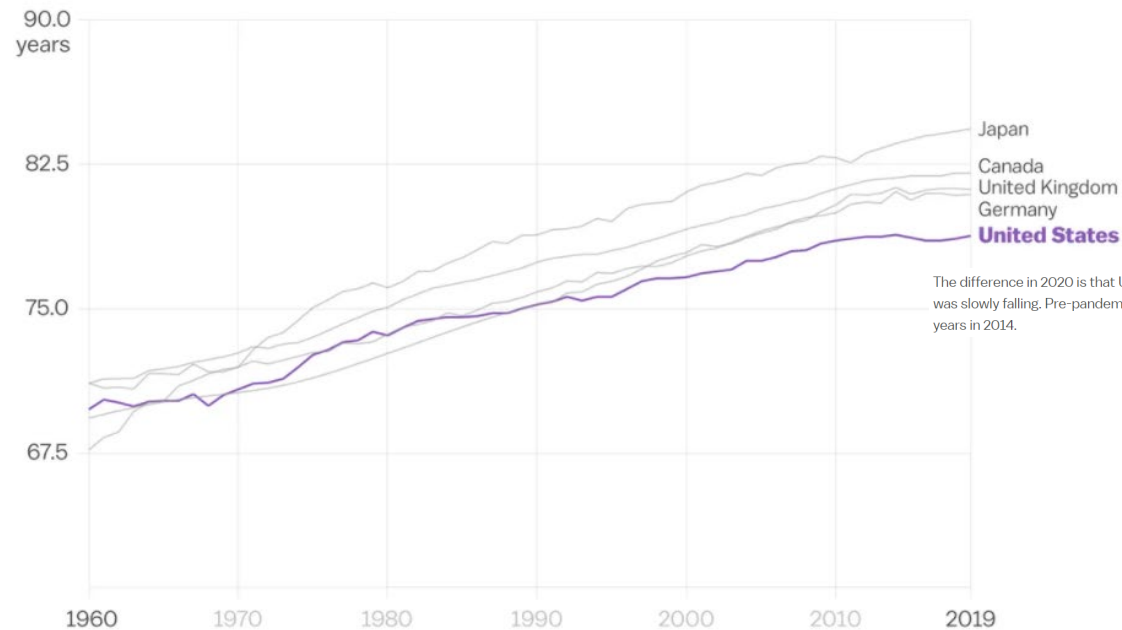
For most of the past century, US life expectancy has increased steadily, but in recent years, it has leveled off and even fallen slightly. In 2020, Covid-19 caused a sharp decline of 1.5 years.



Source: Vox -Covid-19 isn't the reason that US life expectancy is stagnating, July 28,2021

Mortality

Life expectancy over time



The difference in 2020 is that US life expectancy wasn't increasing before the pandemic: It was slowly falling. Pre-pandemic life expectancy in 2019 was 78.8 years, compared to 78.9 years in 2014.

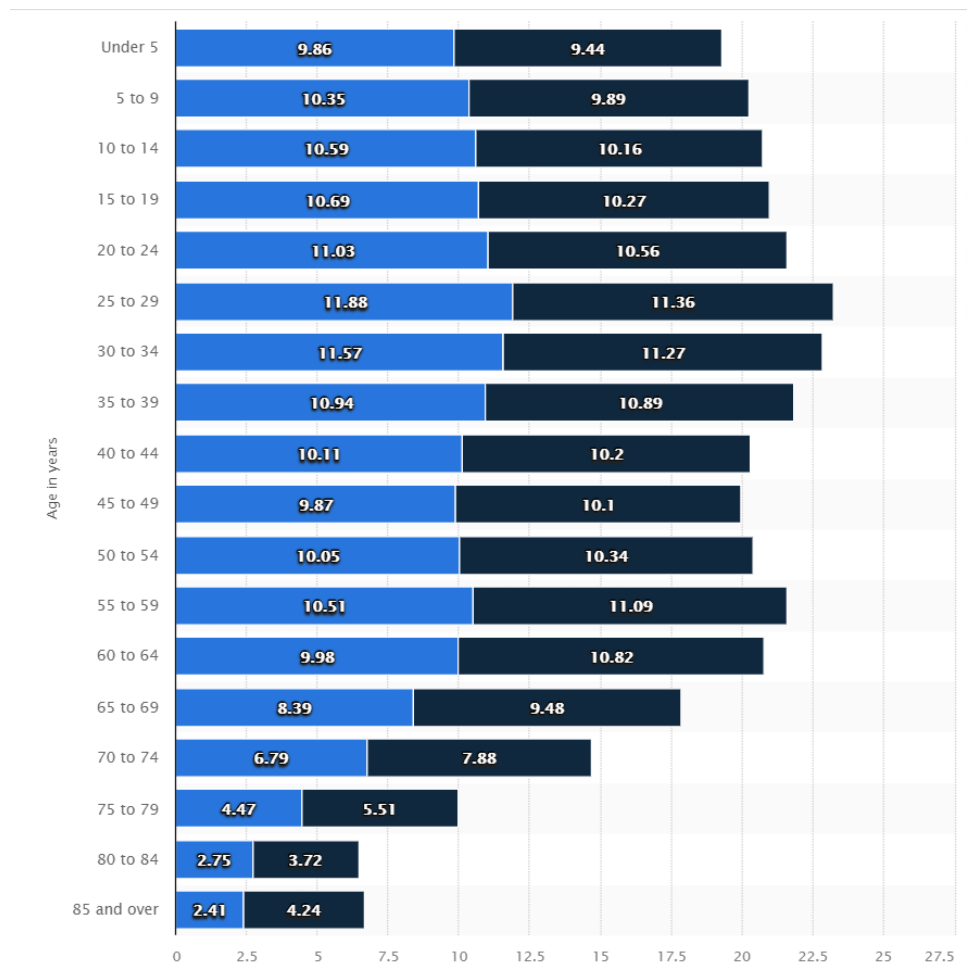
Source: The World Bank

Christina Animashaun/Vox

Vox

Source: Vox - Covid-19 isn't the reason that US life expectancy is stagnating, July 28, 2021

Statista: Resident Population of the U.S. by Age and Sex – July 1, 2020 (in millions)



Source: Statista

COVID-19

In 2020, COVID-19 was the third leading cause of death in the U.S.*

PROVISIONAL 2020 DEATHS



* Provisional National Vital Statistics System (NVSS) death certificate data on underlying causes of death among U.S. residents in the United States during January–December 2020

Fertility

The number of births per woman has been declining for a long time now. We need 2.1 births to replace ourselves as a population, and the developed world is already under two births per woman. Less developed regions are trending in this direction. Maintaining replacement fertility is important because lower birth rates translate into fewer people entering the labor force 20 years later, which affects our economy, and fewer new parents in the future, which can perpetuate the cycle.

COVID Baby Boom More Likely a Baby Bust

- Brookings Institute Estimates 300,000 to 500,000 fewer U.S. Births in 2021
- 2020 was 4% Below 2019 – Lowest Number of Births Since 1979
- May 2020 Guttmacher Institute Study of Women 18 to 49 with over 1/3 of Respondents Indicated Waiting to get Pregnant or Having Fewer Children due to COVID-19



Andrew M. Parker
Senior Behavioral and
Social Scientist; Faculty,
Pardee RAND Graduate
School

COVID-19 Recession

"A recession is a significant decline in economic activity spread across the economy, normally visible in production, employment and other indicators. A recession begins when the economy reaches a peak of economic activity....The committee has determined that a peak in monthly economic activity occurred in the U.S. economy in February 2020."

- Business Cycle Dating Committee, National Bureau of Economic Research, June 8th, 2020.

- Gross Domestic Product **Dropped 31.4%**
- Unemployment **Soared to 14.8%**
- Over **20 Million** Americans were **Unemployed**
- **Worst Unemployment Rate Since Great Depression**
- **S&P 500 Falls 34%**

The Shutdown



CORONAVIRUS PANDEMIC

The Day Everything Changed



The Shutdown

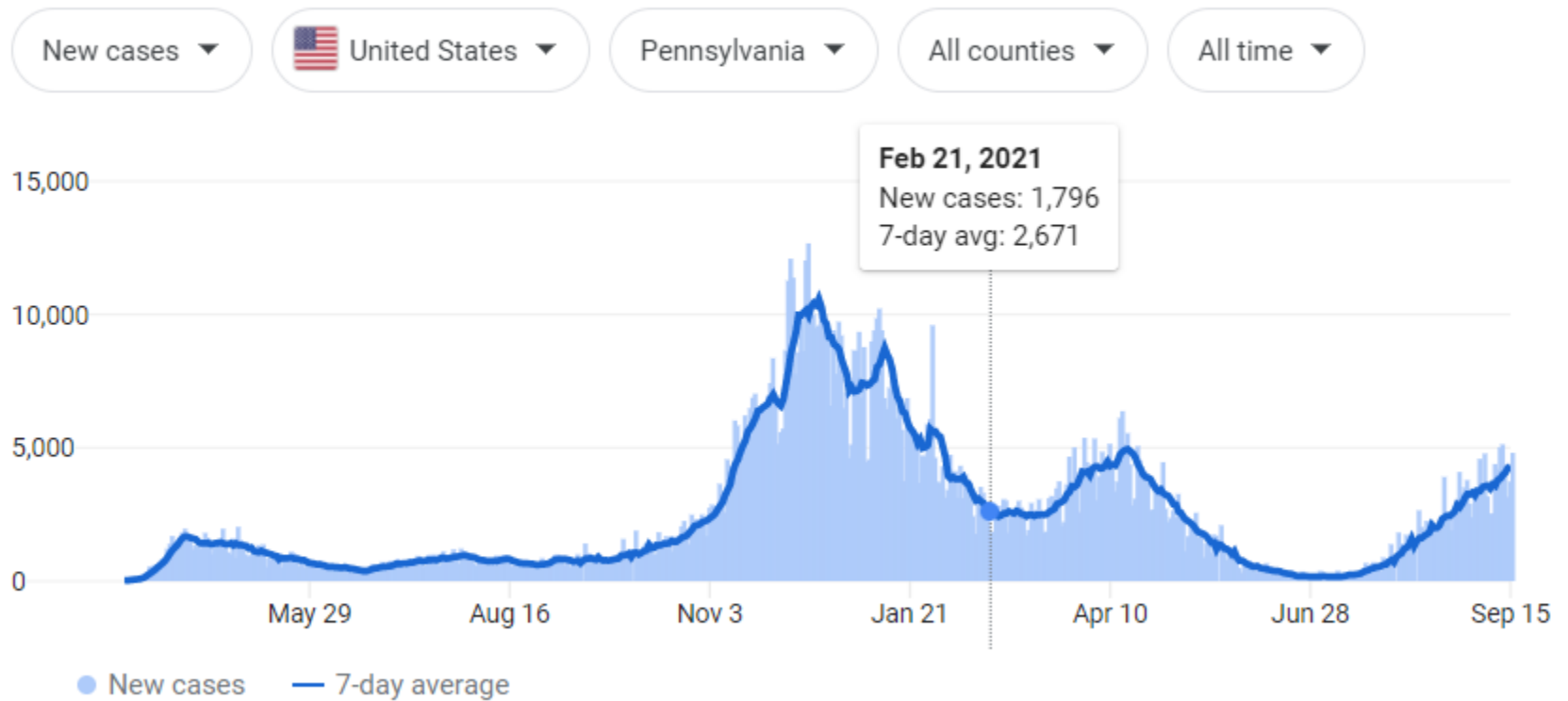
THE WALL STREET JOURNAL. THE MONTH CORONAVIRUS FELLED AMERICAN BUSINESS

March began amid an 11-year expansion and ended with blue-chip companies begging for bailouts. Swift and sharp, the pandemic cut through the country's commerce like nothing before it.



PA COVID Case History

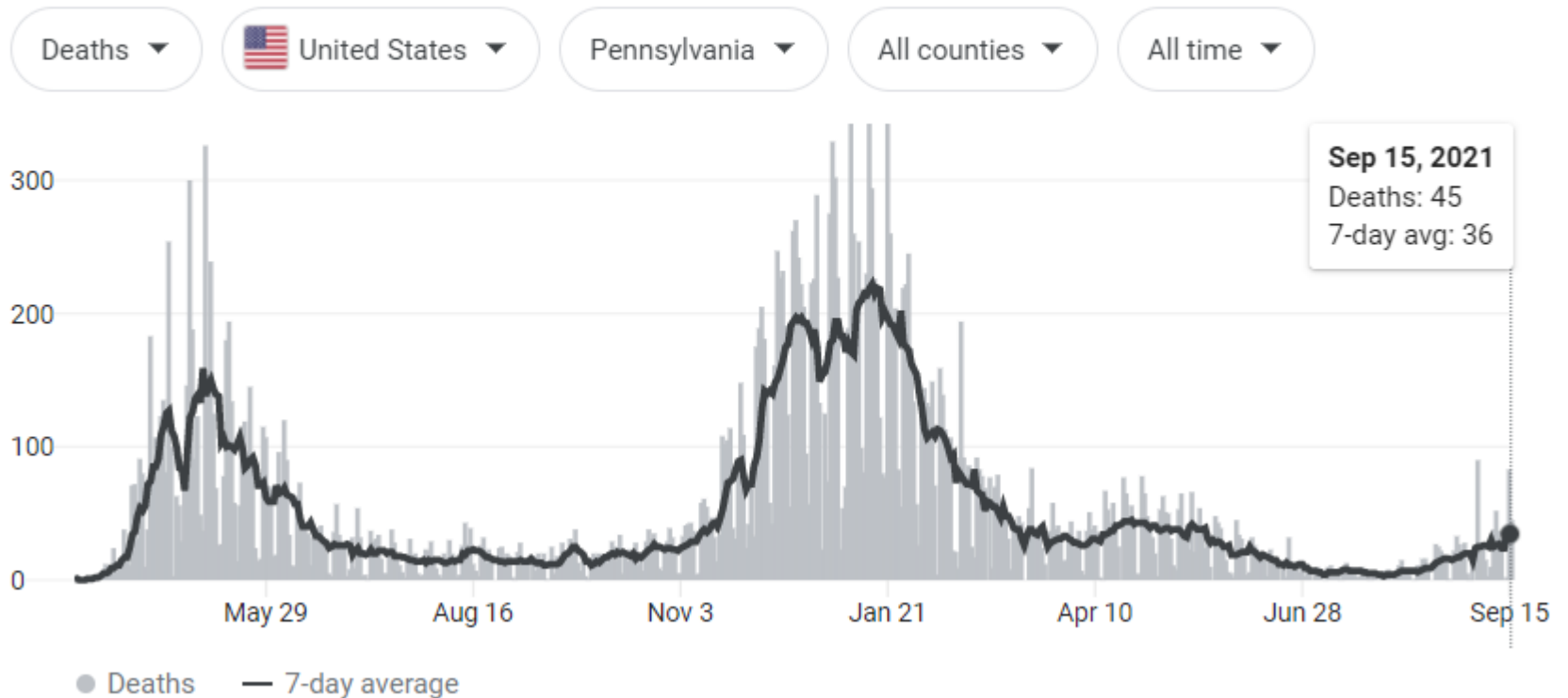
From [The New York Times](#) · Last updated: 20 hours ago



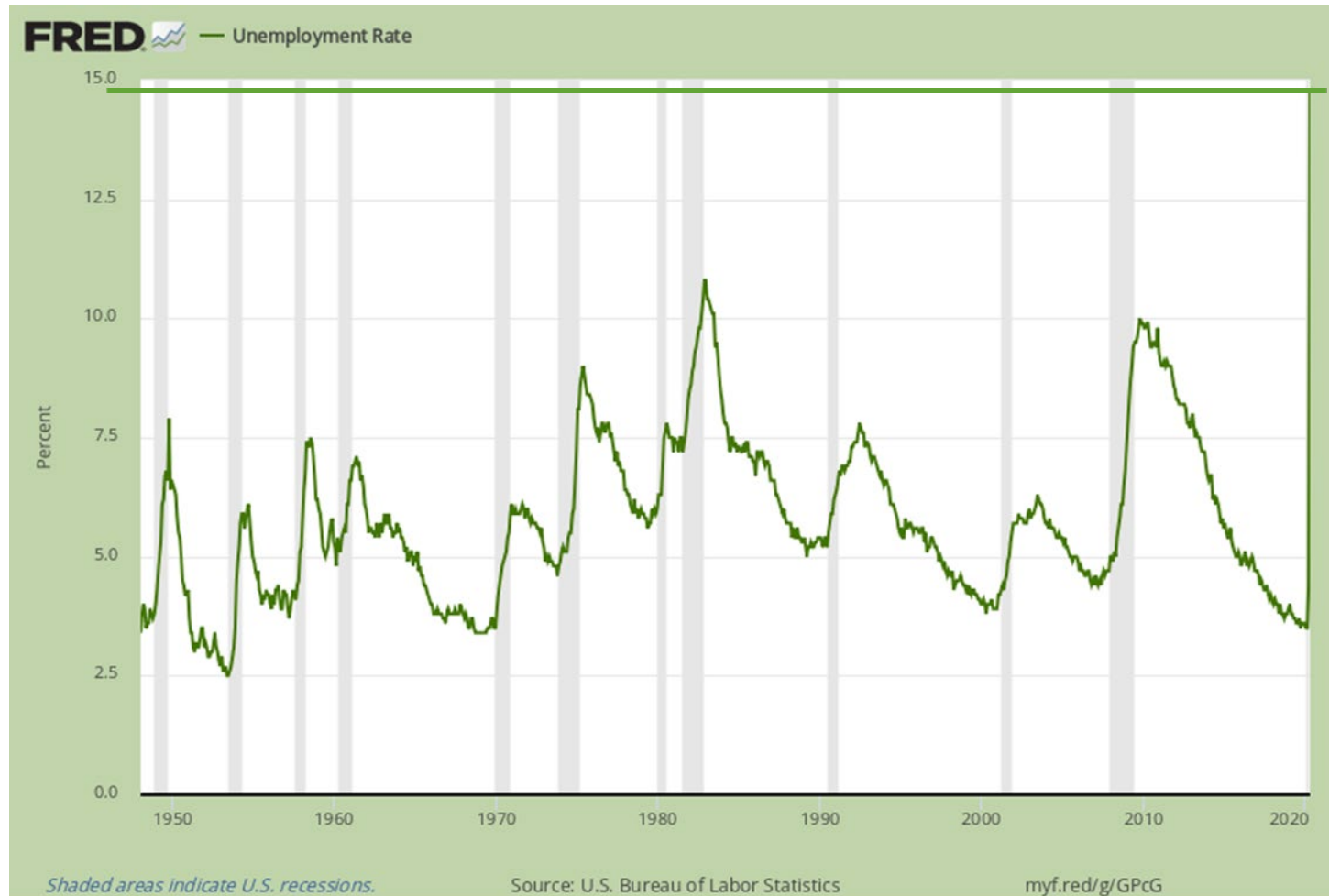
PA COVID Death History

New cases and deaths

From [The New York Times](#) · Last updated: 20 hours ago



Unemployed



Source: St Louis Fed Fred

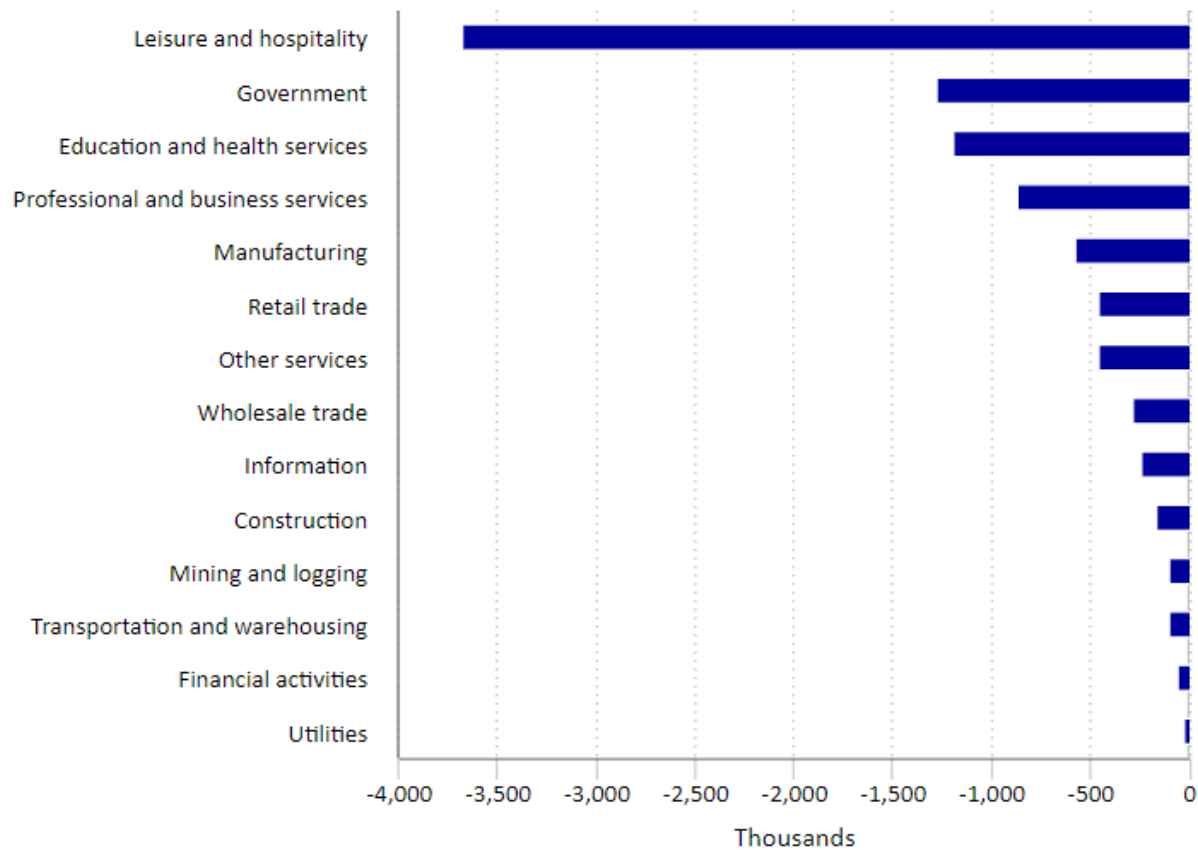
Unemployed Persons



Source: St Louis Fed Fred

Unemployed

Chart 2. Change in total nonfarm employment, by industry, seasonally adjusted, 2020



Source: Bureau of Labor Statistics

Employment

The unemployment rate for women is greater than the rate for men in the COVID-19 downturn

Unemployment rate (%)



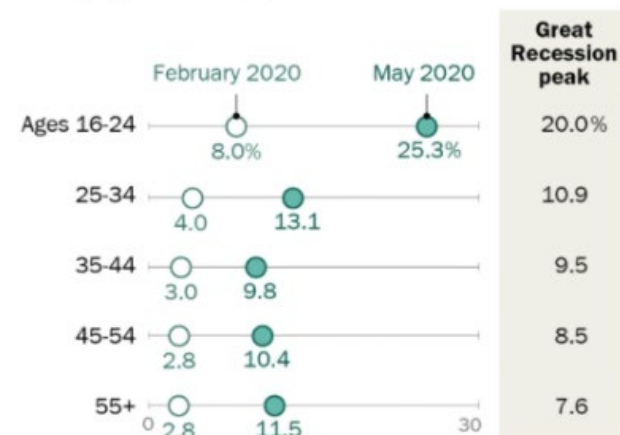
Note: The unemployment rate is the share of workers in the labor force actively looking for work. Estimates refer to workers ages 16 and older, nonseasonally adjusted. Estimates for the Great Recession refer to the highest unemployment rate recorded for each group around that downturn – in January 2010 for all workers and men, and July 2010 for women.

Source: Bureau of Labor Statistics.

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About one-in-four young adult workers are unemployed in COVID-19 downturn

Unemployment rate (%)



Note: The unemployment rate is the share of workers in the labor force actively looking for work. Estimates refer to workers ages 16 and older, nonseasonally adjusted. Estimates for the Great Recession refer to the highest unemployment rate recorded for each group around that downturn; the earliest peak was in January 2010 for workers ages 45-54 and the latest June 2010 for workers ages 16-24.

Source: Bureau of Labor Statistics.

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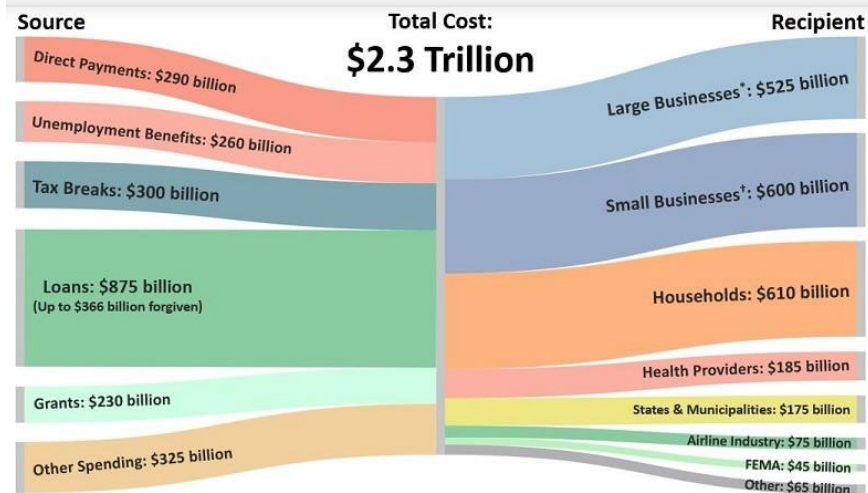
Pew Research Center: “Unemployment rose higher in three months of COVID-19 than it did in two years of the Great Recession”, June 11, 2020

Government Aid

Signed by President on March 27, 2020



A Visualization of the CARES Act



Source: Legislative Offices, JCT, bill text, CRFB estimates.

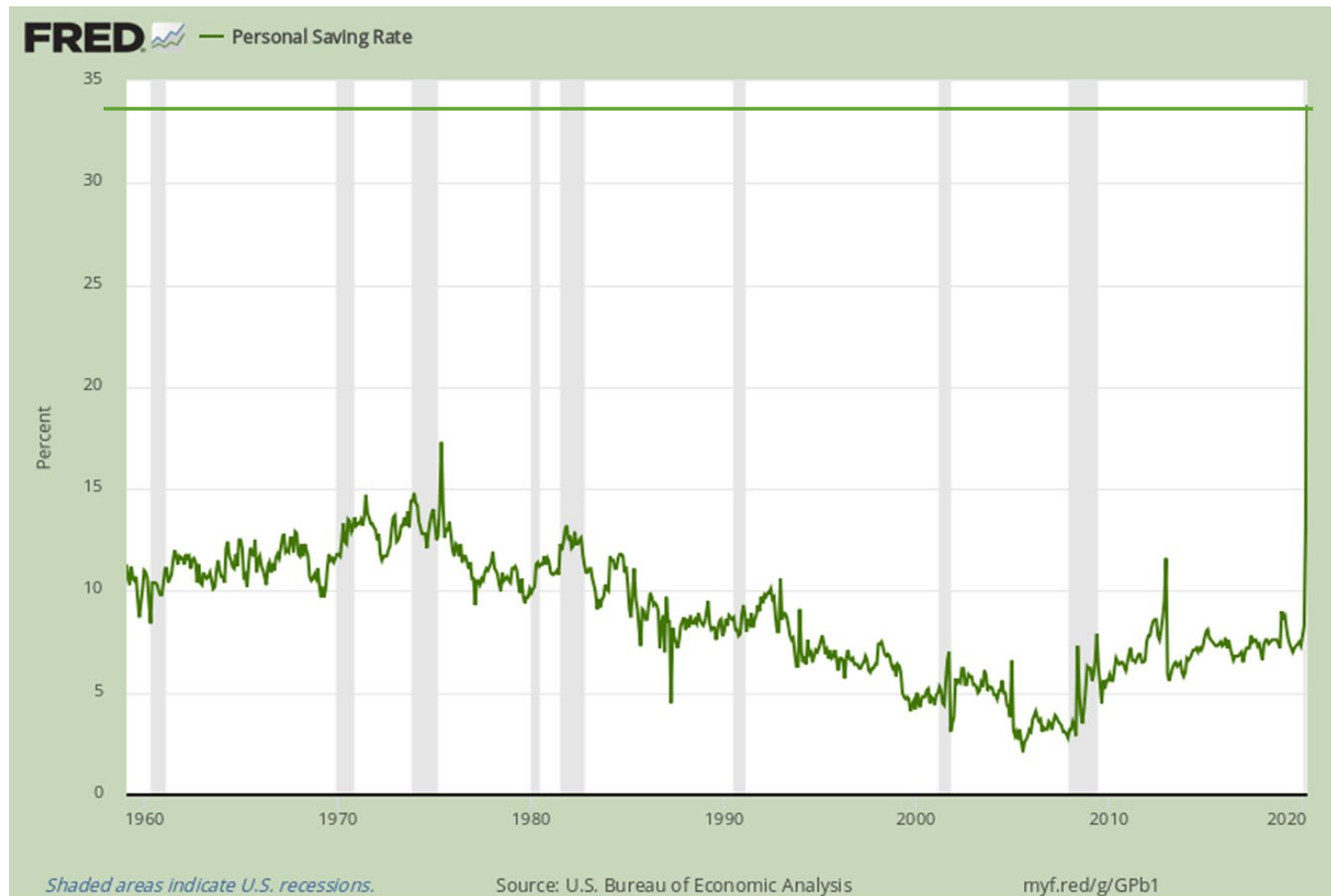
* This includes \$170 billion of tax cuts for businesses other than corporations, some of which are large companies.

* This includes \$454 billion to set up a \$4.5 trillion Fed facility which could support state and local governments as well as companies.

CRFB.org

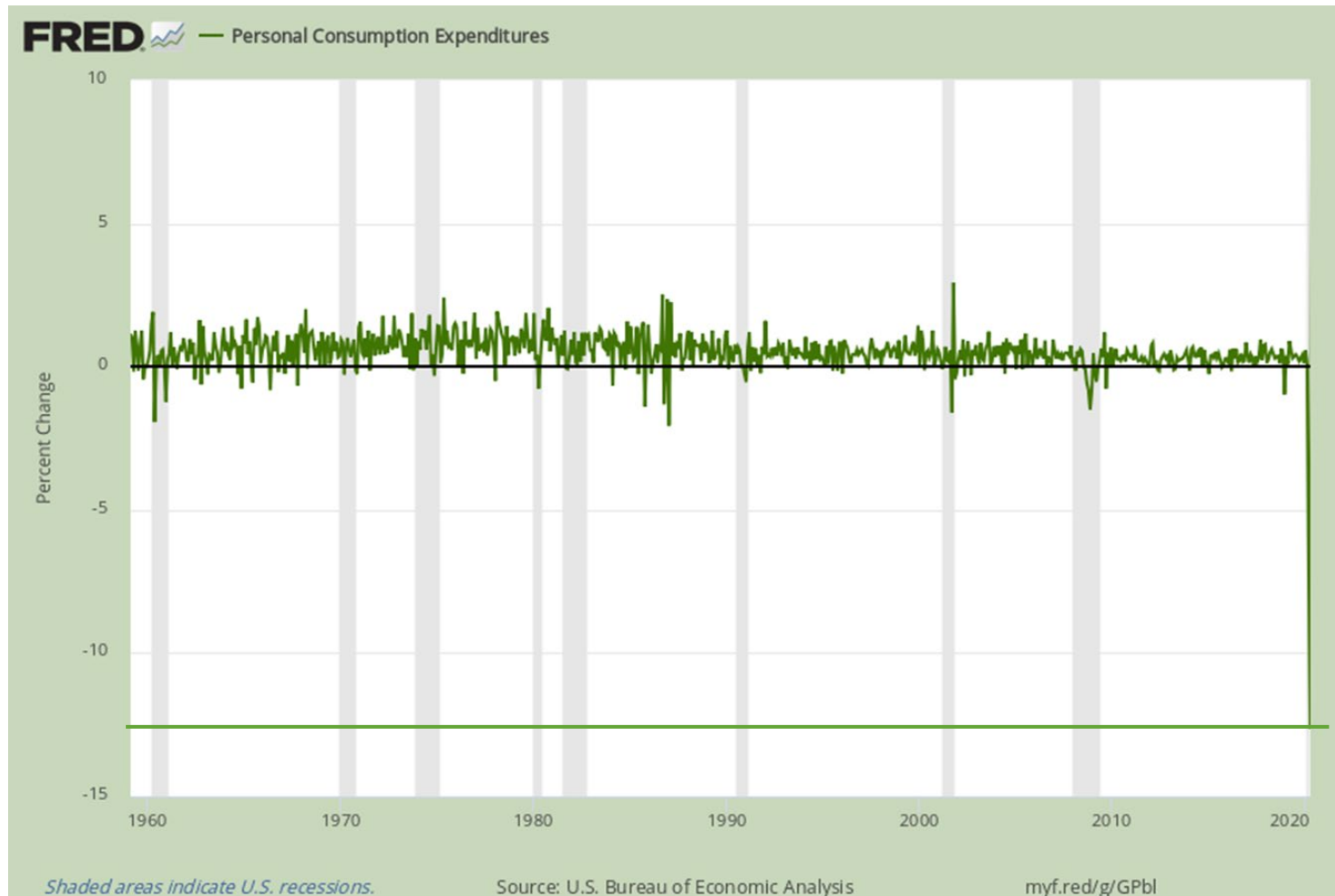


Savings Soared

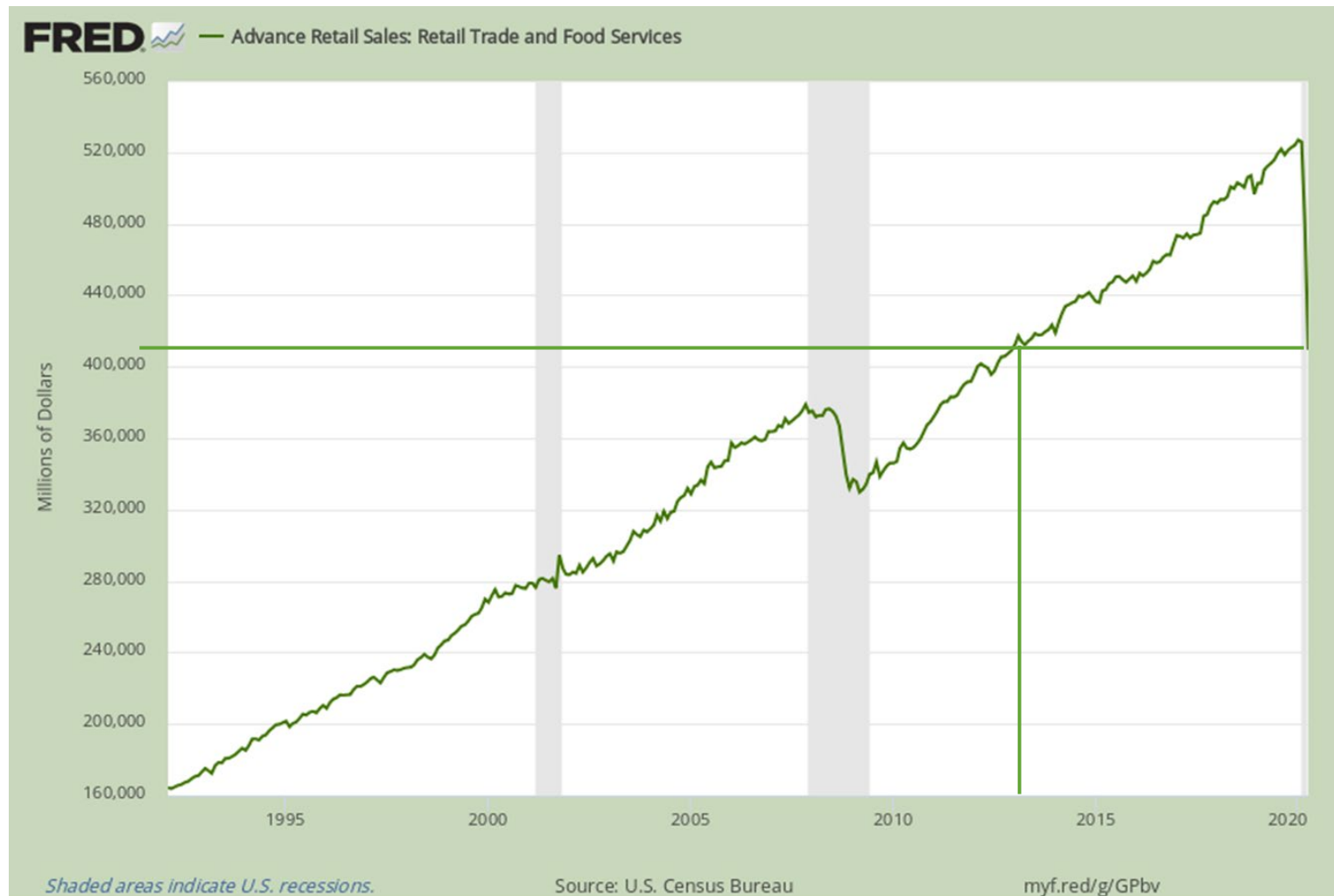


Source: St Louis Fed Fred

Spending Nose Dived

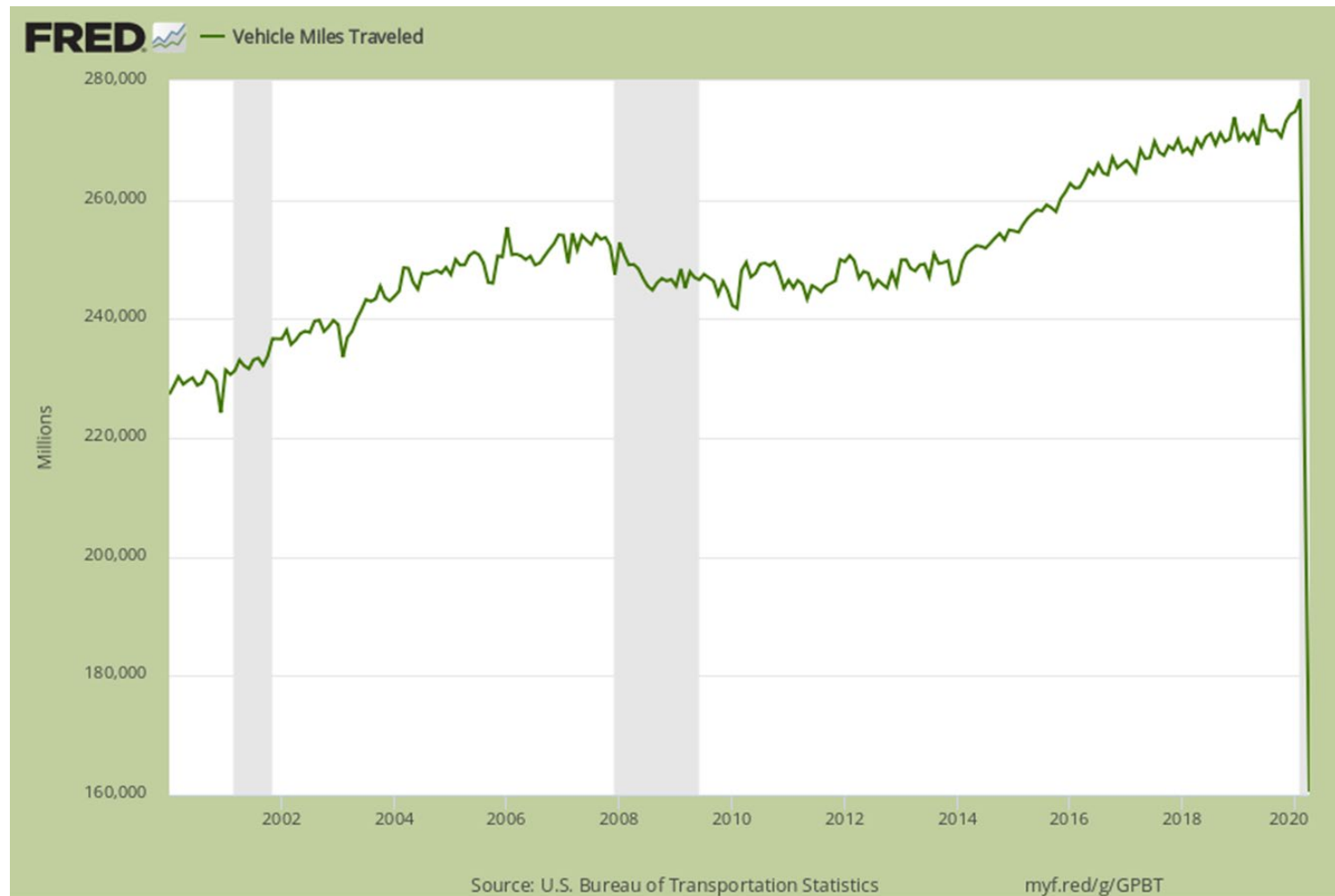


Spending Nose Dived



Source: St Louis Fed Fred

Going Nowhere but FAST

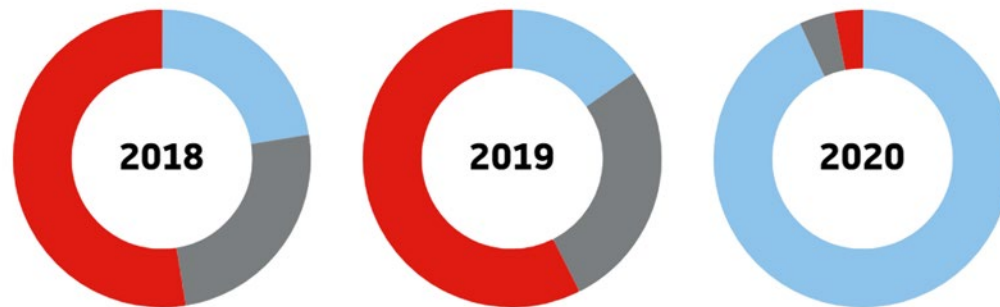
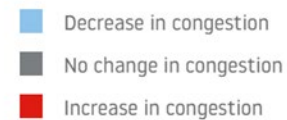


Source: St Louis Fed Fred

Going Nowhere

What has changed?

This year we observed a huge drop in urban congestion levels around the world



...unlike anything we've seen before



But Not All Spending



Source: St Louis Fed Fred

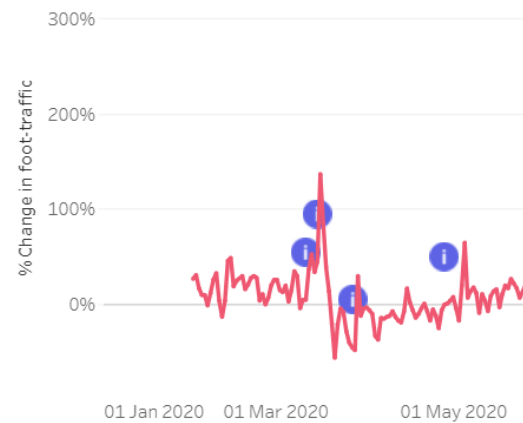
The Shutdown



Total Wine & More, Nationwide - Foot-t

Date Range

Since February 2020 ▼

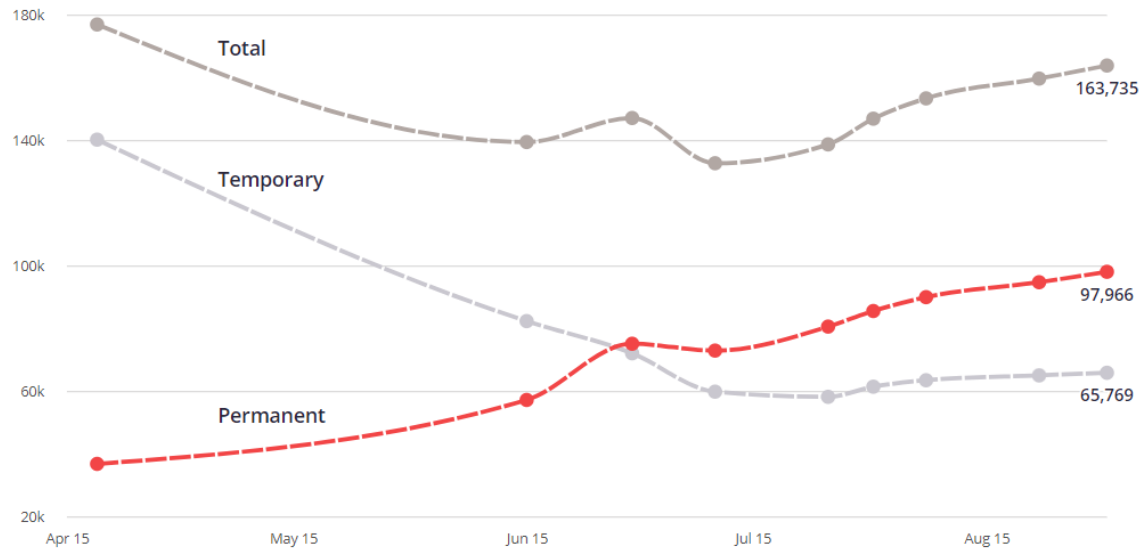


Yelp Business Closure Data – September 2020

Business Closures Continue to Increase Nationally

Number of businesses marked closed on Yelp that were open March 1

🖱️ Hover over a circle to see closures



Source: Yelp Local Economic Impact Report, September 2020

Fitness

- First States Closed Fitness Clubs in mid-March 2020
- By Early April 48 States were Shut Down
- In the Spring Virtually ALL Clubs were Closed
- By the End of 2020
 - 17% of Clubs Closed Permanently
 - 58% Lower Revenues than 2019
 - 44% of Fitness Workforce Lost Jobs



ACTIVITY LEVELS PRIOR TO **VS.**
DURING PANDEMIC-RELATED
SHUTDOWNS

50% less active



31% about the same



19% more active

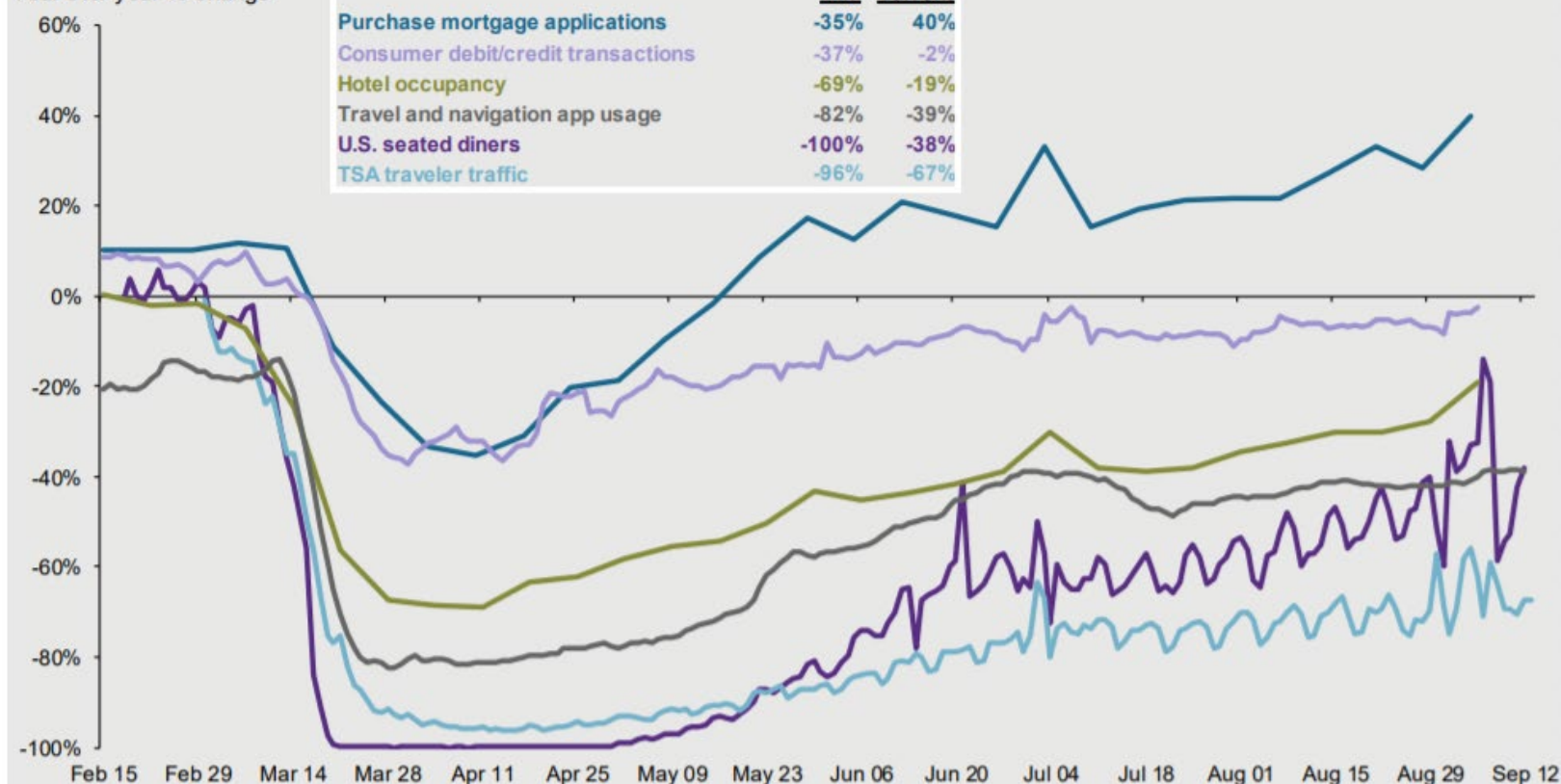


1 OUT OF 10 PEOPLE

who haven't kept up their routine, admit
they've stopped exercising altogether

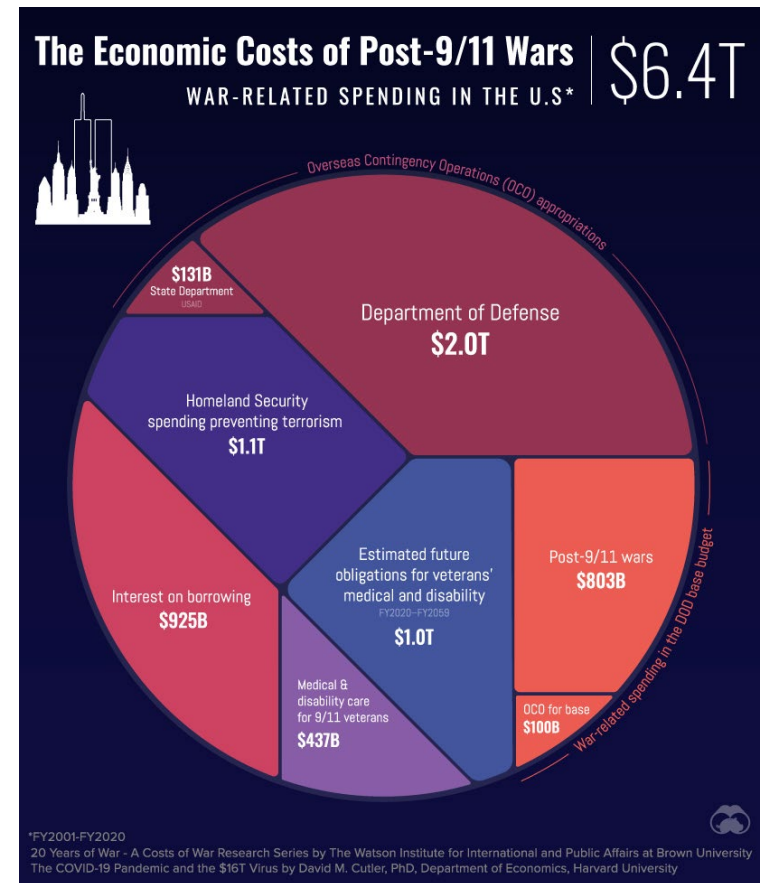
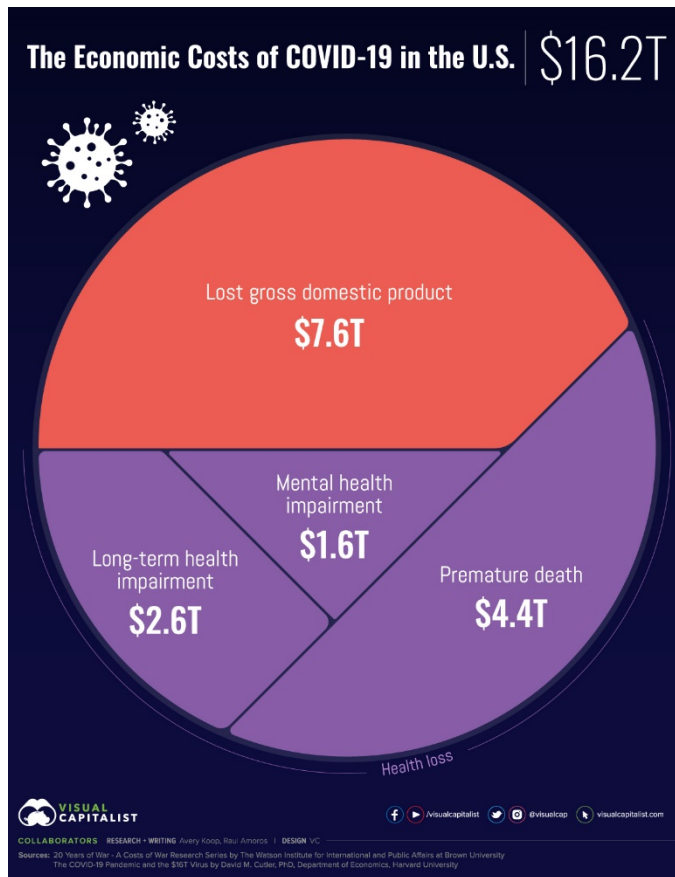
High frequency data

Year-over-year % change*



Source: App Annie, Chase, Mortgage Bankers Association (MBA), OpenTable, STR, Transportation Security Administration (TSA), J.P. Morgan Asset Management. *App Annie data is compared to 2019 average and includes over 600 travel and navigation apps globally, including Google Maps, Uber, Airbnb and Booking.com. Consumer spending: This report uses rigorous security protocols for selected data sourced from Chase credit and debit card transactions to ensure all information is kept confidential and secure. All selected data is highly aggregated and all unique identifiable information—including names, account numbers, addresses, dates of birth, and Social Security Numbers—is removed from the data before the report's author receives it.
Guide to the Markets – U.S. Data are as of September 11, 2020.

COVID Cost



Source: Visual Capitalist – “Putting the Cost of COVID-19 in Perspective”, January 14, 2021

What Didn't Happen



COVID Trends

Figuring out what the next big trend is tells us what we should focus on.

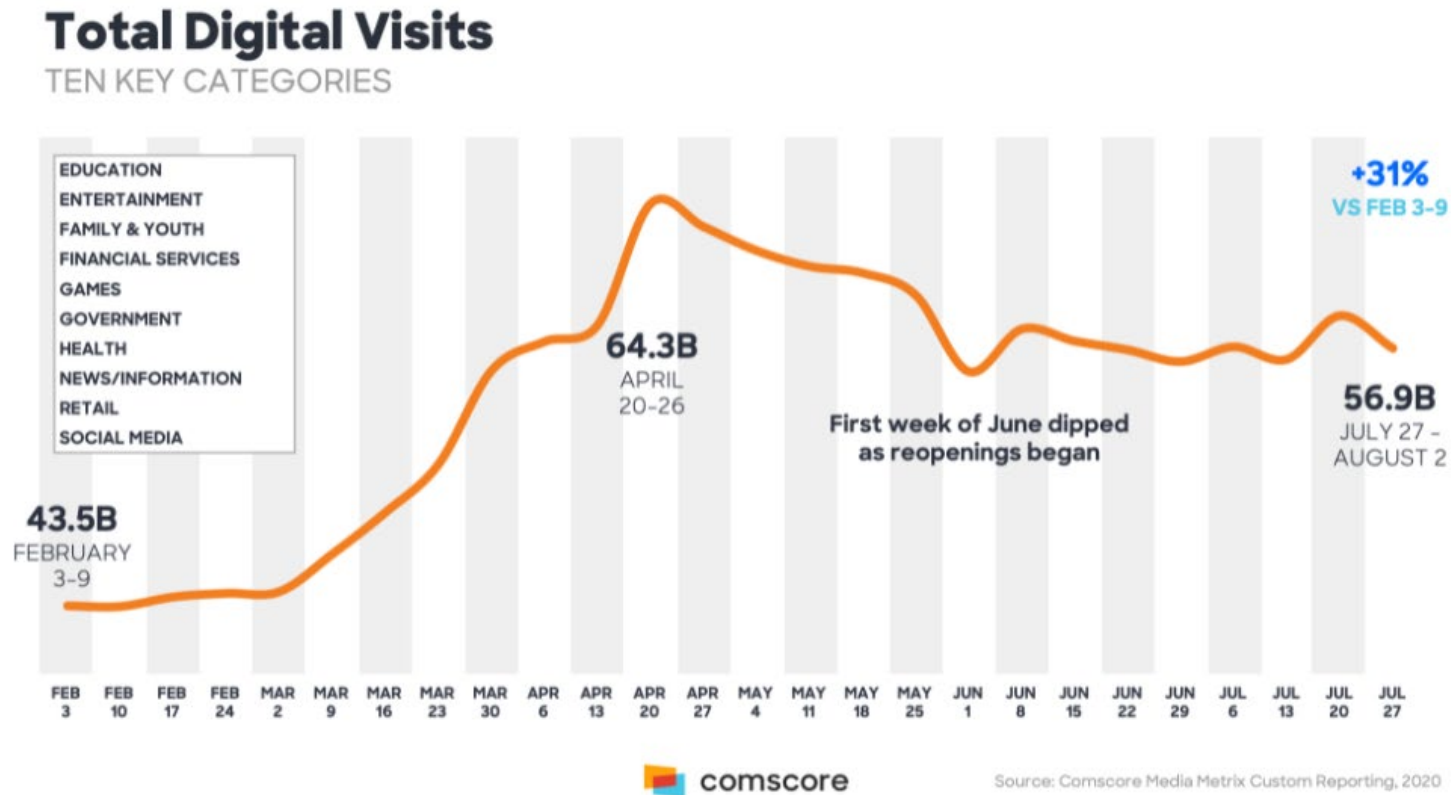
Mark Zuckerberg

COVID-19 Trends

- Digital Social Interactions – Zoom
- The Great Indoors – Work, School, Childcare, Gym, Hobbies
- Need for More Space – Migration
- New Appreciation for Essential Workers
- Business Speed of Execution and Creativity
- E-Commence – Groceries, Order Online – Pick Up in Store
- Streaming
- Contactless Payment – Scan & Go
- Virtual Economy – Remote Healthcare, Online Concerts, Conference, Wine Tasting

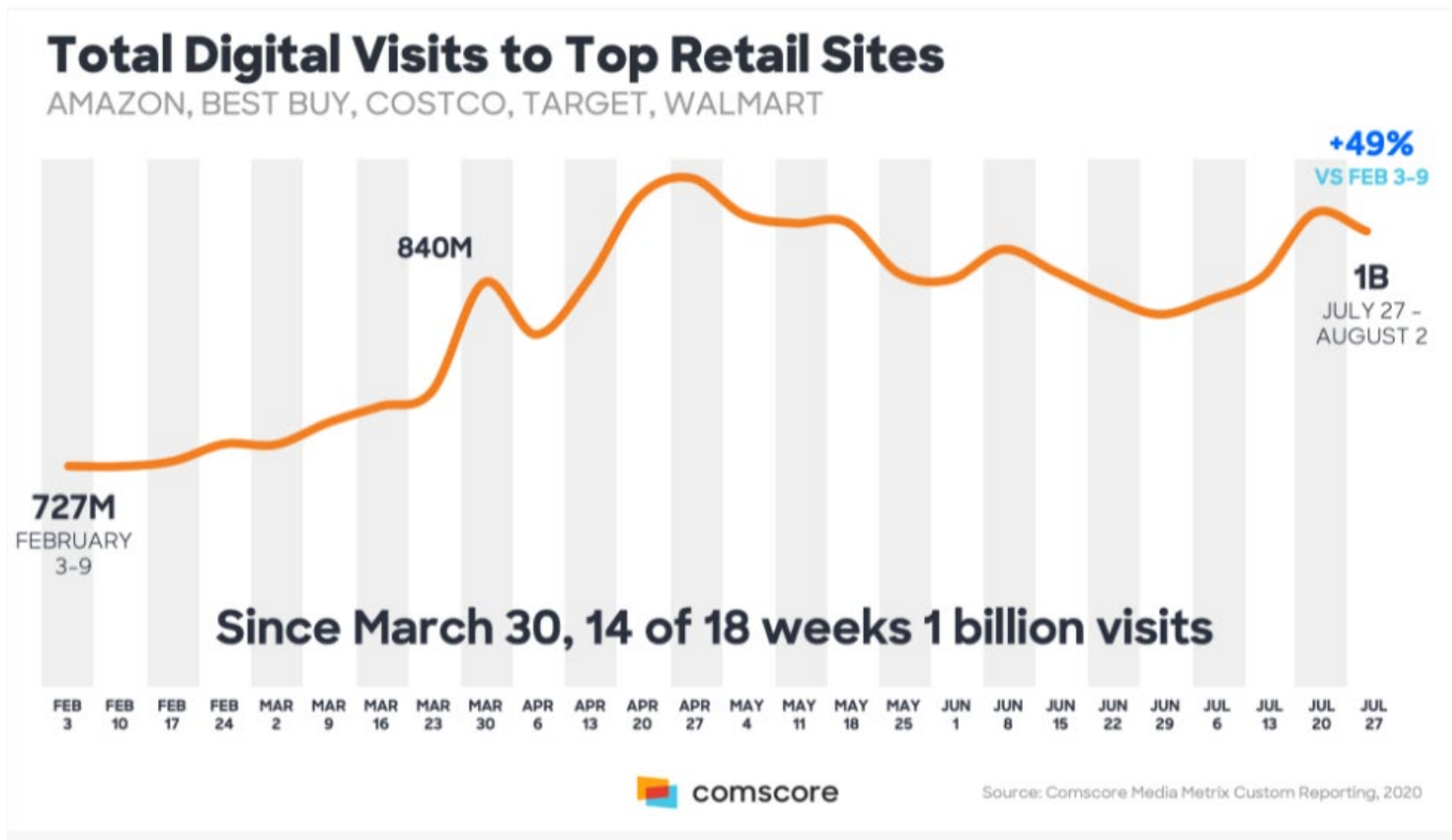
Source: Deloitte Digital: “Covid-19 Induced Business Trends: Preparing for the new normal”, November 2020

COVID Trends – Digital Visits



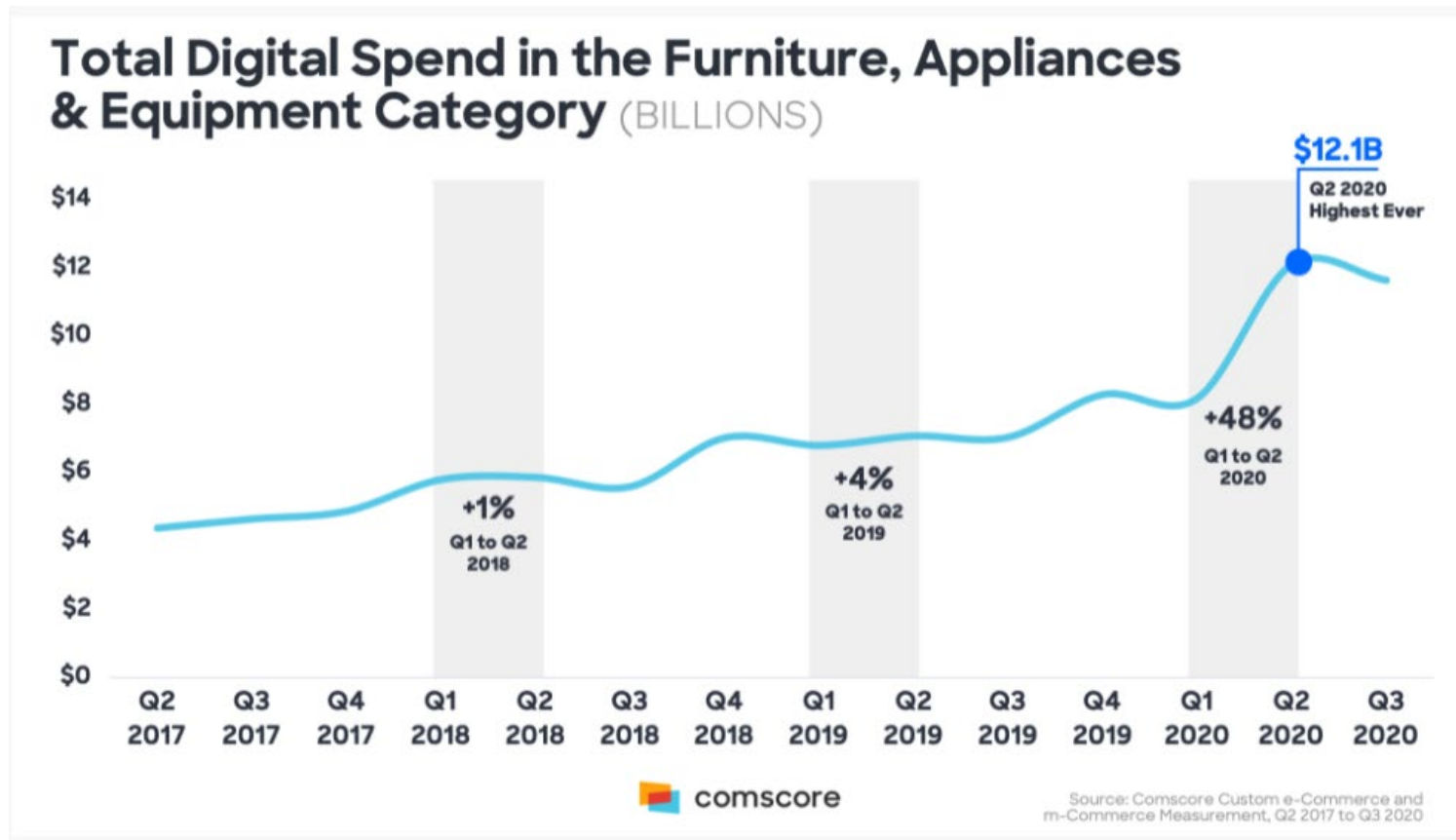
Source: comscore, "Revisited: Media Consumption during the Coronavirus Pandemic", August 19, 2020

COVID Trends – Digital Visits Top Retail



Source: comscore, "Revisited: Media Consumption during the Coronavirus Pandemic", August 19, 2020

COVID Trends



Source: comscore

Remote Work



By June 2020 42% of U.S. Workforce – Mostly White-Collar Workers – Were Working Remotely

- When Pandemic Ends Most Remote Employees Say Want the Choice of Where They Work
- Many Preferring a Flexible Mix of Office and Home
- Could Represent Considerable Saved Productivity from Commutes and Needless Meetings
- Could Save Businesses Millions on Utilities and Office Space
- Downside for those at the Beginning of Career who Struggle with Productivity and Businesses that Depend on Face to Face Contact for Idea Generation

Remote Work at the Dining Room Table

THE WALL STREET JOURNAL.

Adults Bunking With Their Parents Amid Coronavirus Are Having Awkward Flashbacks

Before Brad Malone starts his 9:15 a.m. call for work each day, his parents offer some words of encouragement.

“Traffic shouldn’t be too bad,” they quip from the kitchen table.

The 32-year-old now logs into work at the Georgia Tech Athletic Association from the room in which he grew up playing videogames, at his parents’ house in Loganville, Ga. His daily commute consists of a walk upstairs after breakfast with his parents, who are excited to have him.

“It feels like I am at home on summer break in middle school,” said Mr. Malone, who a few weeks ago drove about 45 miles from his condo in Atlanta to ride out the coronavirus pandemic with his parents.

“Being 32 and under your parents’ roof—it’s strange,” he said.

Young adults around the country have fled to their parents’ homes amid the pandemic, returning to childhood bedrooms and old, familiar rhythms.

Often leaving urban apartments lacking amenities for the sprawling suburbs, they are experiencing the longest period under the same roof as their parents since they were teenagers. The unexpected return to a past life has proved comforting for many families during a time of global upheaval.



Migration

Pandemic Shifts 2020

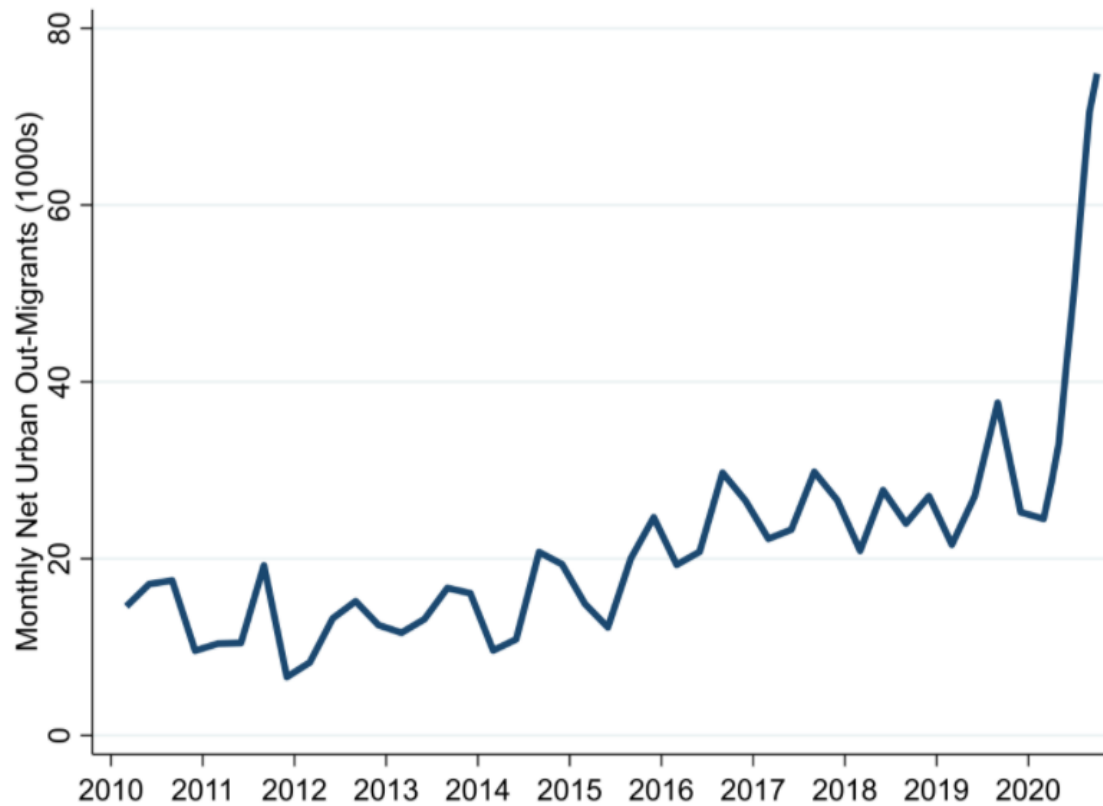
- Moving Out of Large Metro Areas to Smaller Metros
 - New York state, New England, and Vacation Home Destinations
- New York City and San Francisco Experienced Outflow 2 Times Greater in 2020 than 2019
- Accept Longer Commute for More Land and Bigger House
- Most Moved Short to Moderated Distance Either
 - Either Less than 100 Miles or 100 to 500 Miles
- Biggest Group of Movers were Young, Childless Adults who Could Work Remotely

Source: New York Times, “How the Pandemic Did, and Didn’t, Change Where Americans Move”, April 19, 2021

Source: CBRE Research, “COVID-19 Impact on Resident Migration Patterns”, April 2021

Migration

Figure 1. Estimated Net Out-Migration from Urban Neighborhoods



Source: Federal Reserve Bank of New York/Equifax Consumer Credit Panel, American Community Survey, and author's calculations.

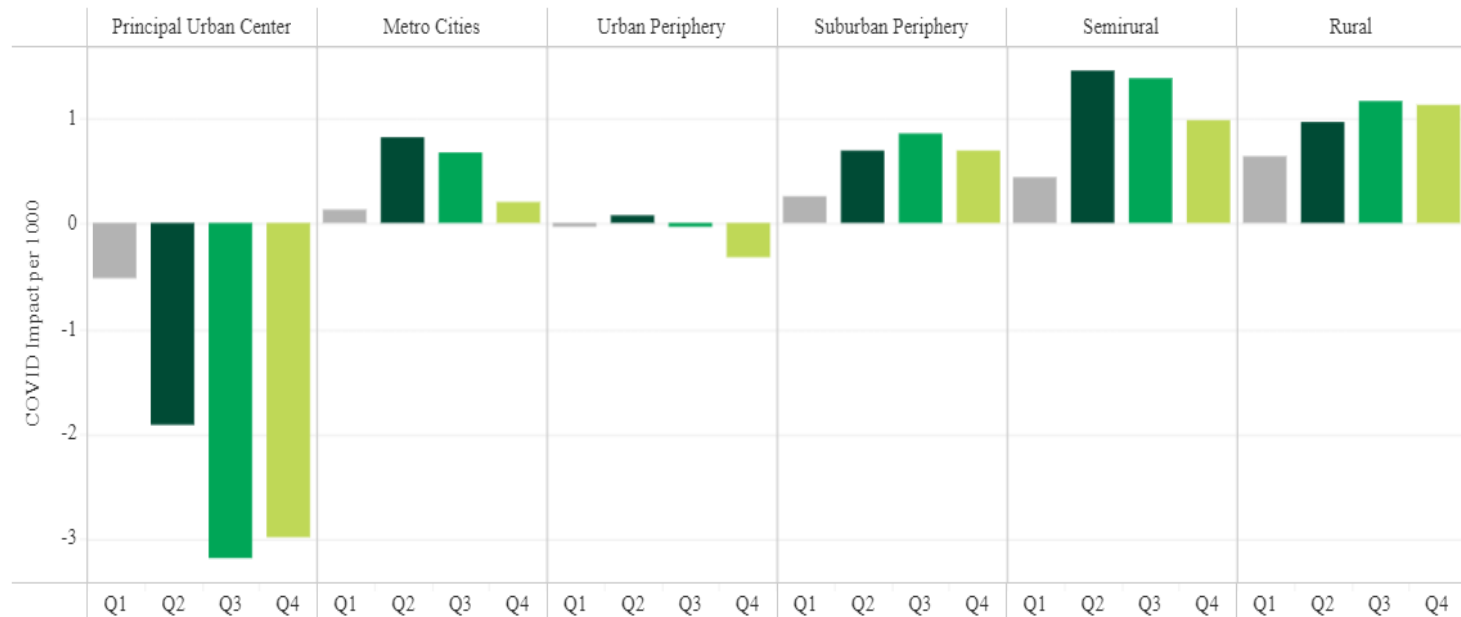
Source: FRB Cleveland, "Did the COVID-19 Pandemic Cause an Urban Exodus?", 2/5/2021

Migration

FIGURE 8 | COVID IMPACT BY NEIGHBORHOOD TYPE AND QUARTER

SELECT MSA:

(All)

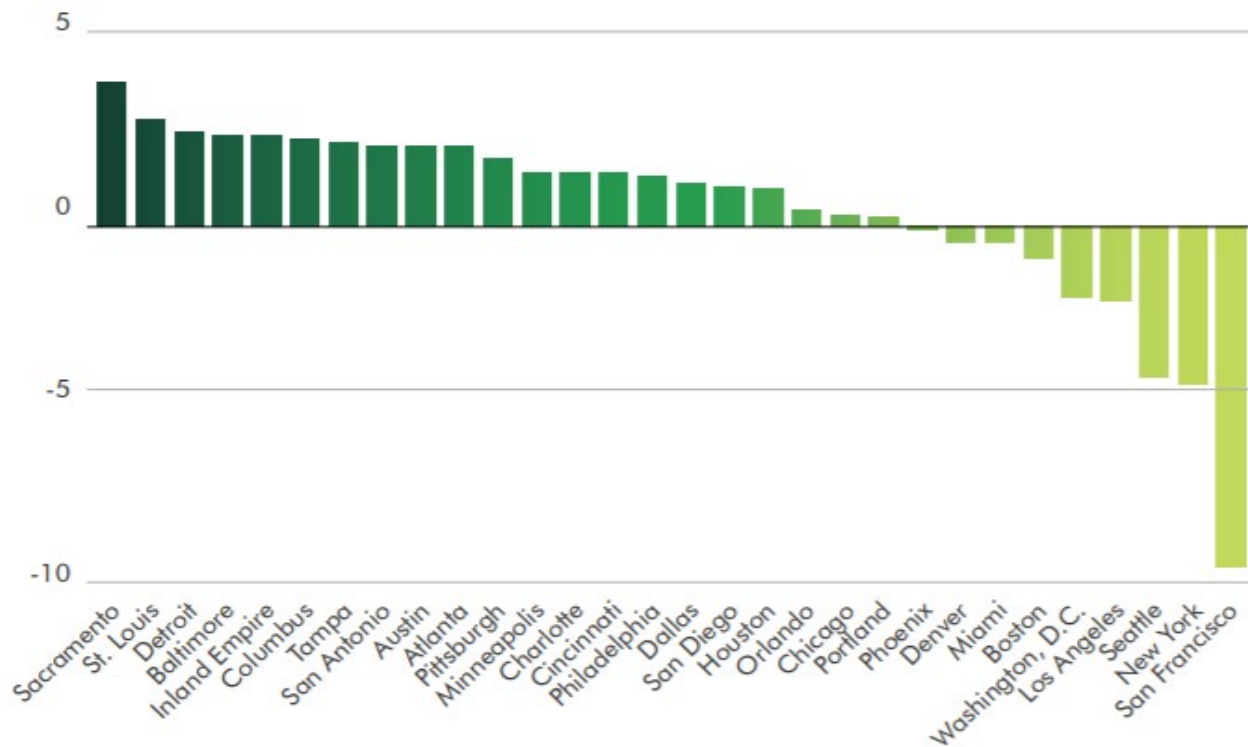


Source: CBRE Research, "COVID-19 Impact on Resident Migration Patterns", April 2021

Migration

FIGURE 3 | COVID-19 IMPACT ON MIGRATION PATTERNS

Change in net moves, 2020 vs. 2019*



*Per 1,000 population.

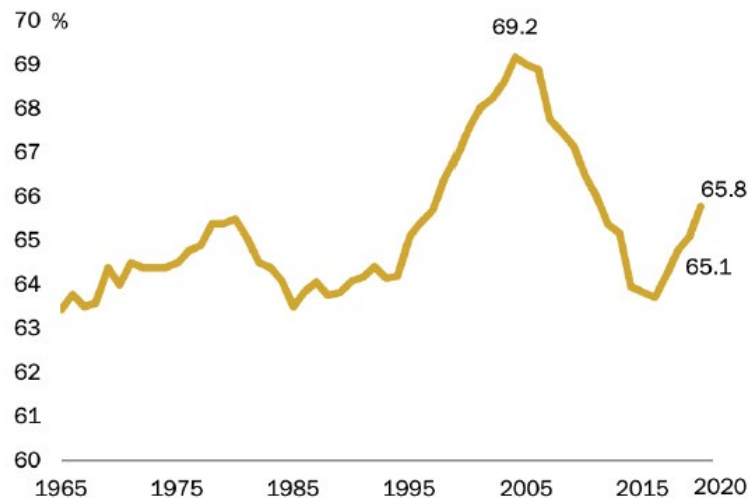
Source: USPS; CBRE Research, 2021.

The Great Indoors

Amid a pandemic and a recession, Americans go on a near-record homebuying spree

The homeownership rate significantly increased in the past year

Homeownership rate (%), fourth quarter, nonseasonally adjusted



Note: The homeownership rate is the share of U.S. households who own their home. Data labels shown are for 2004, 2019 and 2020.

Source: Pew Research Center analysis 2000 to 2020 U.S. Census Bureau Housing Inventory Estimates (FRED) and 1965 to 1999 Quarterly Estimates of the Housing Inventory.

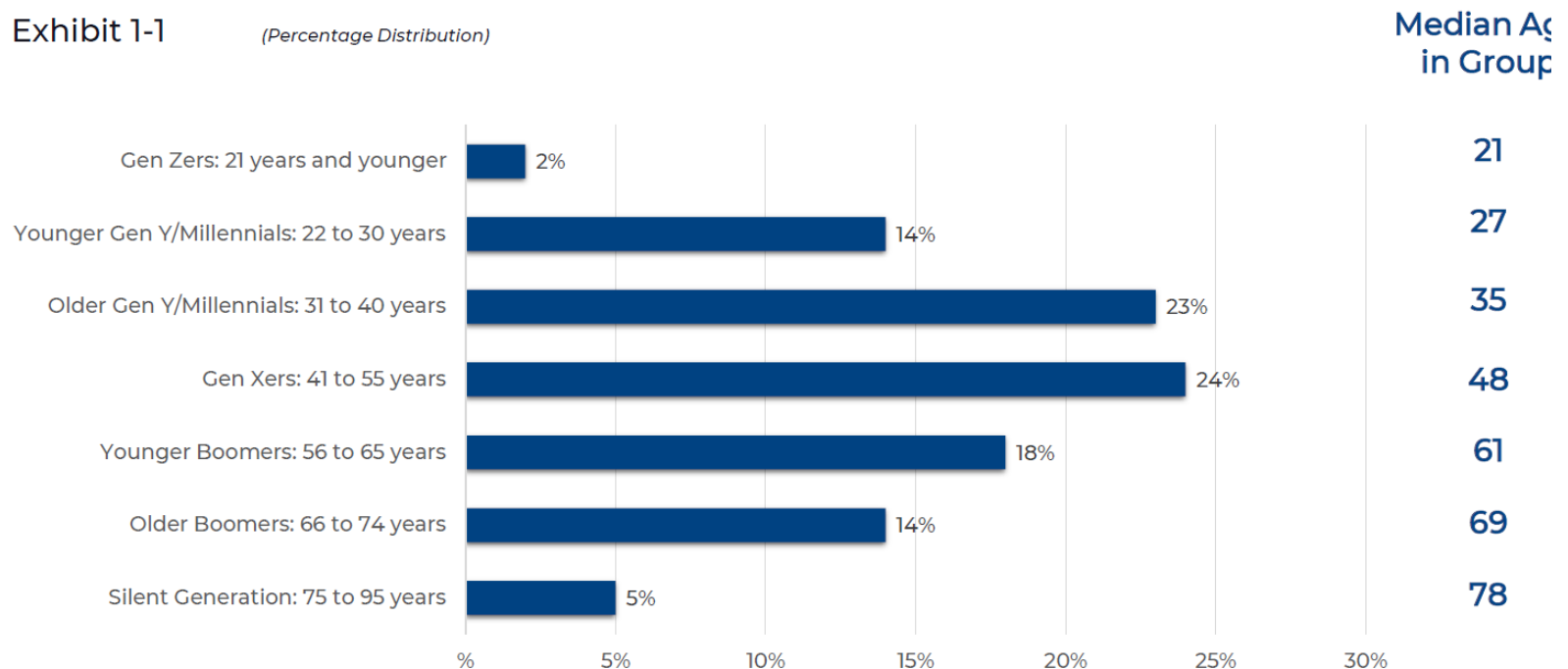
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Home Buyers

AGE OF HOME BUYERS

Exhibit 1-1

(Percentage Distribution)



Note: Buyers 21 years and younger only made up only two percent of the share of all buyers. They were not included in much of chapters 1 through 5 on home buyers due to the low number of responses for analysis.

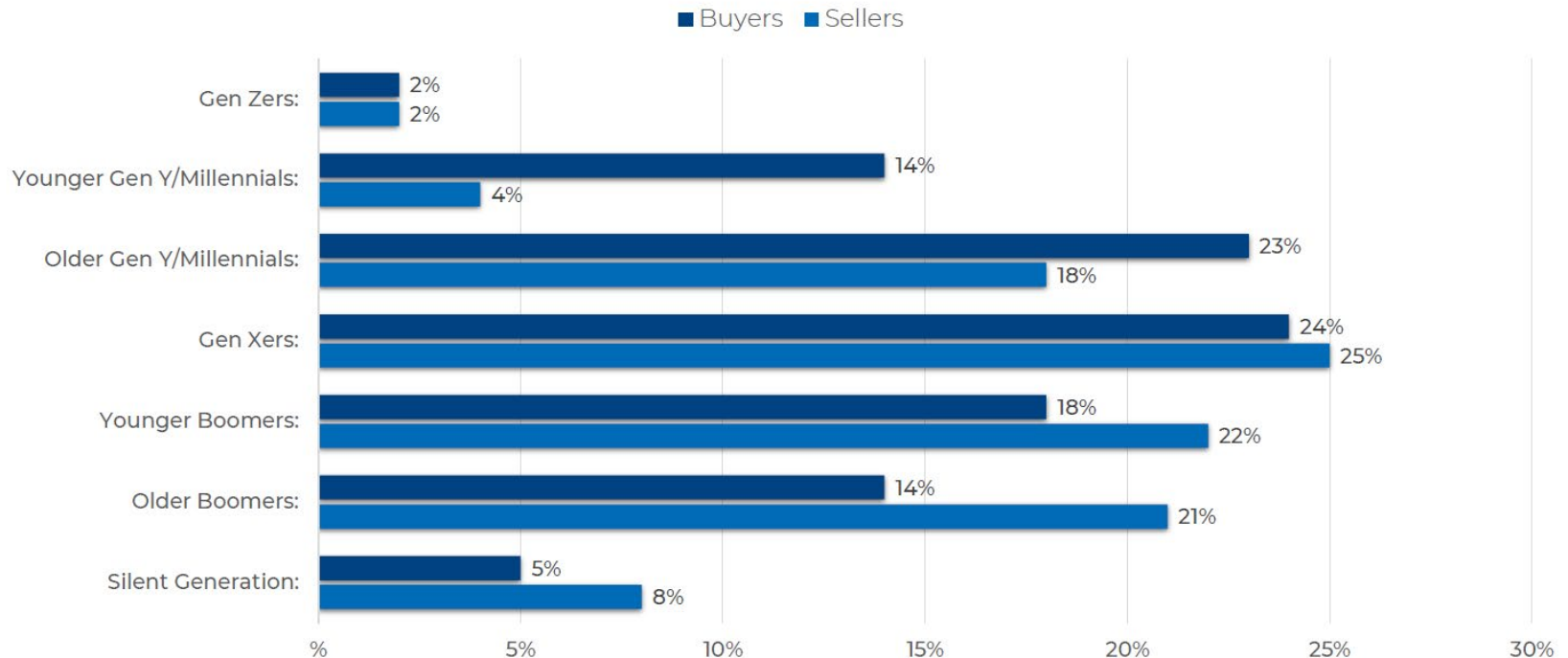
2021 NAR Home Buyer and Seller Generational Trends



Source: NAR: "2021 Home Buyers and Sellers Generational Trends"

Home Buyers

SHARE OF BUYERS AND SELLERS BY GENERATION



2021 NAR Home Buyer and Seller Generational Trends

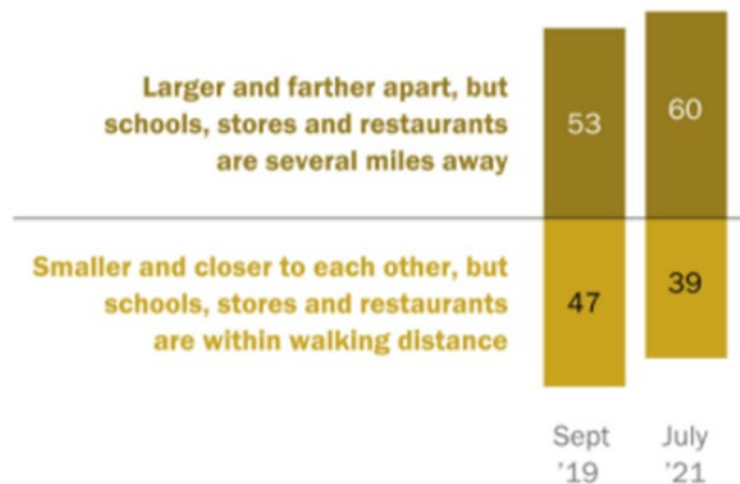


Source: NAR: "2021 Home Buyers and Sellers Generational Trends"

The Great Indoors

Most Americans prefer to live in a community with houses farther apart, up from prior to the pandemic

% who say they would prefer to live in a community where the houses are ...



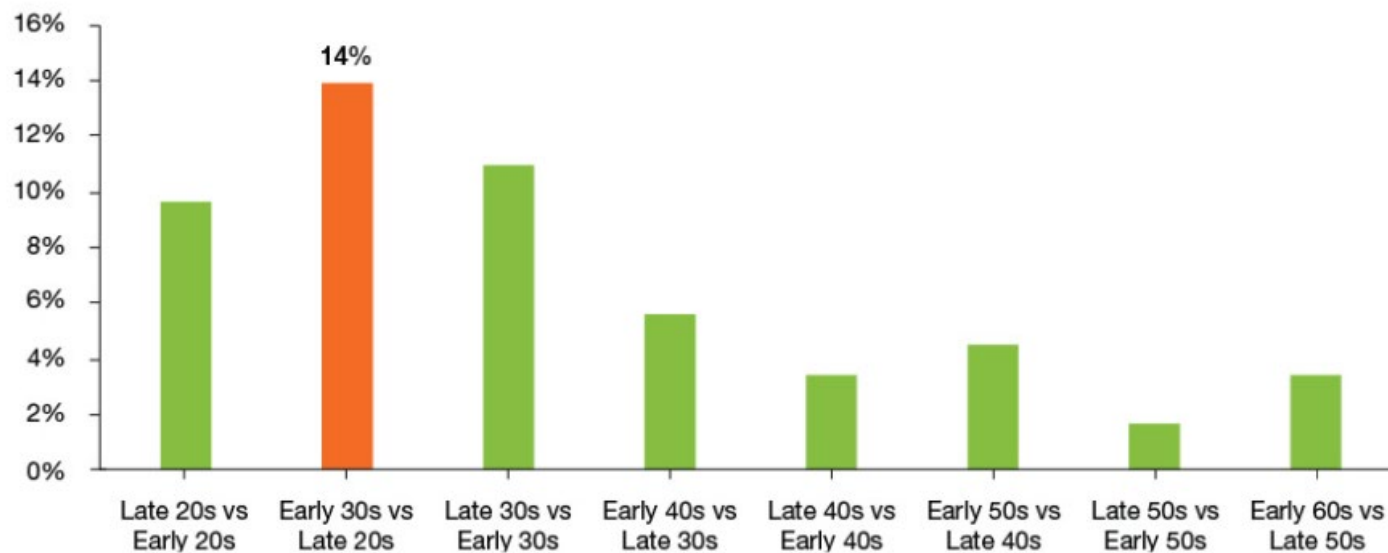
Note: No answer responses not shown.

Source: Survey of U.S. adults conducted July 8-18, 2021.

PEW RESEARCH CENTER

The Great Indoors

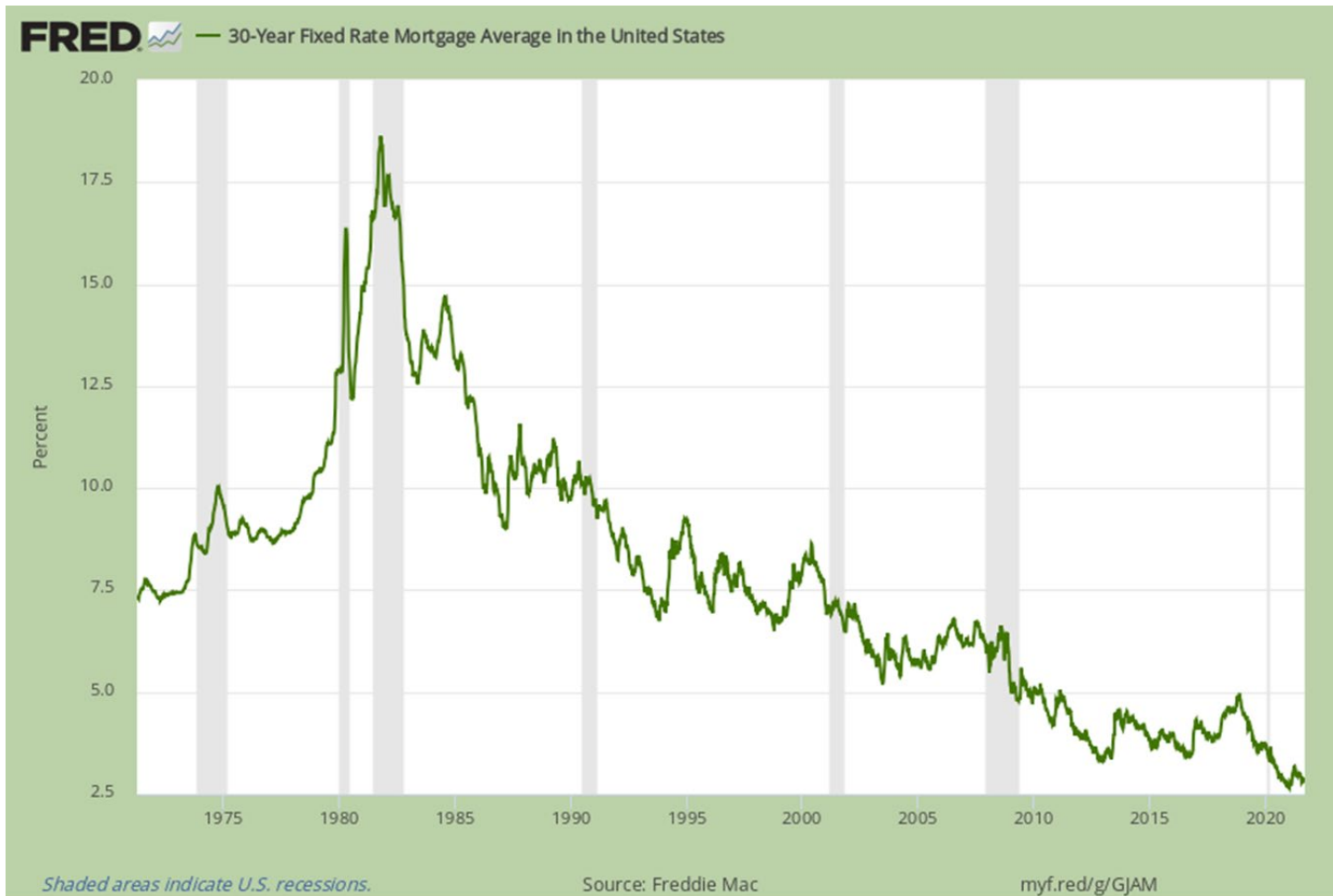
Percentage point change in homeownership by age cohort



Source: HVS, U.S. Census Bureau, 2020.

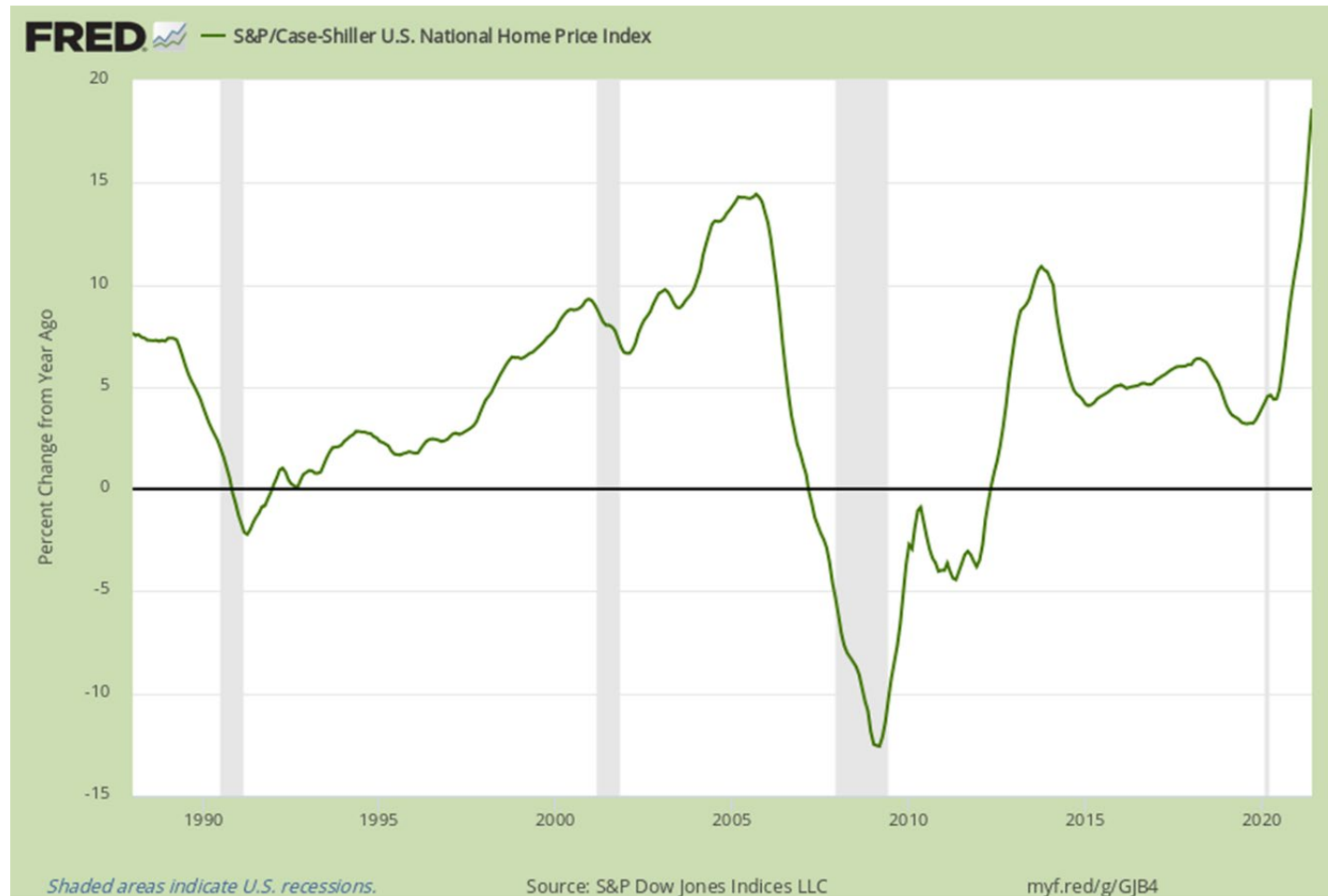
Source: Freddie Mac – “Housing Supply a Growing Deficit”, May 2021

Mortgage Rates



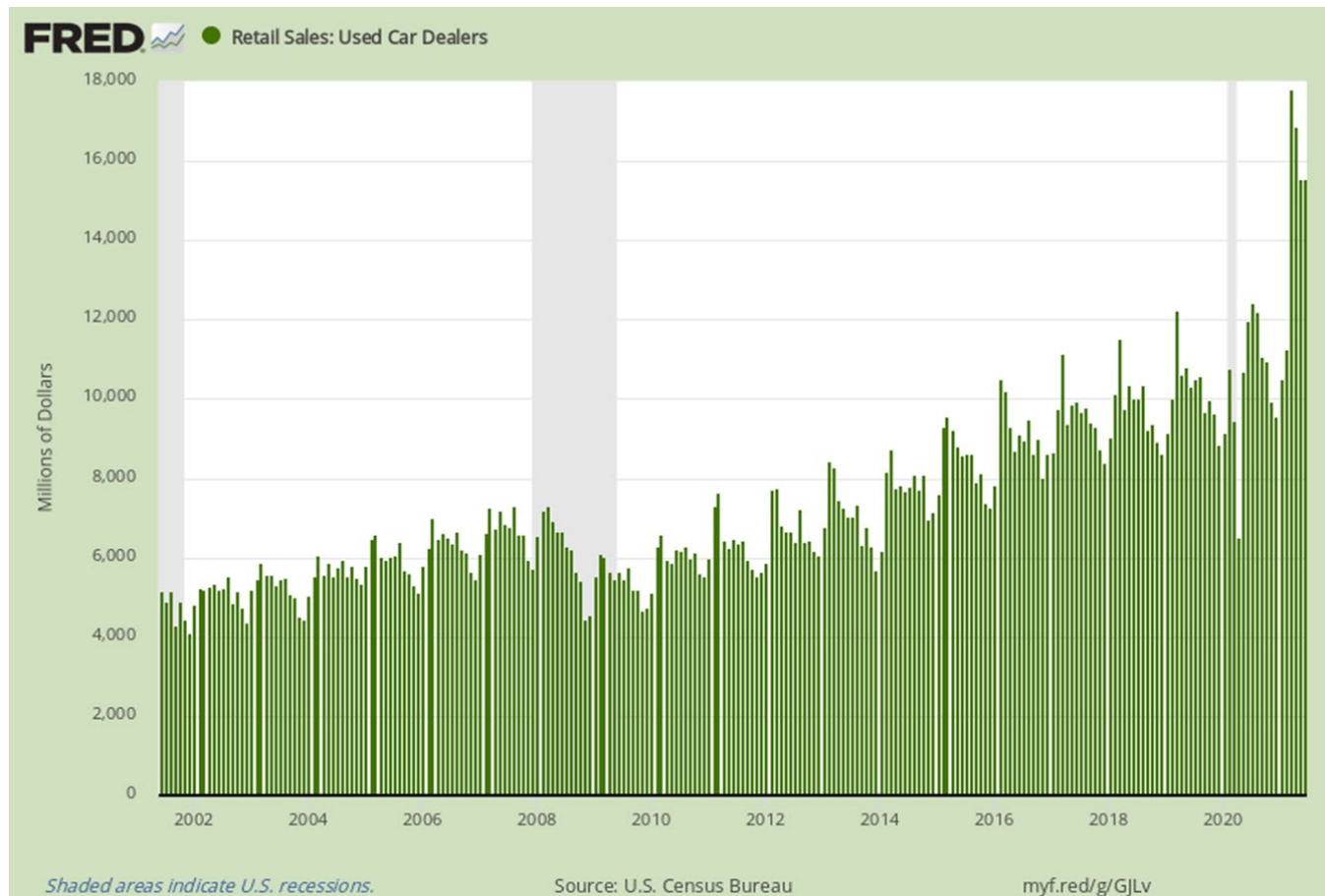
Source: St Louis Fed Fred

The Great Indoors



Source: St Louis Fed Fred

Consumer Purchases – Used Cars

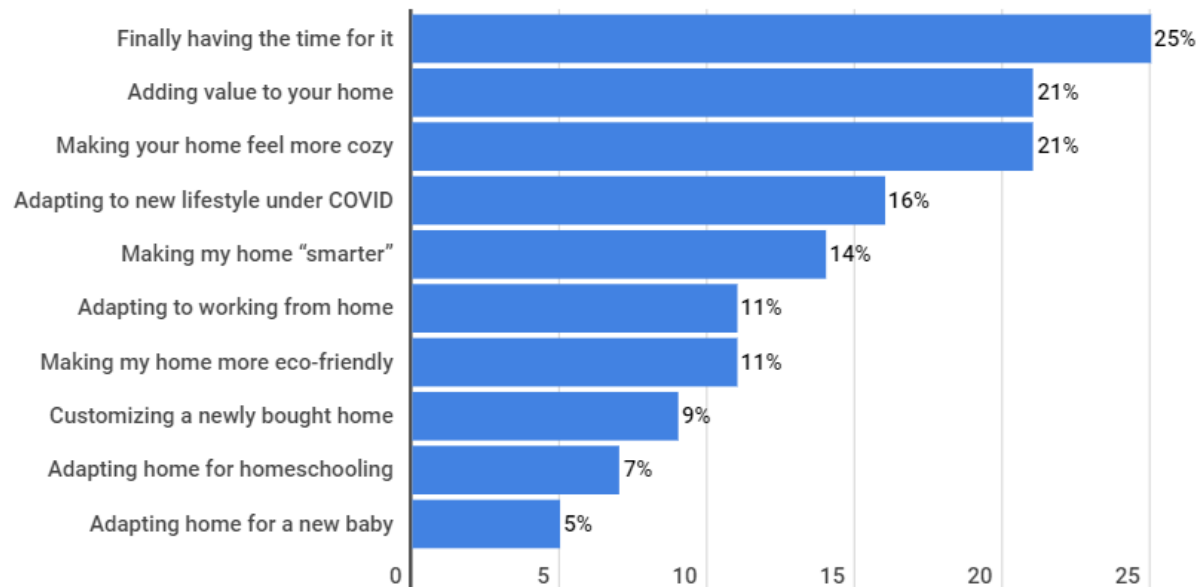


Source: St Louis Fed Fred

The Great Indoors

Having Time and Adding Value

What drove Americans to improve their homes during the pandemic



Q: What motivated you the most to make improvements or additions to your home since the start of the COVID pandemic? Tick

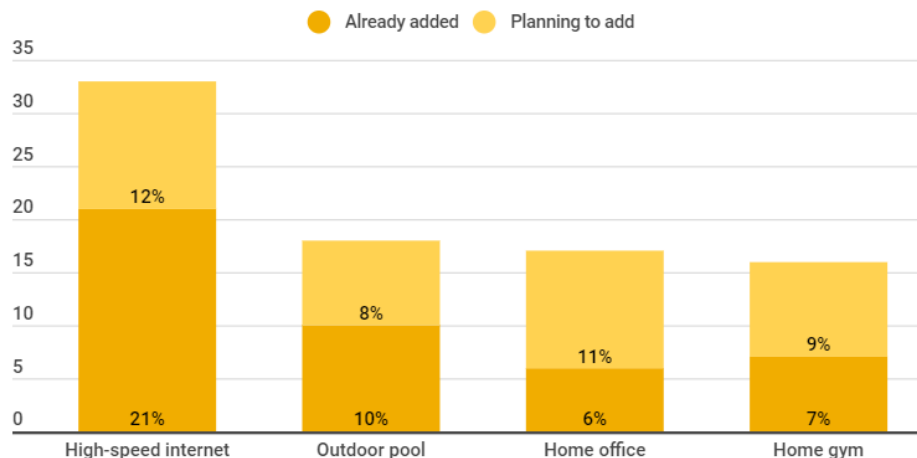
Source: Porch Research – July 2020

The Great Indoors

Survey: Home Improvement Trends in the Time of Covid

Planning For The New Normal?

Improvements suggesting Americans expect to accomplish more without leaving home



Q: Have you made any of the following improvements to your home interior since the start of the COVID pandemic on March 11, 2020? Tick all that apply. (n = 1083)

--

Q: Which of the following home improvements or additions to your home interior are you planning to make by this time next year (July 2021)? Tick all that apply. (n = 1083)

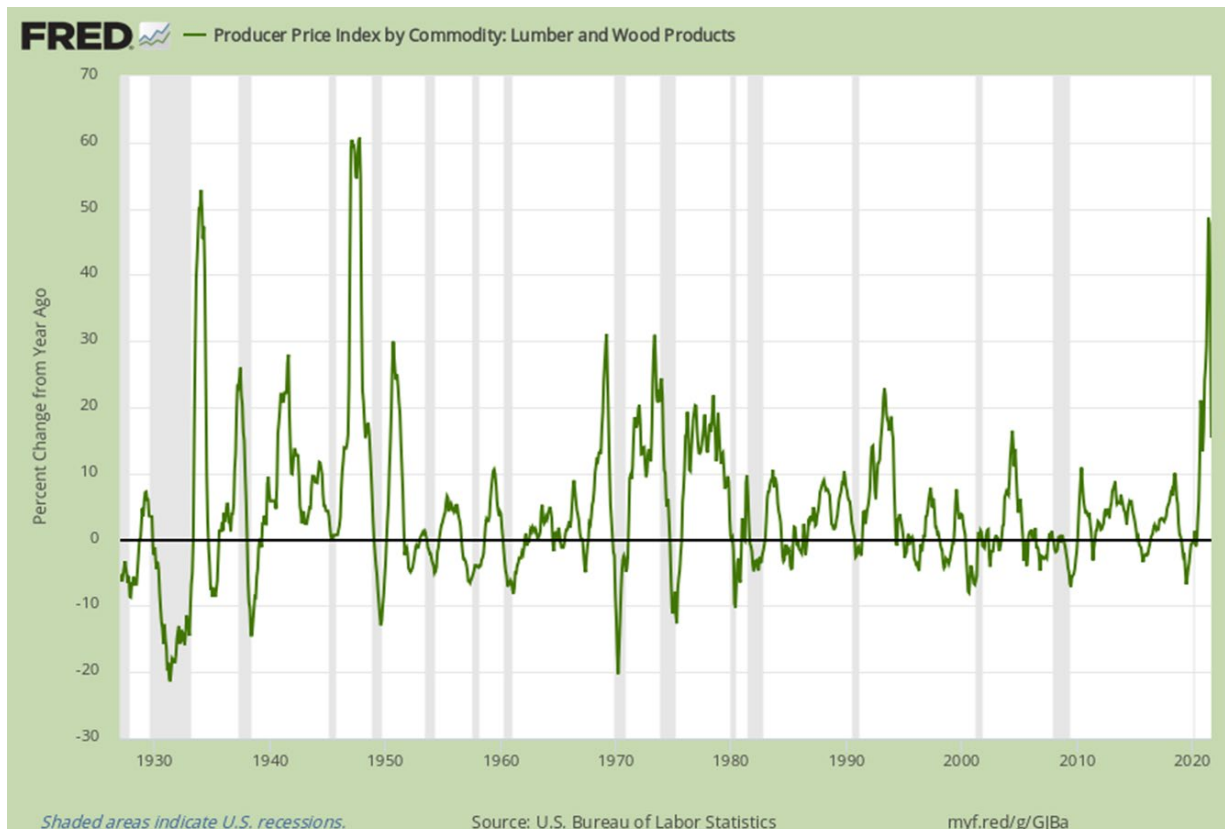
Source: Porch Research – July 2020

The Great Indoors

CNBC

September 25, 2020

**Home remodeling during Covid-19
—'expect it to cost 50% more and
take 50% longer,' says finance expert**



Source: CNBC– September 25, 2020 & St Louis Fed Fred

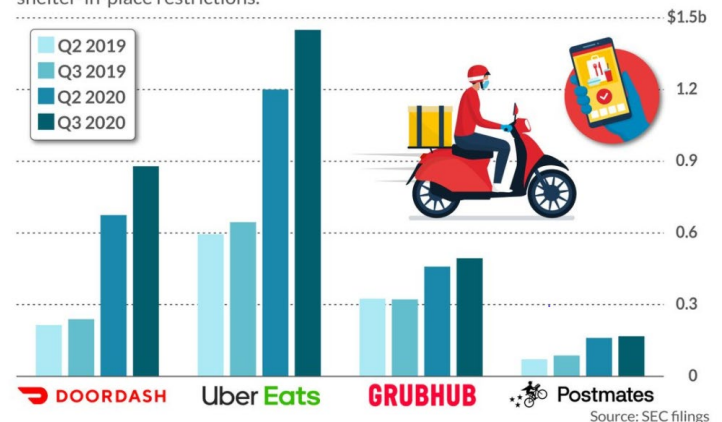
Eating

- Restaurants, Hotels, and Bars Closed
- Consumers Stockpiled Necessities – Flour and Yeast
- Cooking at Home Almost Always – Affordable Comfort Food
- Online Grocery Shopping
- Takeout
- Pandemic Pounds



The COVID-19 delivery boom

The four top U.S. food-delivery apps saw revenue rise \$3 billion collectively in the second and third quarters, as the coronavirus pandemic required shelter-in-place restrictions.

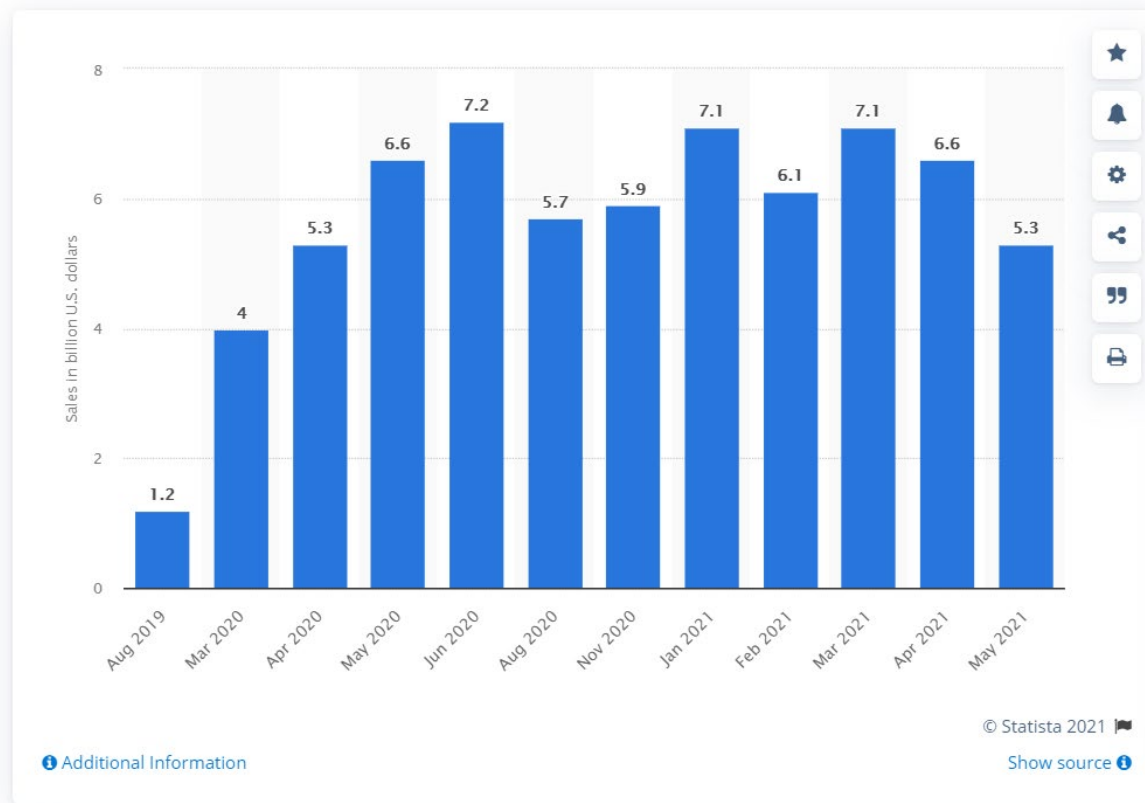


Source: MarketWatch 11/27/20

Food

Sales of grocery delivery and pickup in the United States in August 2019 and March to May 2021

(in billion U.S. dollars)



Source: Fortune, One Year Later: 15 Ways Life has Changed since the Onset of the COVID-19 Pandemic, 3/9/2021

The Shutdown – May 9, 2020 – Is it Over Yet?



“This picture is from early May – Spring had not yet arrived in central PA. We were still in shutdown and our main source of stress reduction after a week of remote work was a hike at our farm. This picture was taken after one of those hikes. We hadn’t had haircuts (or color) for months and for some unknown reason our son, Michael, had decided that growing 1970s “porn star” facial hair was a good look for a global pandemic.”

The Great Outdoors

Sometimes it takes a global pandemic to get us to appreciate our own backyard.



- America's rekindled relationship during a crisis isn't new – Trend Matches how Country Reacted to Spanish Flu
- 1920 with Pandemic Subsiding in the U.S. Americans flocked to Yellowstone – 42% Increase in Visitors by Rail – 21% Increase in Visitors by Car
- Lancet Researchers: Access to Green Spaces is “associated with more physical activity, better mental health, sounder sleep, lower stress levels, improved cognition, and faster hospital recovery.”

The Great Outdoors 2020 – Staying Active & Distanced

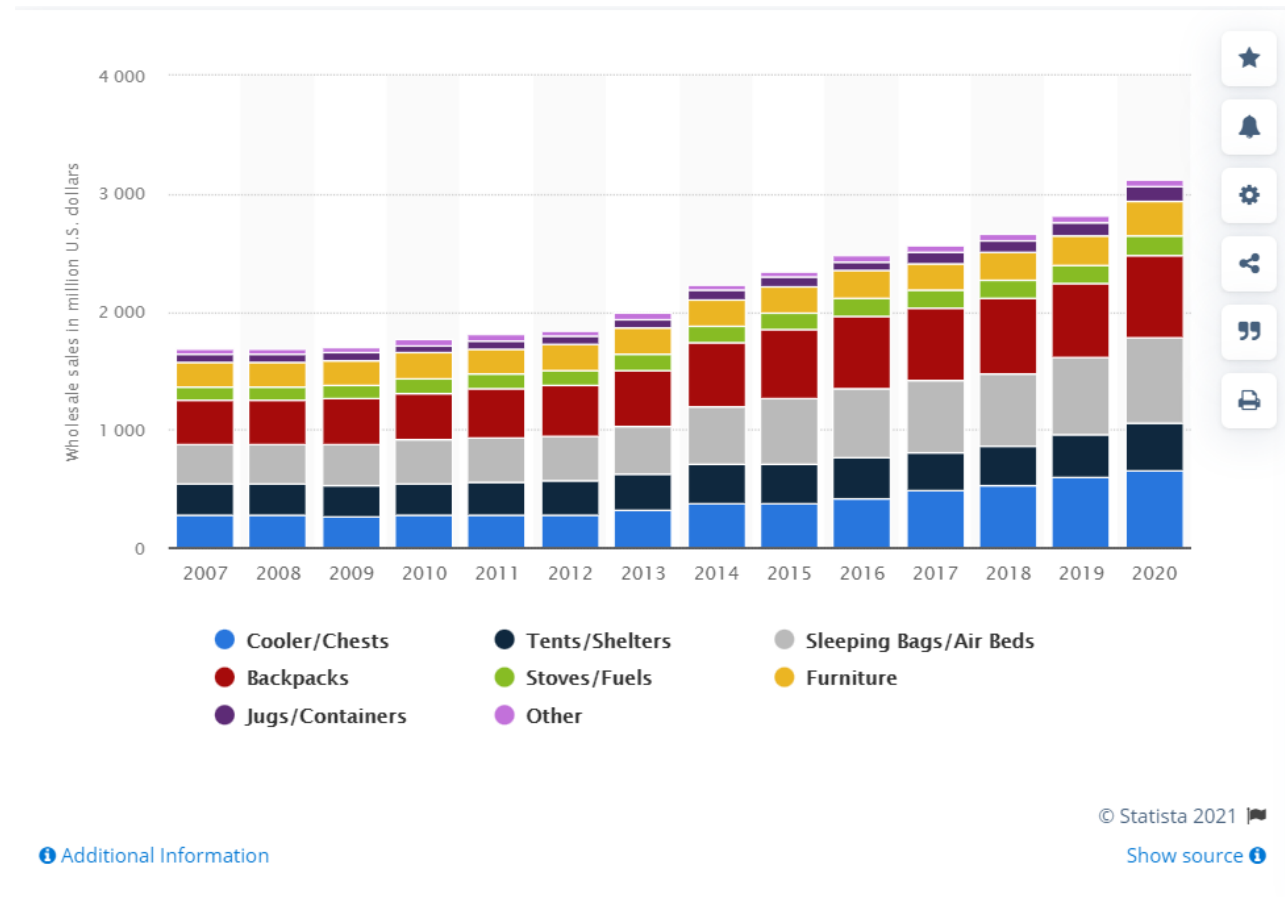
NPD – American Outdoors: Consumers are Flocking these 5 Activities

As of June 2020 Year-over-Year

1. Cycling +63%
2. Paddle Sports +56%
3. Golf +51%
4. Camping +31%
5. Bird Watching and Nature +22%



The Great Outdoors 2020



Source: Statista

The Great Outdoors 2020



- September 2020 RV Shipments 31.2% Higher than September 2019
- Allow for Domestic Travel with Social Distancing
- Low Gas Prices in 2020
- Place to Work or School Remotely while Traveling

Source: Insider, "RV sales continue to soar through the coronavirus pandemic with no end in sight and shipments rising 30% in September alone", October 2020

COVID Entertainment & Unemployment



COVID Vacation & Andy Moves On

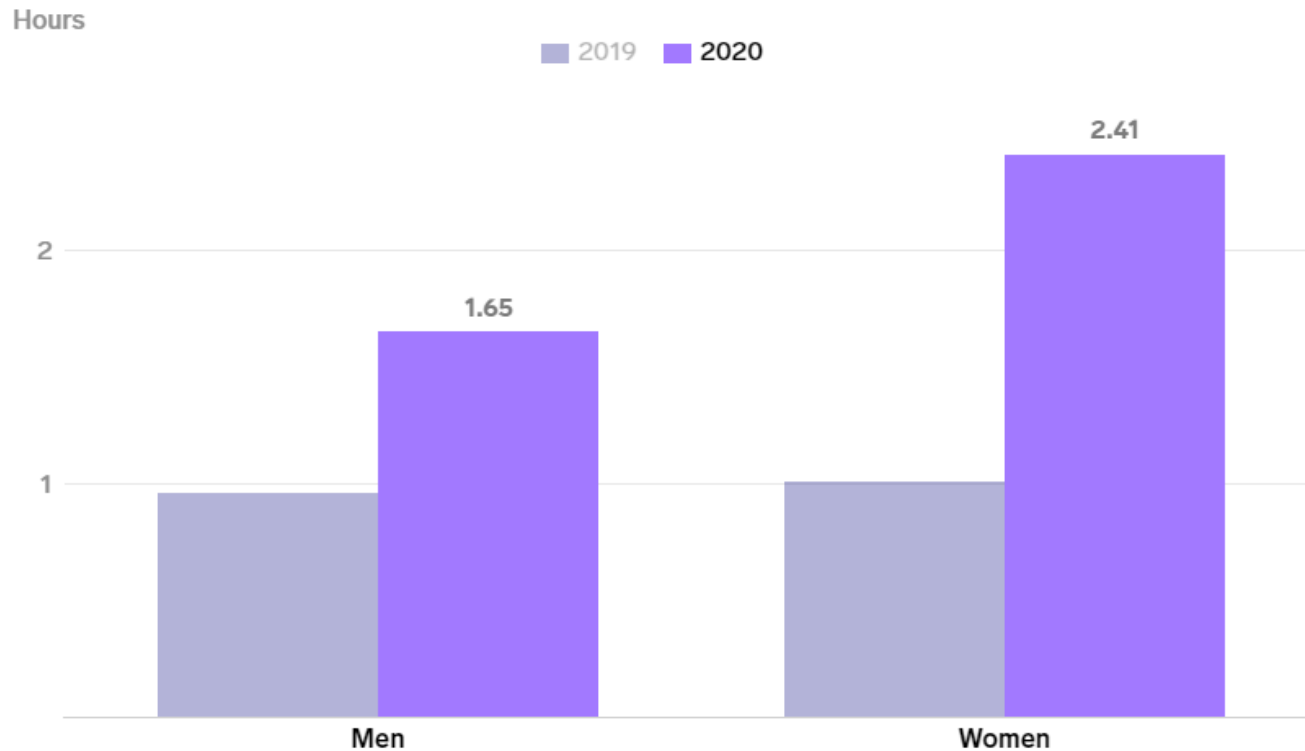


Childcare & Remote School

- Pre- and Post-Pandemic Studies have Found Online Remote Learning Can't Replace the Classroom Experience
- Lack of Personal Interaction and Social Engagement Appears to Impair Knowledge Retention with Younger Children Least Able to Adapt
- Shift to Remote Learning has Been a Disaster for Traditional Schooling, the Most Vulnerable Students, and Careers and Mental Health of Parents
- While Staying Home has Benefitted Many Children
- More than 500,000 Working Mothers have Left the Workforce Altogether Because of Increased Childcare Duties – Far Higher than Father's Making the Same Choice
- Only Constant during Pandemic about Working Parenthood is that it's Harder than Ever
- Approximately 60% of jobs lost by COVID-19 were Held by Women which will cost the Economy as Estimated \$341 Billion

Childcare & Remote School

Time spent on education-related activities

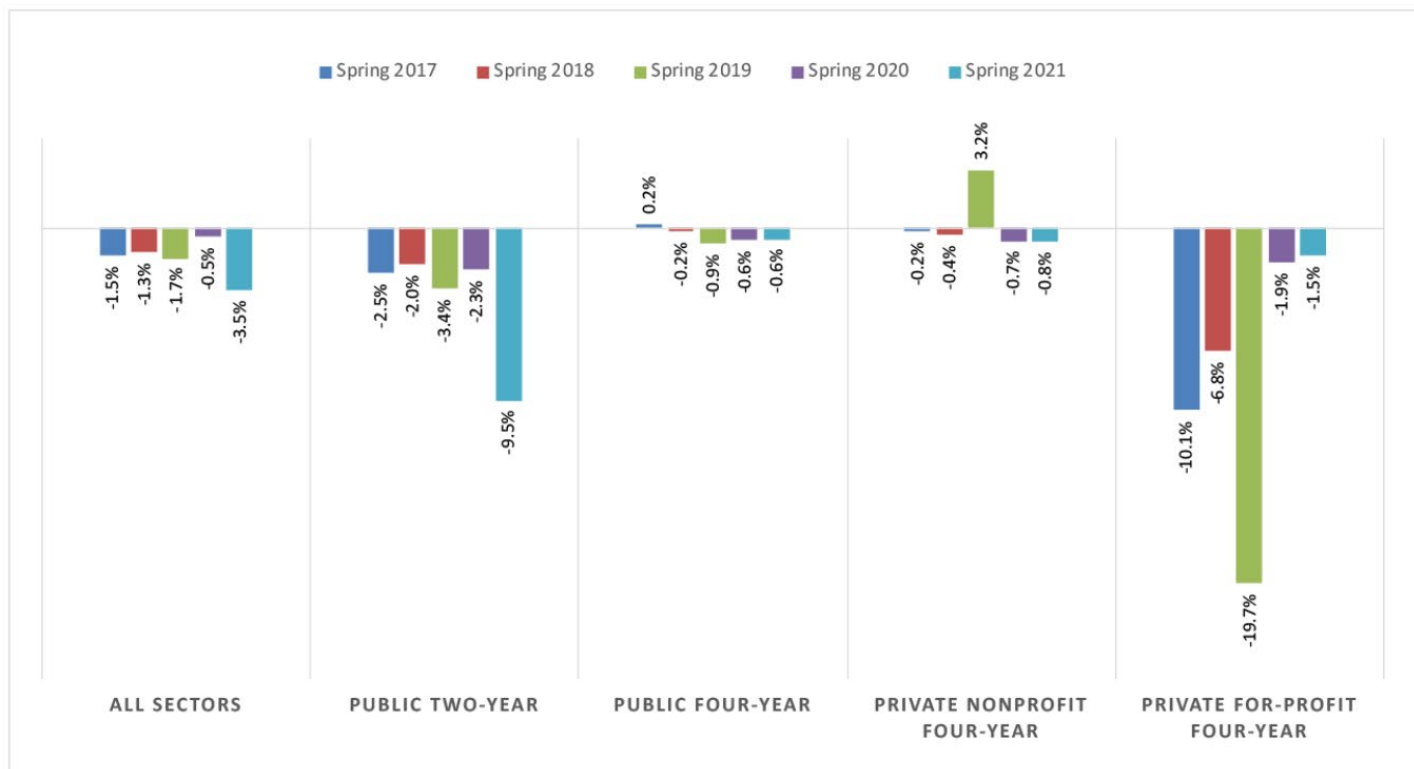


Note: Data is from May through December for both years.

Source: Insider: “The unpaid teacher crisis no one is talking about: Women did more homeschooling than men in 2020”, 7/29/21

Higher Education

Percent Change in Enrollment from Previous Year by Institutional Sector: 2017 to 2021

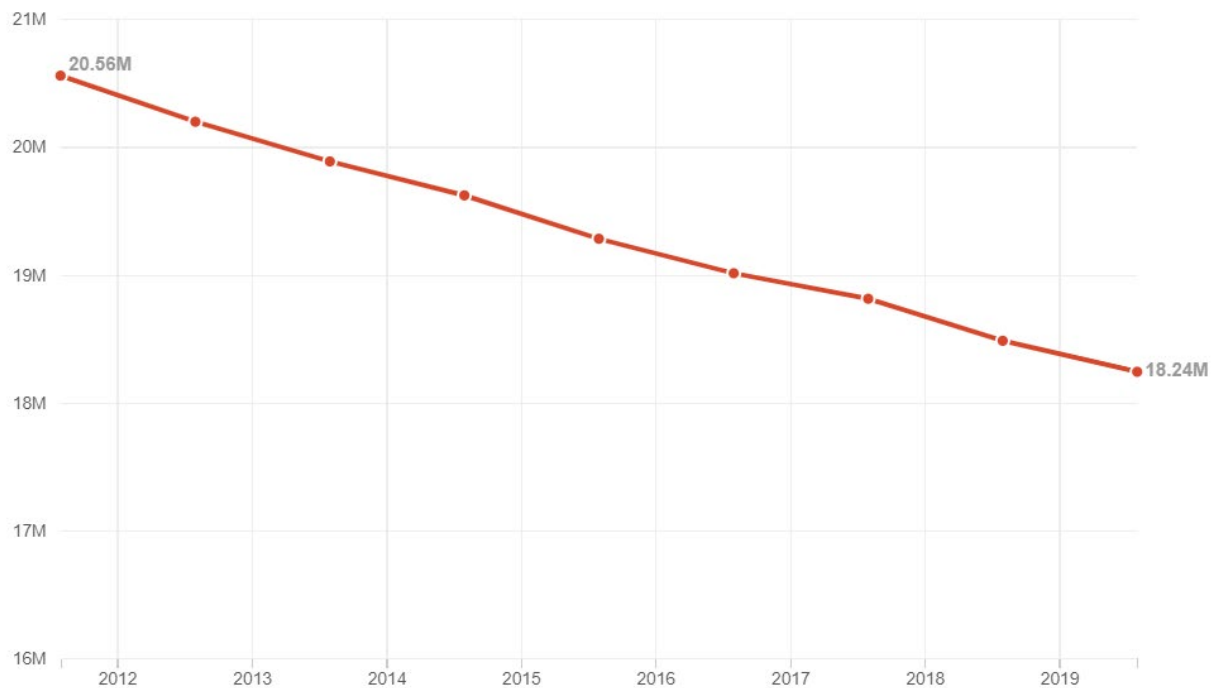


Source: National Student Clearinghouse Research Center, June 10, 2021

Higher Education

Student Enrollment At U.S. Colleges Down 11% Since 2011

About 2.3 million fewer students enrolled in college this fall than in fall 2011.



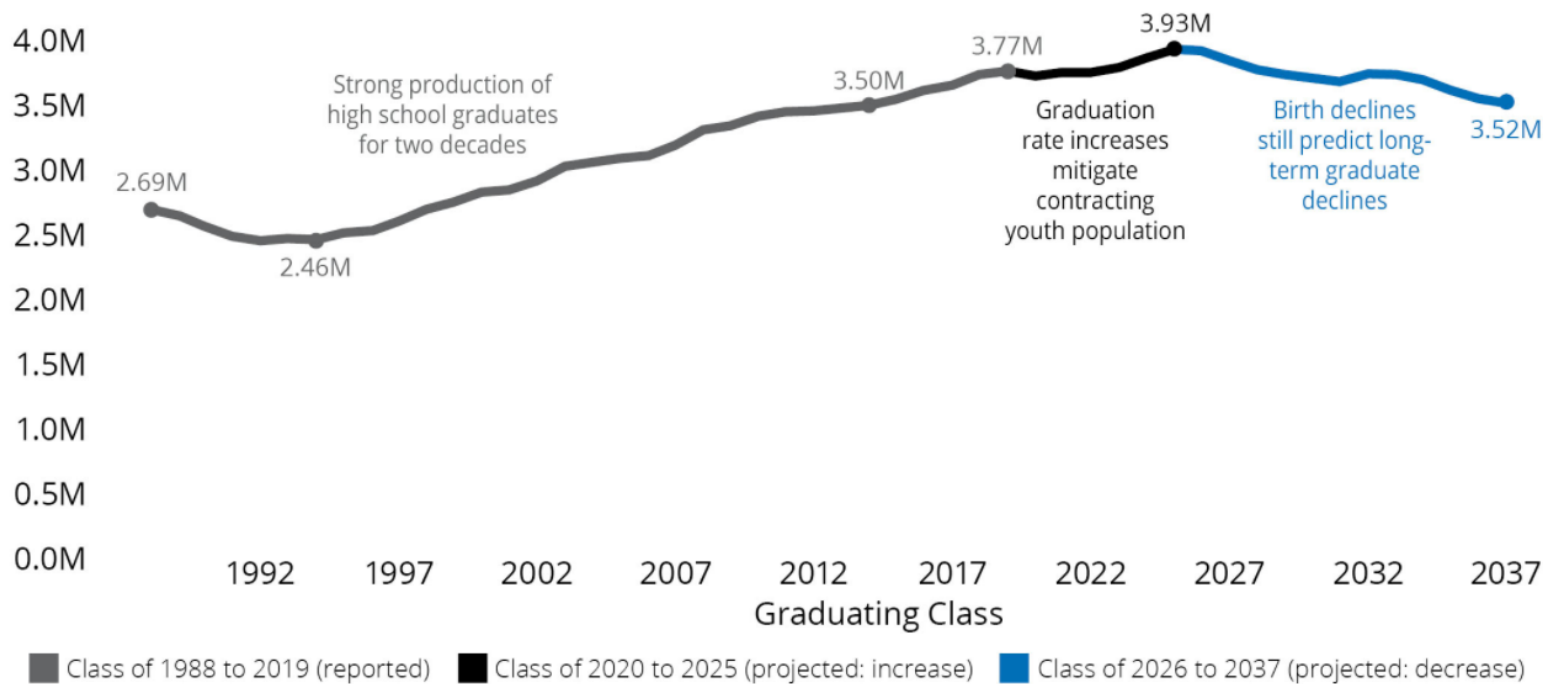
Source: [National Student Clearinghouse Research Center](#)

Credit: Daniel Wood/NPR

Source: National Student Clearinghouse Research Center, June 10, 2021

Higher Education

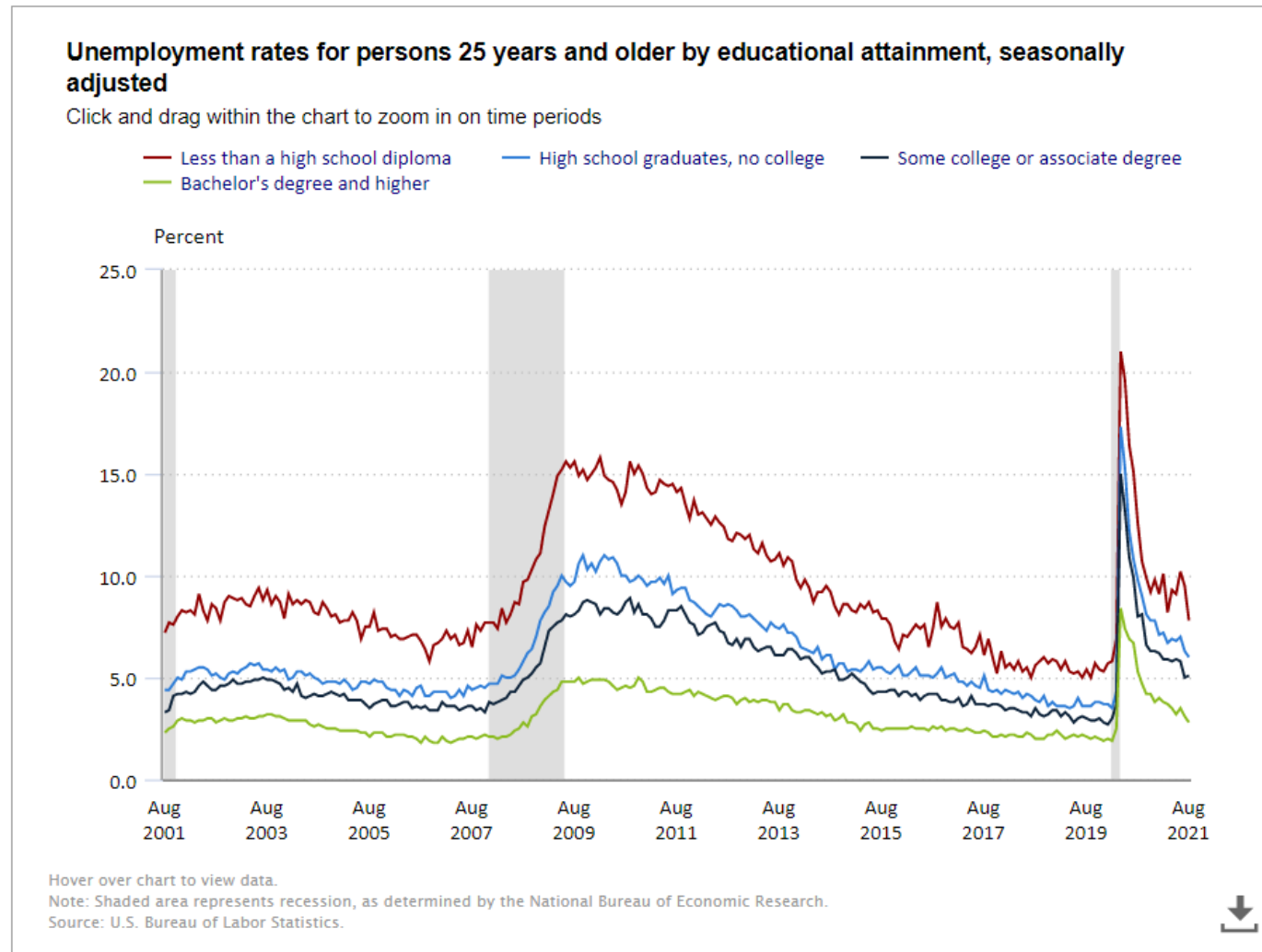
Figure 1. Slowing Growth in Number of U.S. High School Graduates, then Decline (U.S. Total High School Graduates)



Source: Western Interstate Commission for Higher Education, *Knocking at the College Door*, 10th edition, 2020. See [Technical Appendix](#) for detailed sources of data through the Class of 2019; WICHE projections, Class of 2020 through 2037. ([View states or regions](#))

Source: Knocking at the College Door, December 2020

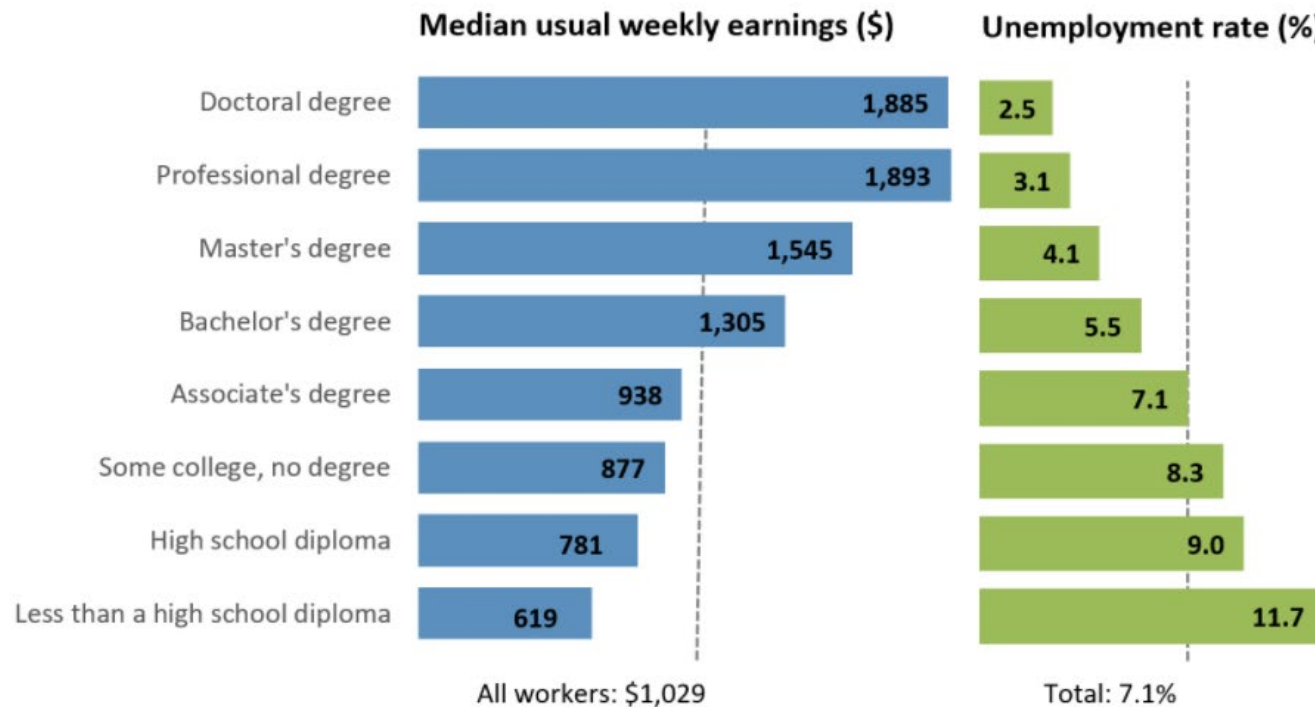
Unemployment by Age and Education



Source: Bureau of Labor Statistics

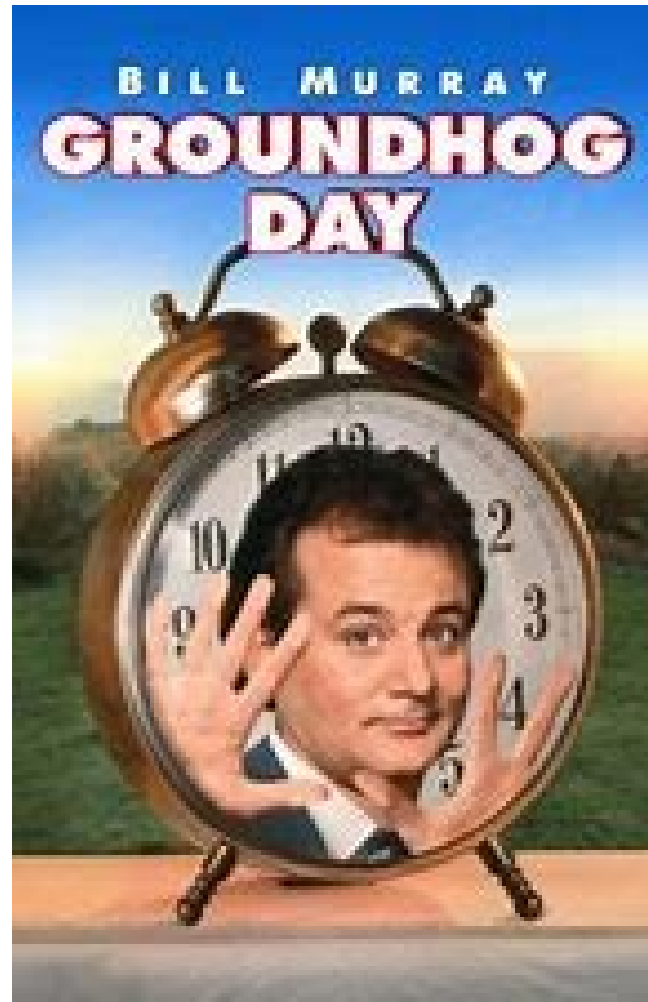
Bureau of Labor Statistics

Earnings and unemployment rates by educational attainment, 2020



Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: U.S. Bureau of Labor Statistics, Current Population Survey.

Distorted Sense of Time



Holidays & An Empty Nest Again



The Long COVID Winter Filled with Hobbies



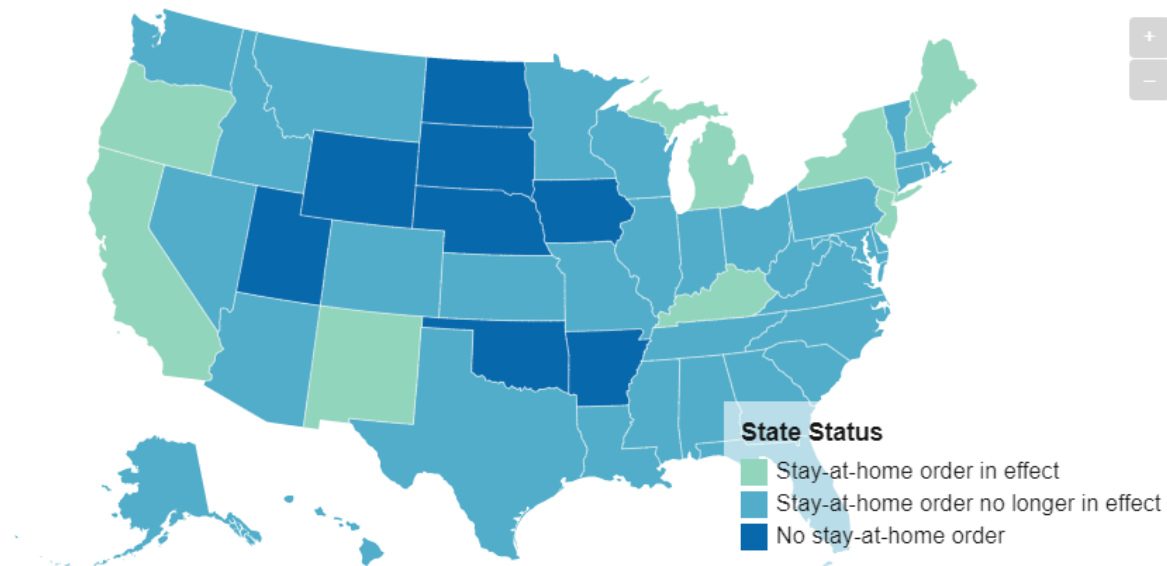
The Great Renovation



The Reopening Begins

LAST UPDATED: June 4, 2020

Stay-at-Home Orders by State



Map: Elliott Davis for USN&WR • Source: State records and media reports • Created with [Datawrapper](#)

Source: U.S. News and World Report– June, 4 2020

PA COVID Case History

COVID-19 PHASED REOPENING IN PA

RED

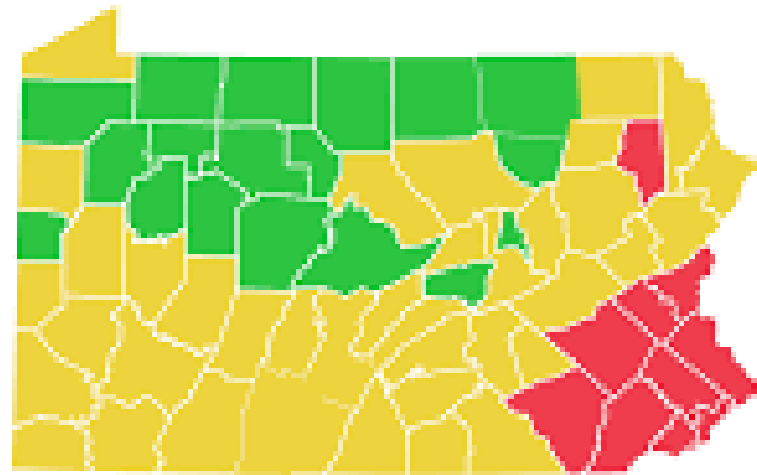
*Stay at Home
Order*

YELLOW

*Aggressive
Mitigation*

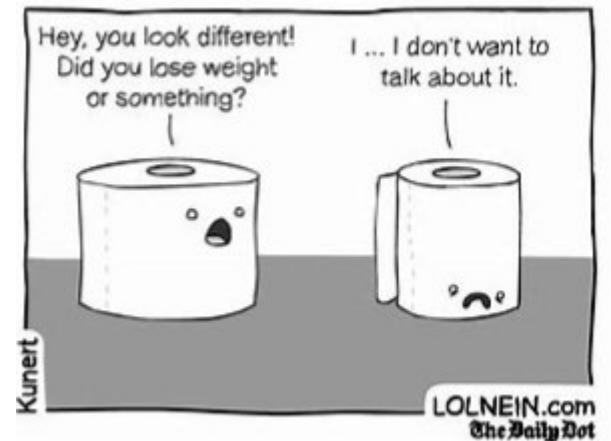
GREEN

*CDC & PA Dept. of
Health Guidelines*



— IN EFFECT MAY 29 —

Shortages & Empty Shelves



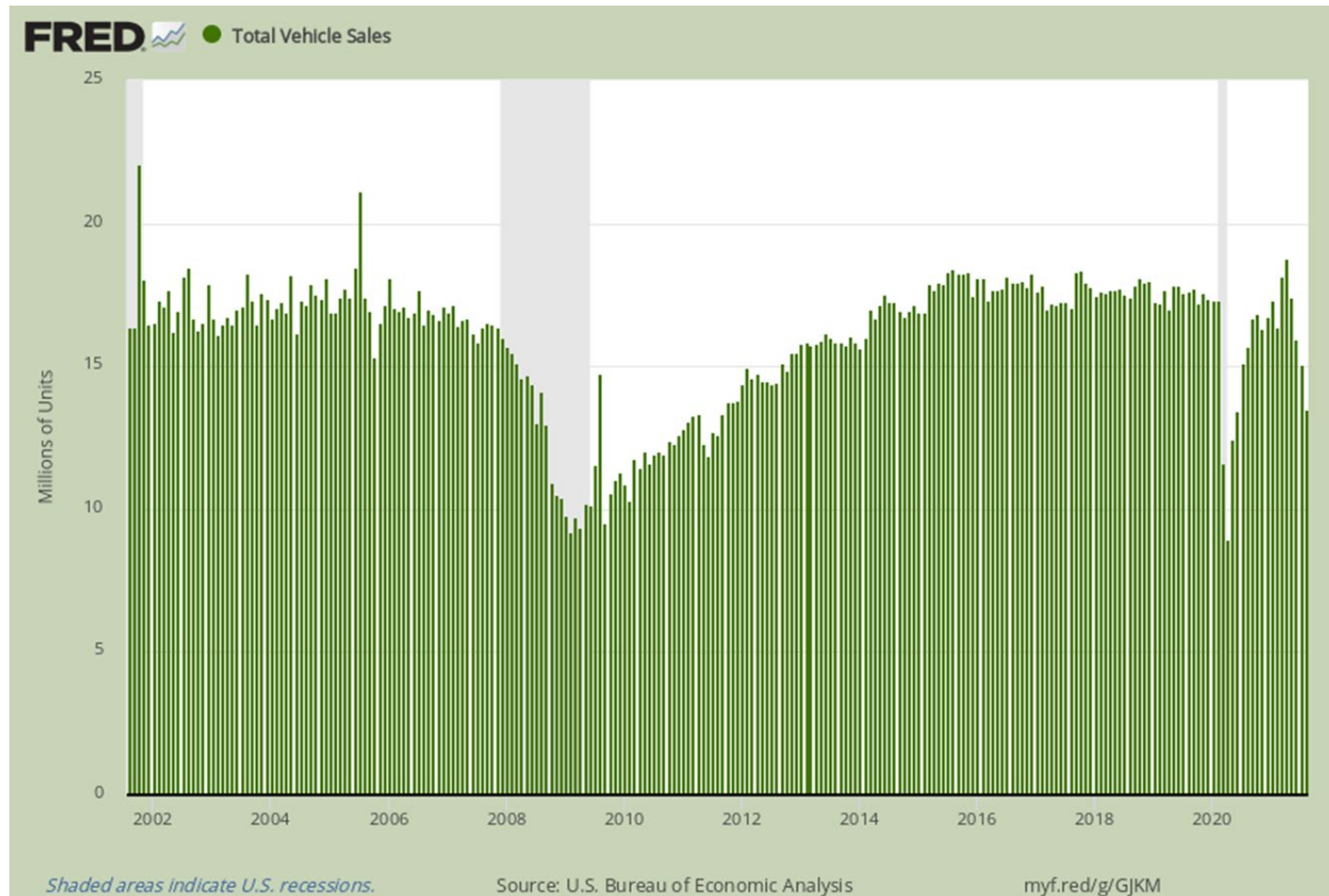
One day, you'll be able to tell your grandkids, "I survived the Great Toilet Paper Shortage of 2020."

COVID Shortages



Source: USA Today

Consumer Purchases – Vehicle Sales



Source: St Louis Fed Fred

Forbes: Rising Prices, Product Shortages, Delta Variant Have Consumers and Retailers on Edge for Holiday 2021



Source: Forbes, August 12, 2021

- Meat +5.9%
- Eggs +5.7%
- Milk +6.7%
- Furniture & Bedding +8.8%
- Major Appliances +12.3%
- Pants +11.2%
- Dresses +18.8%
- Jewelry +10.1%
- Hotels +21.5%
- Energy +24.4%
- Gasoline +41.8%

Pets



MONEY

Dog days of the pandemic create a thriving economy for man's best friend

Brent Schrotenboer USA TODAY

Published 5:05 a.m. ET Sep. 2, 2020 | Updated 2:10 p.m. ET Feb. 1, 2021

As much as humans might hate the COVID-19 pandemic, an alternate viewpoint may be gaining ground among other family members living in the same house.

Consider the outlook of a dog:

*You mean our bipedal benefactors don't have to leave us every day to go to work?
They have more time to give us attention?*

Pet adoptions were up in 2020 and dogs were in short supply

Online pet retailer Chewy said it had its busiest ever quarter ending May 3 (2020) – 46% increase in net sales

Source: USA Today, September 2, 2020

COVID Winners



COVID Vaccine



COVID-19 Vaccination Record Card

Please keep this record card, which includes medical information about the vaccines you have received.
Por favor, guarde esta tarjeta de registro, que incluye información médica sobre las vacunas que ha recibido.

Last Name: Laychur First Name: Renee MI:

Date of Birth: 2/19/1957 Patient number (medical record or IIS record number):

Vaccine	Product Name/Manufacturer Lot Number	Date	Healthcare Professional or Clinic Site
1 st Dose COVID-19	Pfizer BioNTech Covid 19 Vaccine Mfg: Pfizer / Lot #E160200	3/1/21 mm dd yy	UPMC WILLIAMSPORT
2 nd Dose COVID-19	Pfizer BioNTech Covid 19 Vaccine Mfg: Pfizer / Lot #E160201	3/22/21 mm dd yy	UPMC WILLIAMSPORT
Other		mm dd yy	
Other		mm dd yy	

Vaccination Celebration – April 7, 2021



Changed Behavior?



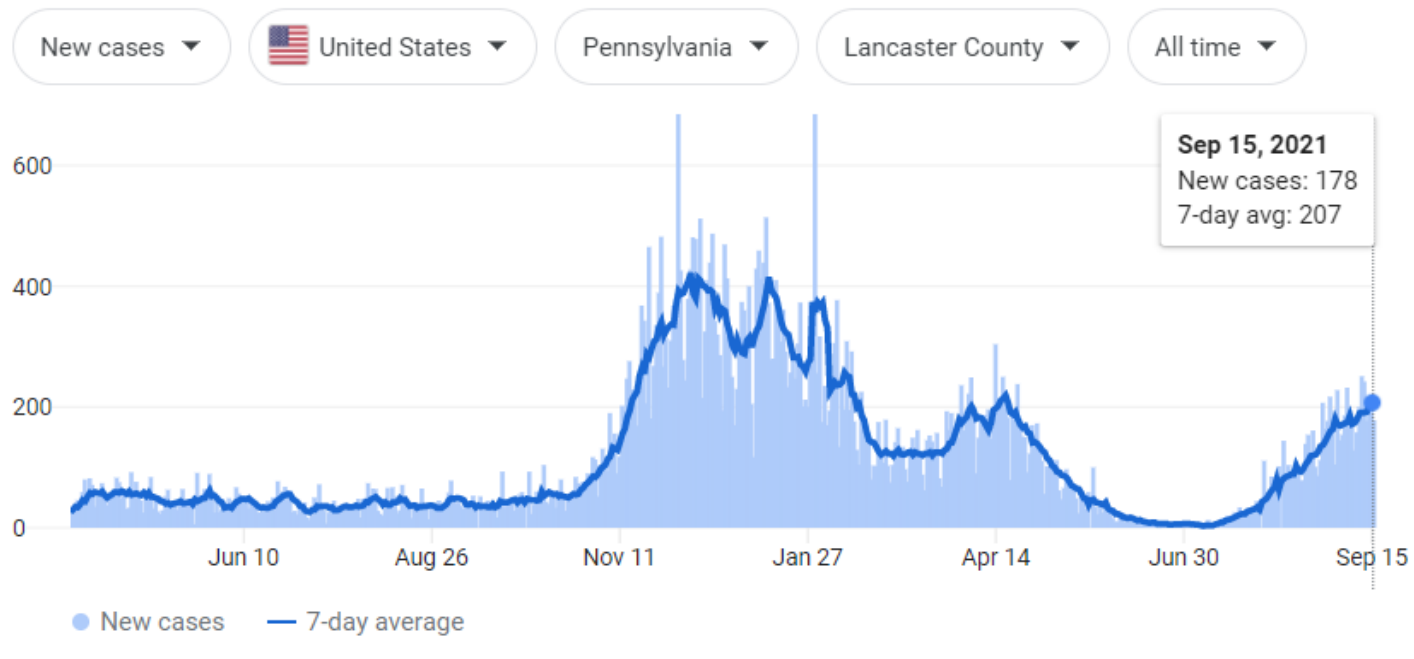
New Appreciation of Essential Workers



COVID Dashboard – September 15, 2021

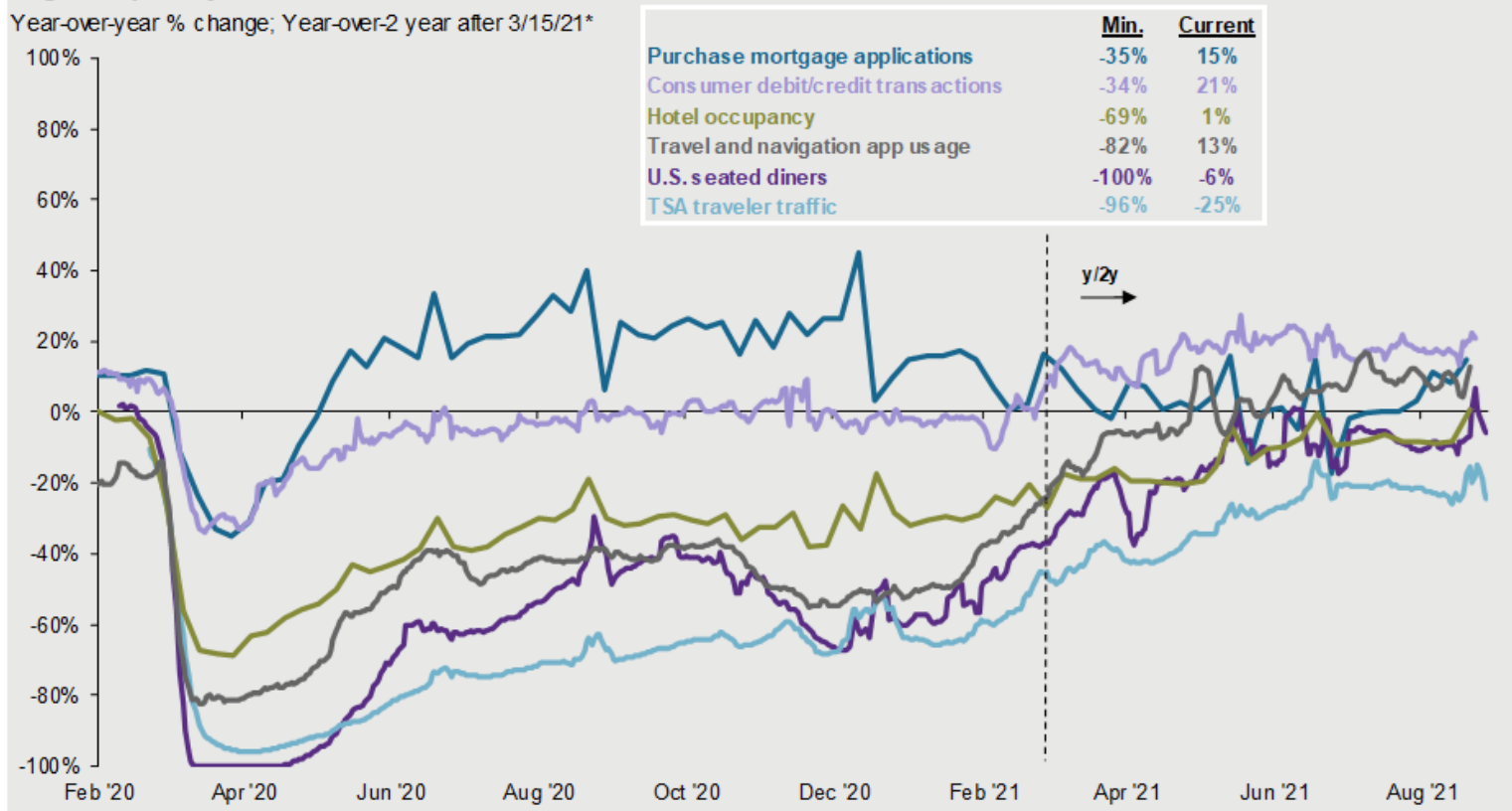
📈 New cases and deaths

From [The New York Times](#) · Last updated: 1 day ago



High-frequency data

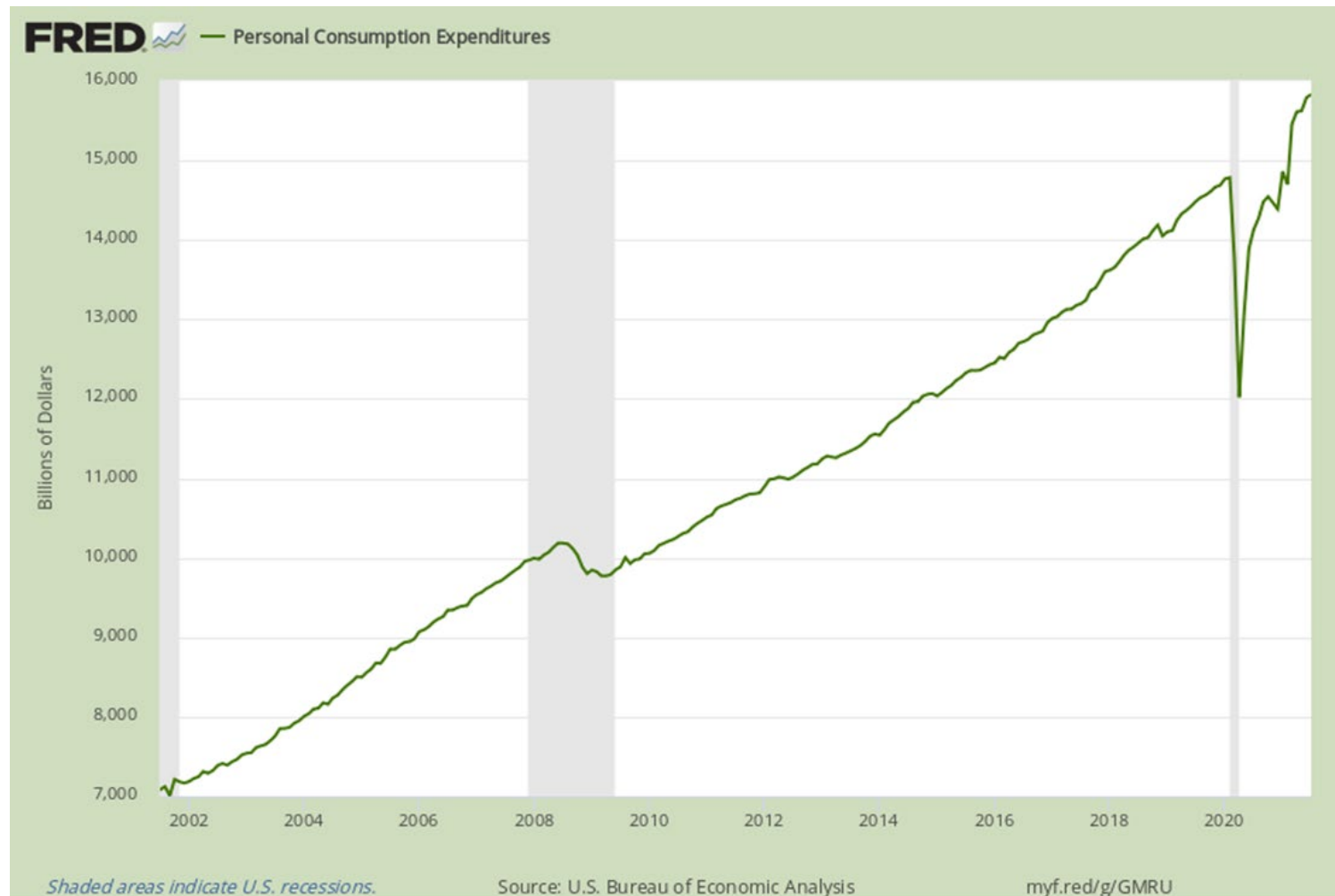
Year-over-year % change; Year-over-2 year after 3/15/21*



Source: App Annie, Chase, Mortgage Bankers Association (MBA), OpenTable, STR, Transportation Security Administration (TSA), J.P. Morgan Asset Management. *Beginning 3/15/21, all indicators compare 2021 to 2019. Prior to 3/15/21, figures are year-over-year. Consumer debit/credit transactions, U.S. seated diners and TSA traveler traffic are 7-day moving averages. App Annie data is compared to 2019 average and includes over 600 travel and navigation apps globally, including Google Maps, Uber, Airbnb and Booking.com. Consumer spending: This report uses rigorous security protocols for selected data sourced from Chase credit and debit card transactions to ensure all information is kept confidential and secure. All selected data is highly aggregated and all unique identifiable information—including names, account numbers, addresses, dates of birth and Social Security Numbers—is removed from the data before the report's author receives it.
Guide to the Markets – U.S. Data are as of September 10, 2021.

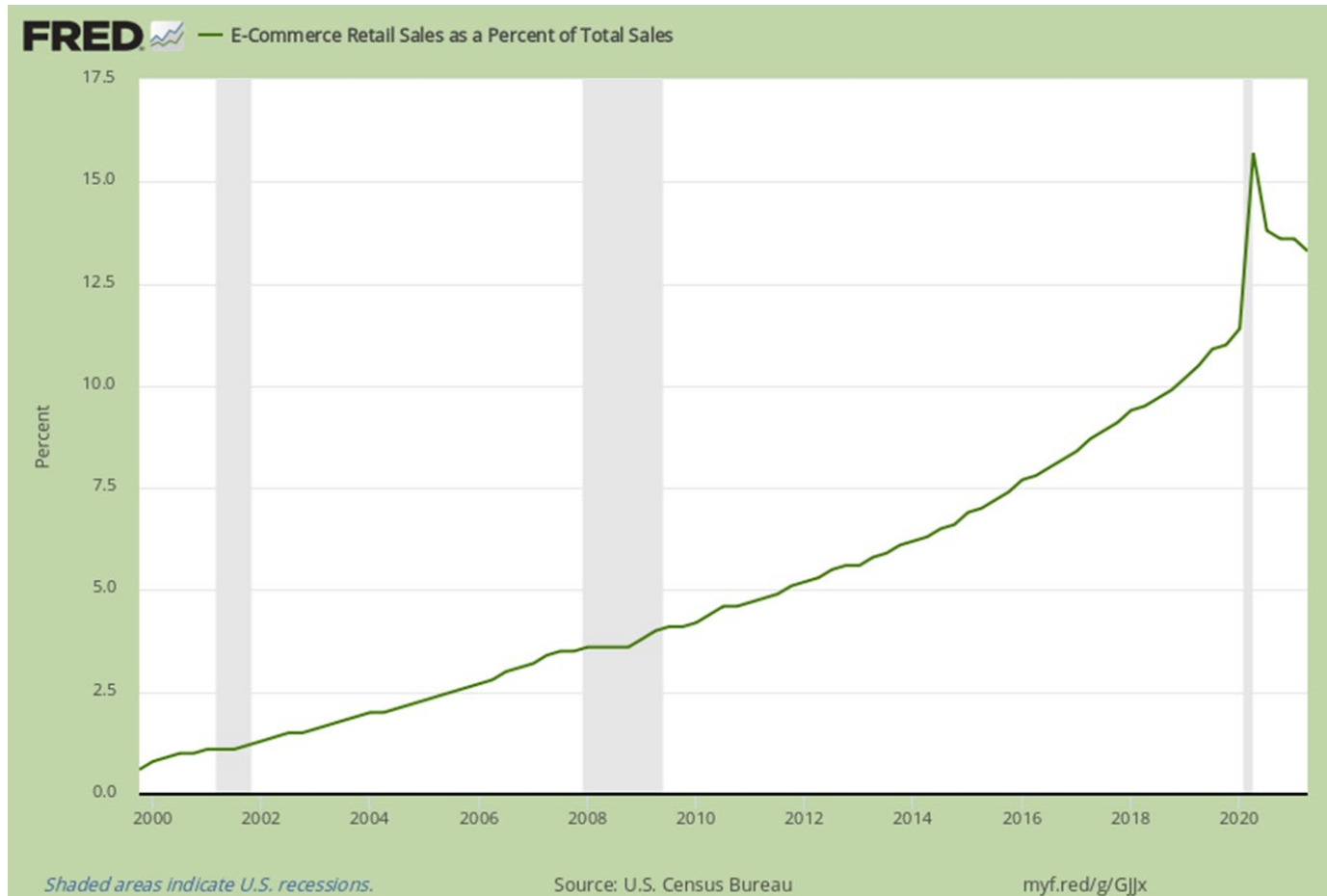
J.P.Morgan
Asset Management

Spending Rebounds



Source: St Louis Fed Fred

Consumer Purchases – Ecommerce as a % of Total Sales



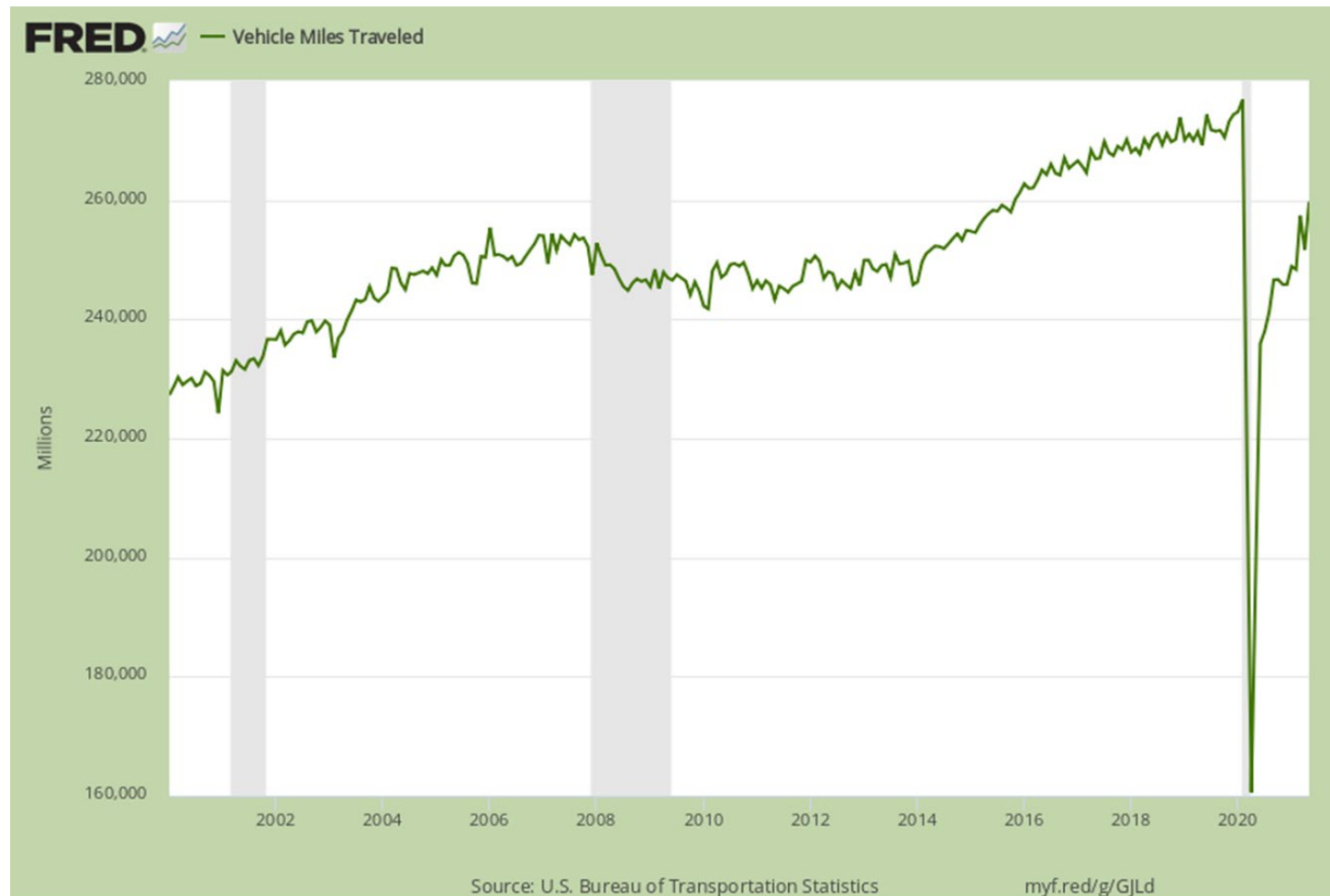
Source: St Louis Fed Fred

Consumer Purchases – Gasoline Stations



Source: St Louis Fed Fred

Vehicle Miles Traveled



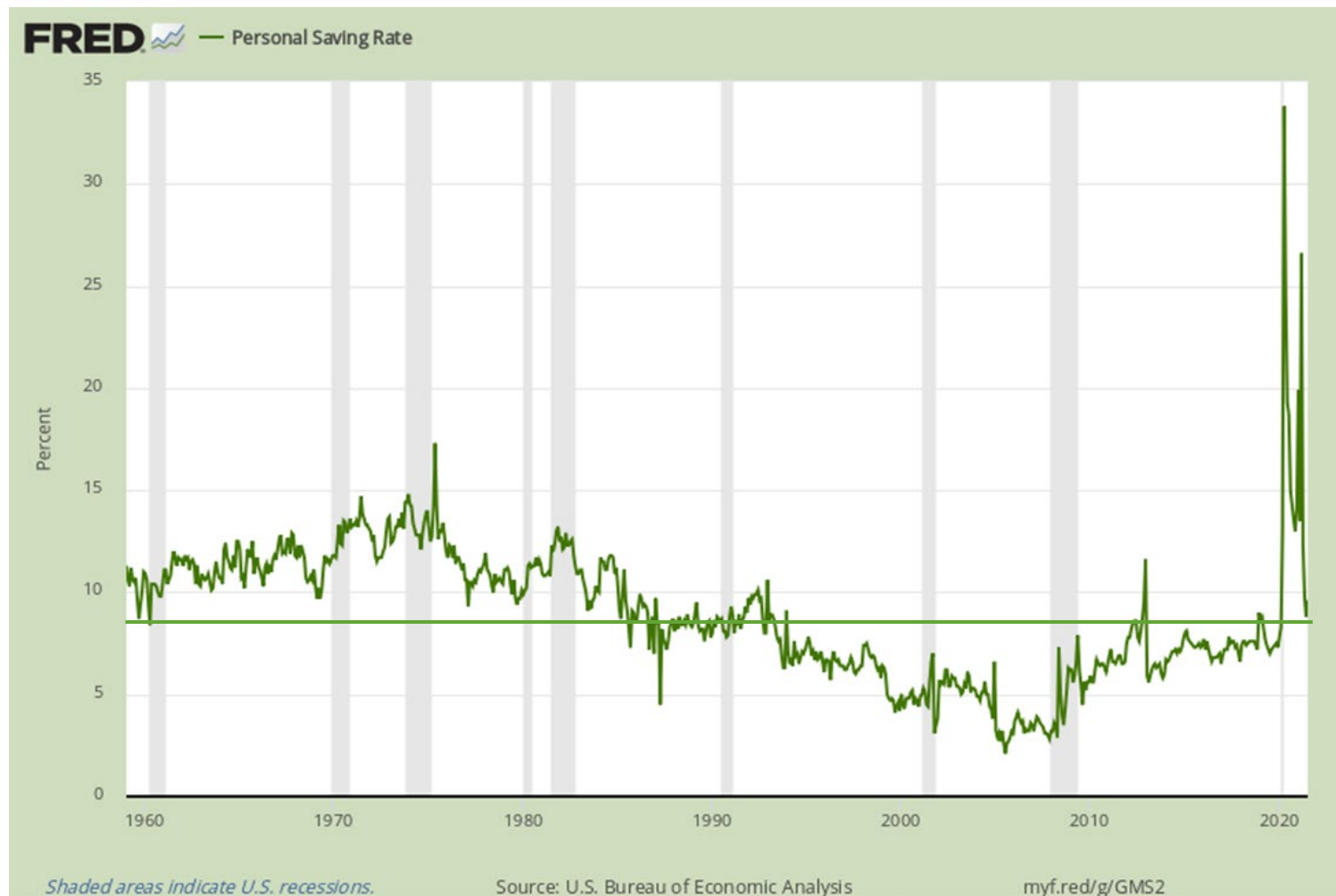
Source: St Louis Fed Fred

Consumer Purchases – Restaurant Sales



Source: St Louis Fed Fred

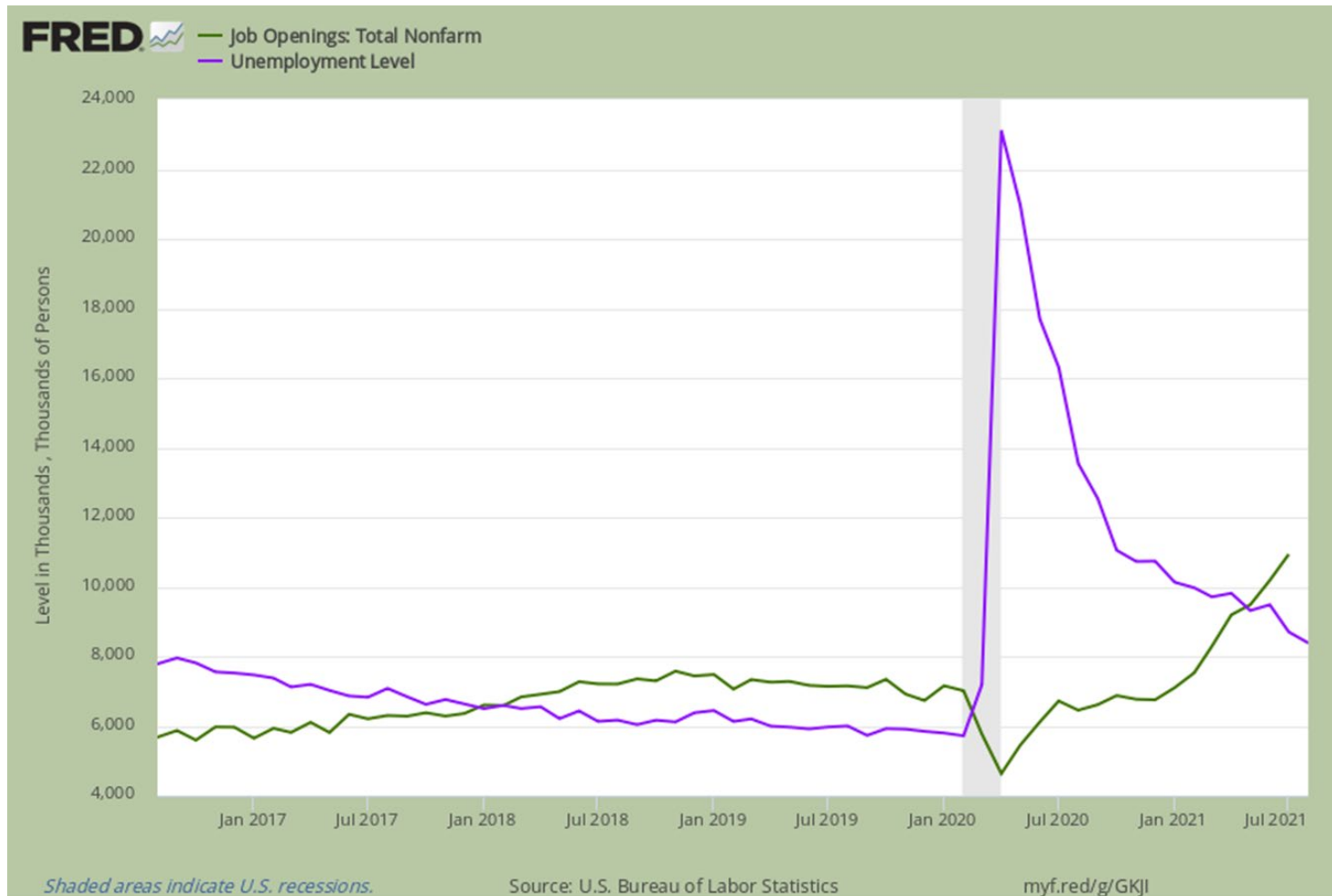
Saved



Source: St Louis Fed Fred



JOLTs Job Openings vs Job Seekers

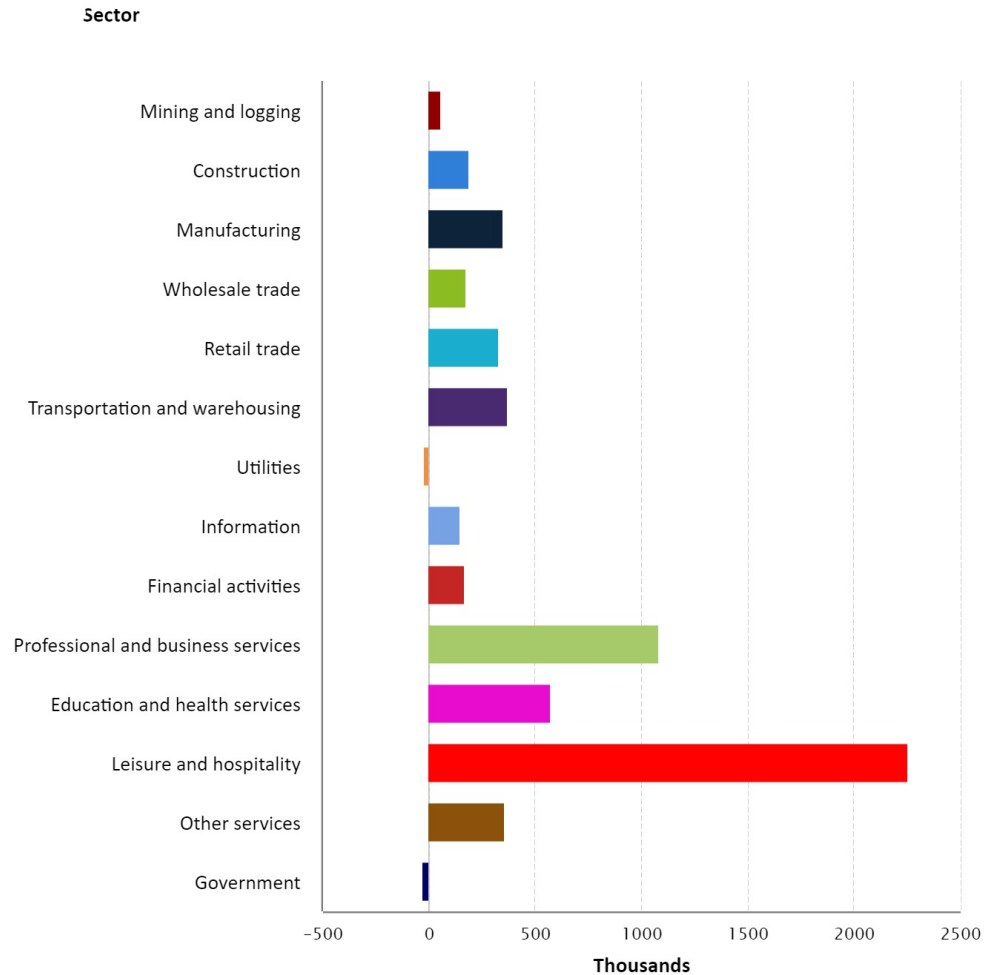


Source: FRB St. Louis

Employment Change By Industry – Past 12 Months

Employment change by industry, August 2021, seasonally adjusted, **12-month net change**

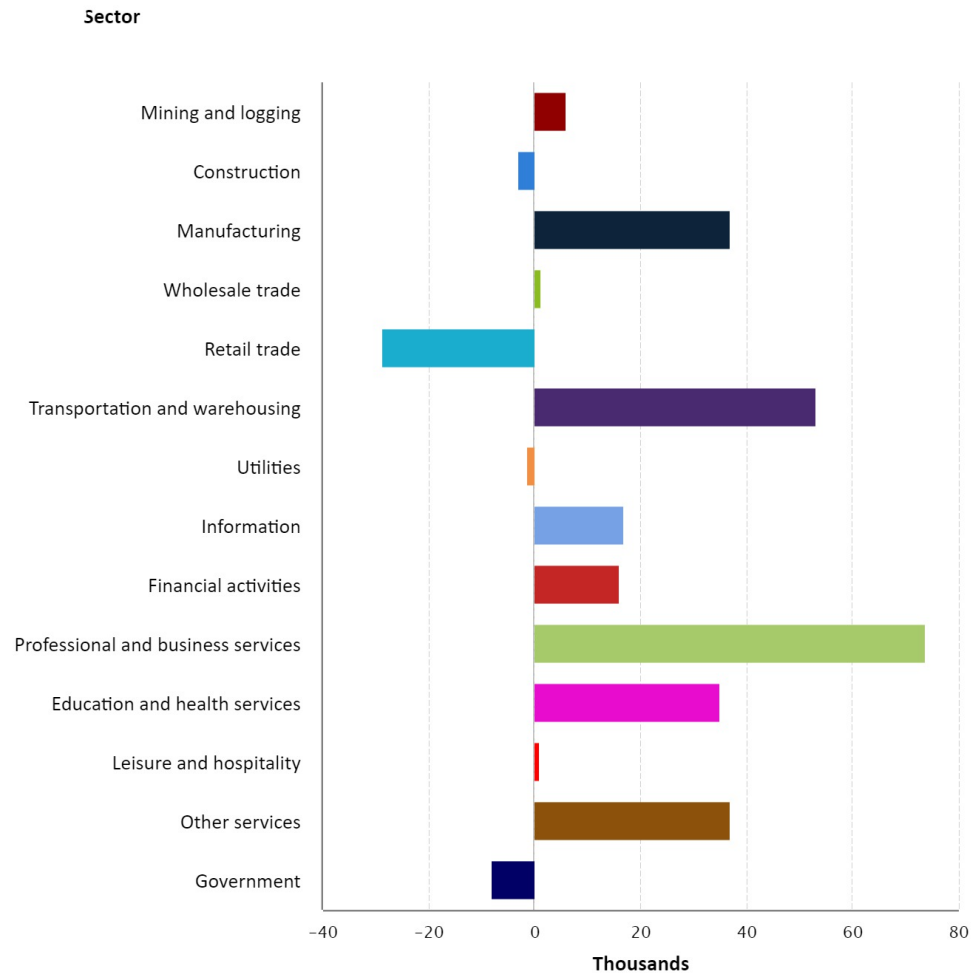
Click on bars to drill down



Employment Change By Industry – Past Month

Employment change by industry, August 2021, seasonally adjusted, 1-month net change

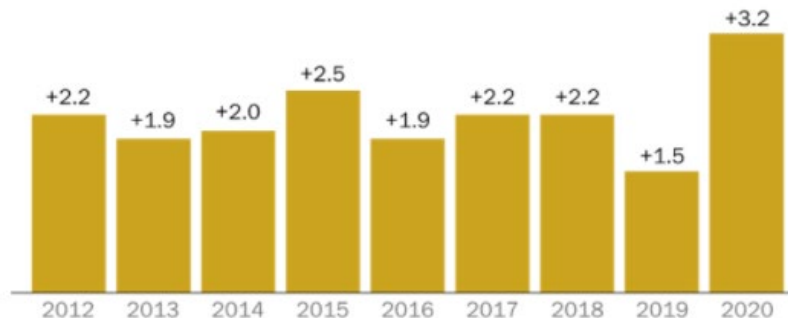
Click on bars to drill down



Silver Tsunami

The number of retired Baby Boomers rose more from 2019 to 2020 than in prior years

Annual increase in the retired U.S. Baby Boomer population (in millions)



Note: "Retired" refers to those not in the labor force due to retirement. Baby Boomers are those born between 1946 and 1964. Each year's retired Boomer population is based on the average of the July, August and September estimate.

Source: Pew Research Center analysis of July, August and September Current Population Survey monthly files (IPUMS)

PEW RESEARCH CENTER

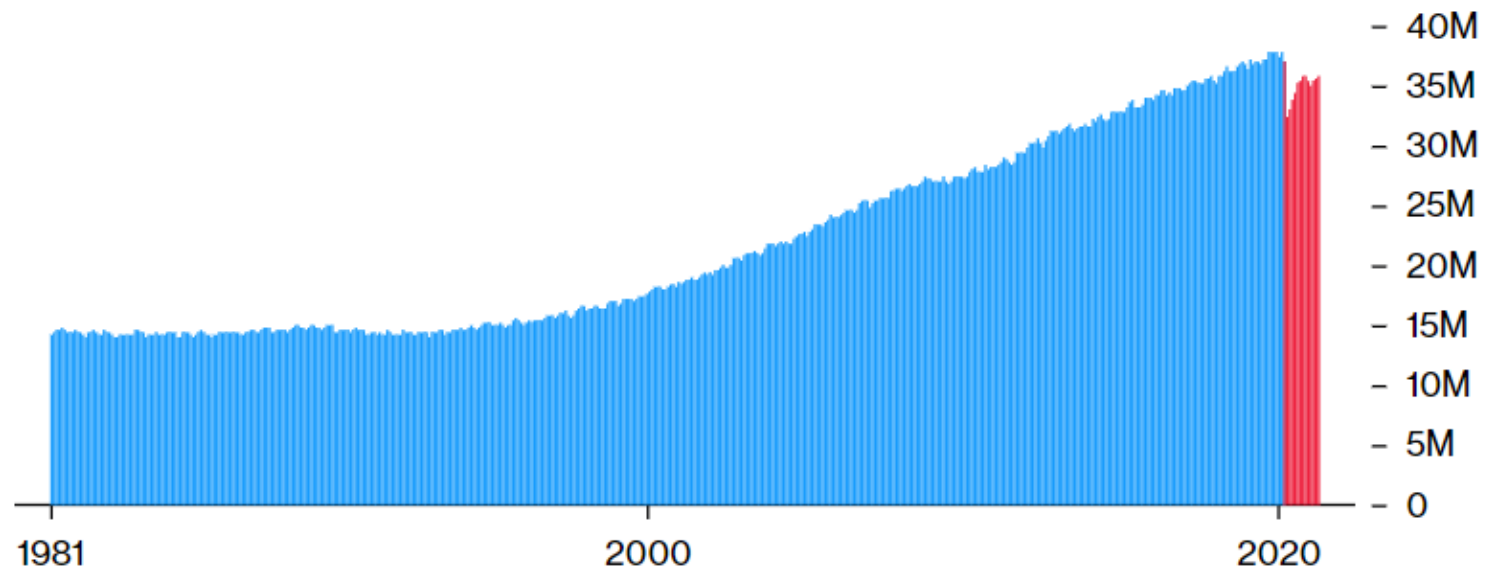
- By September 2020 More Baby Boomers— 28.6 Million – had Retired Since 2011 when the First Boomers Turned 65
- 3.2 Million More than Retired in Same Quarter of 2019
- Workers 55-64 Without a College Degree Retired at a 5% Faster Pace
- Over 65 Workers with College Degree were More Likely to Leave Workforce than Pre-COVID
- Fidelity Survey: 1/5 of Boomers within 10 Years of Retirement Accelerated Departure Date

Baby Boomers & Work

Decline in Older Workers

Boomer generation exit from U.S. labor market might be forever

■ 55+ ■ Pandemic era



Source: Bureau of Labor Statistics

Baby Boomers & Work

Woodlands Bank welcomes new trust officer



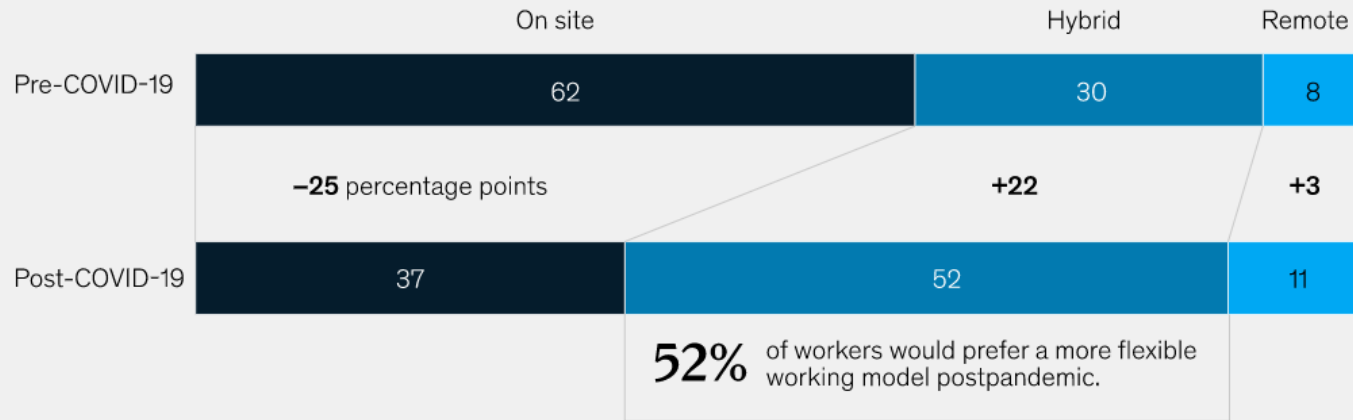
COVID Effects – Social Security

- Severe COVID-19 Downturn Weighed on the Financial Health of Social Security, but Not Nearly as Much as Originally Anticipated
- Expect to Pay Benefits that Exceed Income in 2021 as was the Case in 2020
- Deep Recession and High Unemployment Reduced Payroll Taxes
- Faster than Expected Recovery has Increased Payroll Tax Payments
- Trustees Expect Social Security to Reserves to be Depleted by 2034 and Medicare's Hospital Fund by 2026
- Near Term Costs were Reduced by COVID-19 Higher Mortality Rates Among Beneficiaries
- Pandemic Related Inflation May Push Cost of Living Adjustments Up Significantly in 2022 after Years of Subdued Inflation
- Future Costs are Expected to Rise as Baby Boomers Enter Retirement and Low Birth Rate will Affect Employment Growth

Remote Work

Most employees would prefer a more flexible working model after the pandemic is over.

Working models pre-COVID-19 and desired working models post-COVID-19, % survey participants

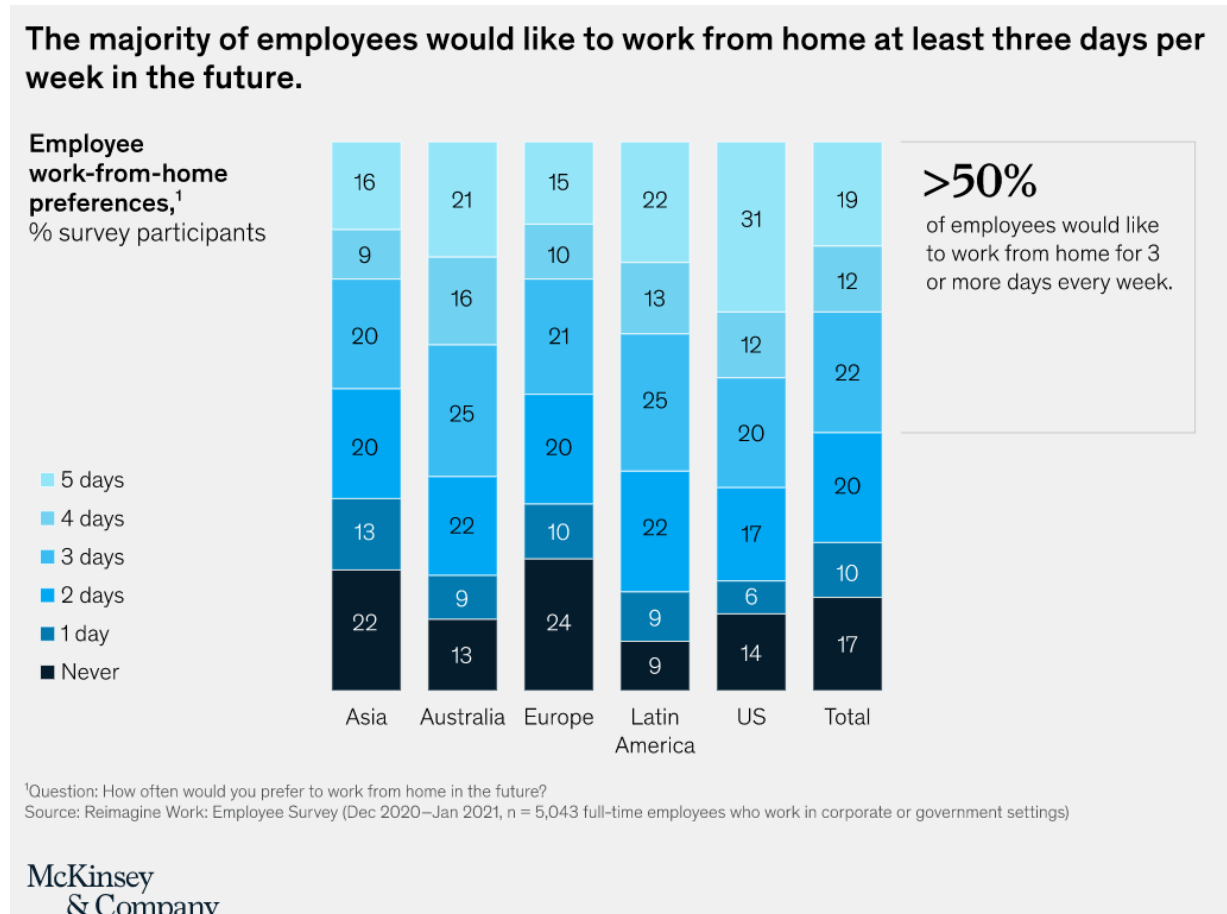


Source: Reimagine Work: Employee Survey (Dec 2020–Jan 2021, n = 5,043 full-time employees who work in corporate or government settings)

**McKinsey
& Company**

Source: McKinsey & Company – “What Employees are Saying about the Future of Remote Work”, April 1, 2021

Remote Work



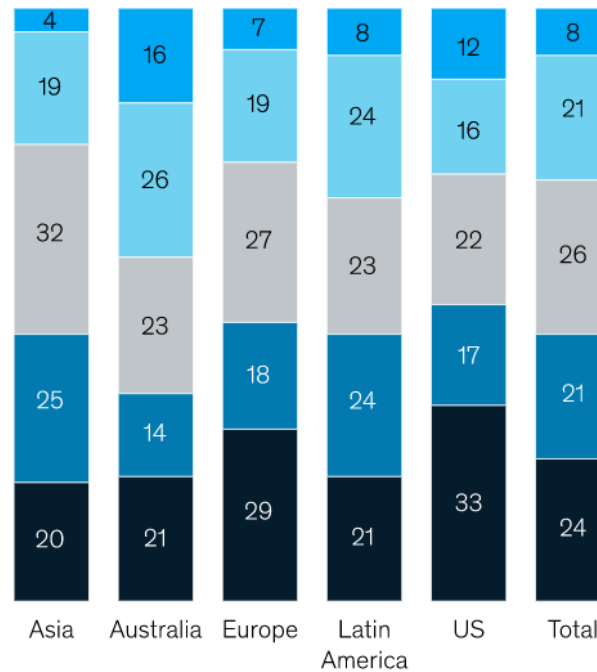
Source: McKinsey & Company – “What Employees are Saying about the Future of Remote Work”, April 1, 2021

Remote Work

Going back to a fully on-site model might have significant talent implications.

Employees who are likely to switch jobs if work returns to fully on-site, % survey participants

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely



~30%

of employees say they are likely to switch jobs if returned to fully on-site work

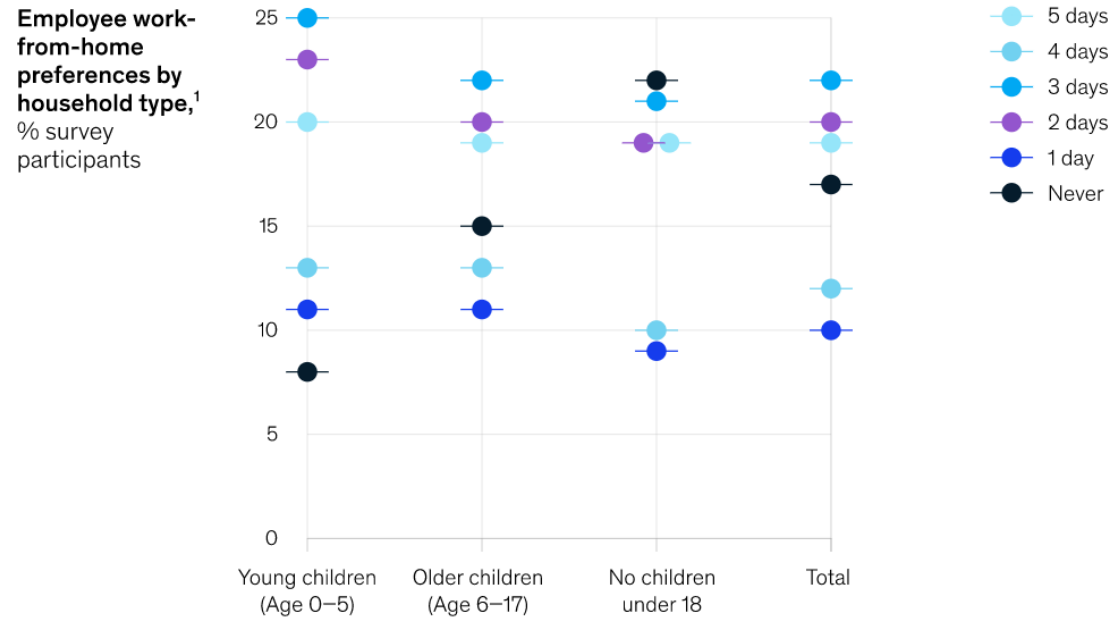
Source: Reimagine Work: Employee Survey (Dec 2020–Jan 2021, n = 5,043 full-time employees who work in corporate or government settings)

McKinsey
& Company

Source: McKinsey & Company – “What Employees are Saying about the Future of Remote Work”, April 1, 2021

Remote Work

Employees with young children are more likely to prefer primarily remote working models.



¹Question: How often would you prefer to work from home in the future?

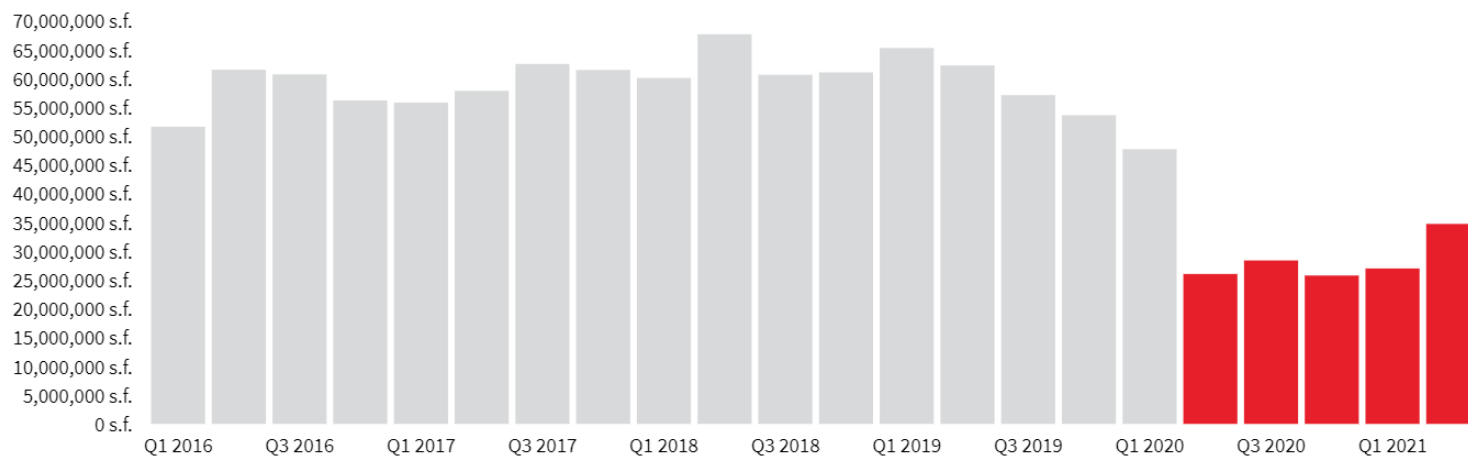
Source: Reimagine Work: Employee Survey (Dec 2020–Jan 2021, n = 5,043 full-time employees who work in corporate or government settings)

**McKinsey
& Company**

Source: McKinsey & Company – “What Employees are Saying about the Future of Remote Work”, April 1, 2021

Office Space

Quarterly leasing activity (s.f.)



Source: JLL Research

Remote Work

Jamie Dimon, fed up with Zoom calls and remote work, says commuting to offices will make a comeback

PUBLISHED TUE, MAY 4 2021•10:28 AM EDT | UPDATED TUE, MAY 4 2021•2:45 PM EDT



Hugh Son
@HUGH_SON

Dawn Giel
@DAWNGIEL

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- While Jamie Dimon is fine with the greater flexibility allowed by employees working from home part time, that's no substitute for being at the office, the JPMorgan chief said.
- "I'm about to cancel all my Zoom meetings," Dimon said. "I'm done with it."
- Dimon also said clients told him that in cases where JPMorgan lost business to rivals, it was because "bankers from the other guys visited, and ours didn't. Well, that's a lesson."

The New Normal – Too Much Zoom Time

Fortune: Escaping 'Zoom fatigue' is surprisingly complicated

8-Year Old 3rd Grade Student:

“He frowned. “I do not like that,” he said. “It’s hard. And I don’t want to see my friends if I can’t play with them.”

“The data already prove it out, at least for those in white-collar tech jobs: Workers are spending 29% more time in team meetings and 24% more time in one-on-one meetings than they were before the COVID-19 pandemic, according to Clockwise, the maker of a calendar assistant that optimizes employees' work schedules. In a completely work-from-home environment, colleagues can't drop by each other's desks or have unplanned watercooler conversations.”

Source: Fortune, “Escaping 'Zoom fatigue' is surprisingly complicated”, June 7, 2020

The New Normal – Too Much Zoom Time

Stanford Research: Four Causes for ‘Zoom Fatigue’

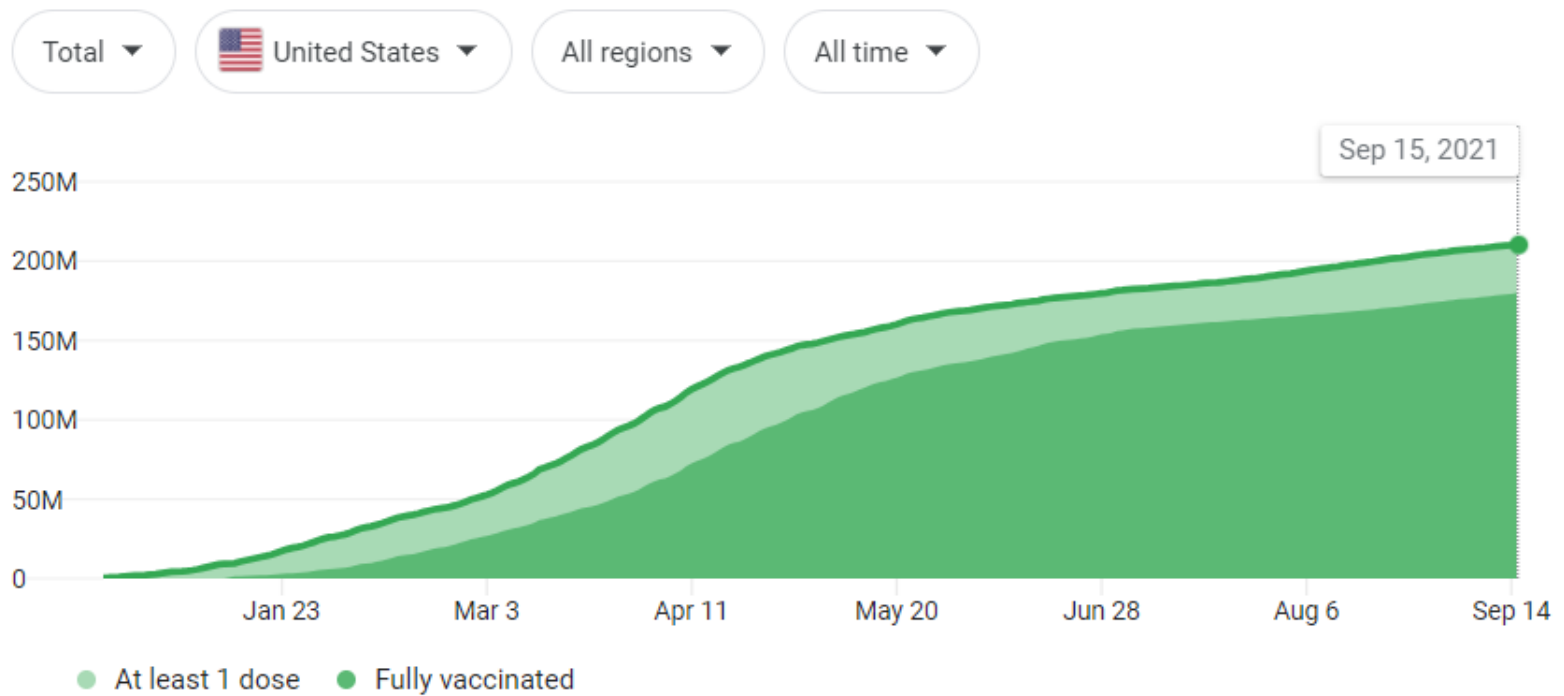
1. Excessive Amounts of Close-Up Eye is Highly Intense
2. Seeing Yourself During Video Chats Constantly in Real-Time Fatiguing
3. Video Chats Dramatically Reduce Our Usual Mobility
4. The Cognitive Load is Much Higher in Video Chats

Source: Stanford News, “Stanford researchers identify four causes for ‘Zoom Fatigue’ and their simple fixes”, 2/23/21

COVID Vaccine

Vaccinations

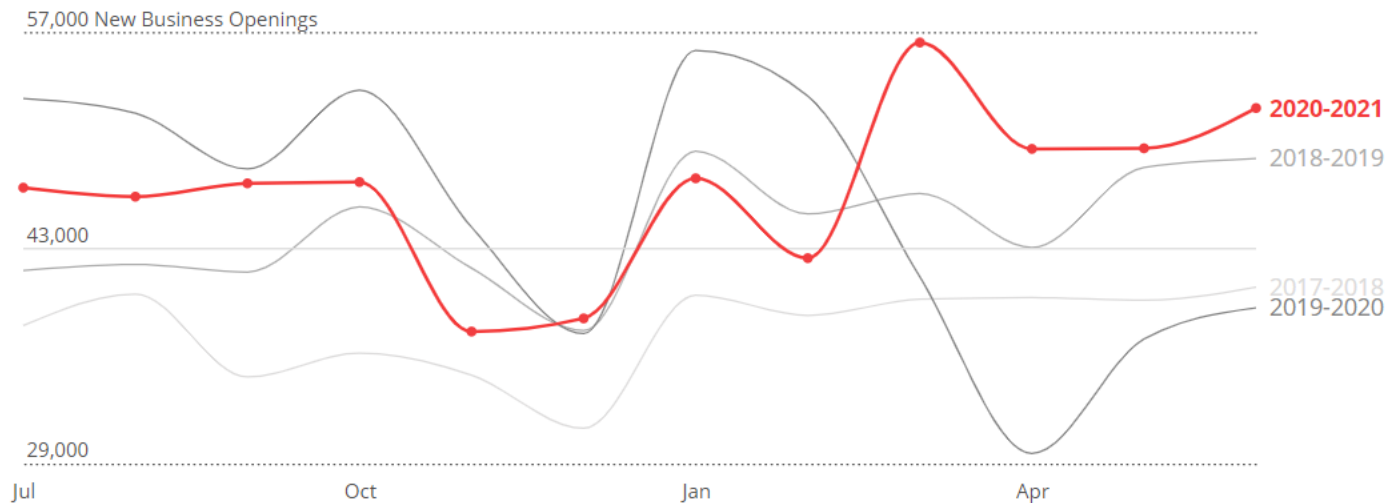
From [Our World in Data](#) · Last updated: 2 days ago



Reopening Trends

New Businesses Open Above Pre-Pandemic Levels in Q2

Business openings by month on Yelp, July 2017 – June 2021



Yelp Economic Average - June 2021 Economic Recovery Report, July 2021

Home Sales Trend Problematic



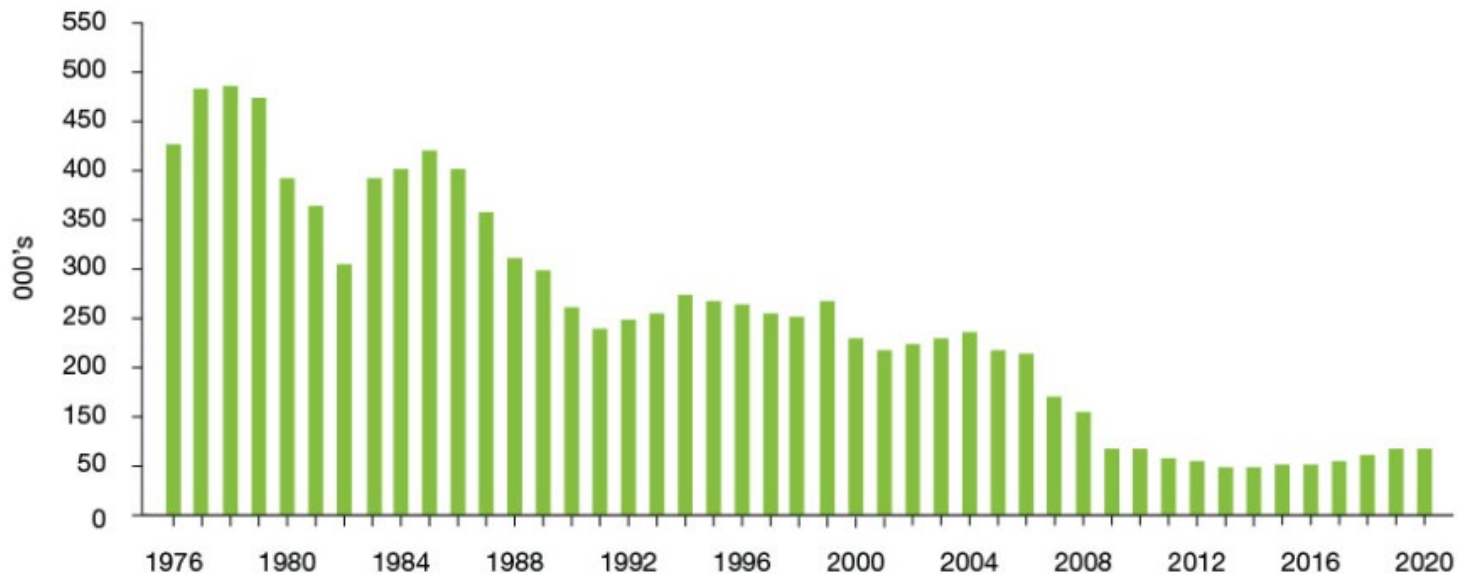
- 72 Million Millennials are Entering the Housing Market
- From 2018 to 2020 due to Pandemic and Other Factors – 52% Supply Decrease
- Starter Home Shortage has Increased from 2.5 Million Units to 3.8 Million Units
- Freddie Mac does NOT Expect the Shortage to Slow Down for the Next 10 Years

Source: Freddie Mac – “Housing Supply a Growing Deficit”, May 2021

Home Sales Trend Problematic

Number of new homes constructed below 1,400 square feet

Entry-Level home construction collapsed after the Great Recession and never recovered



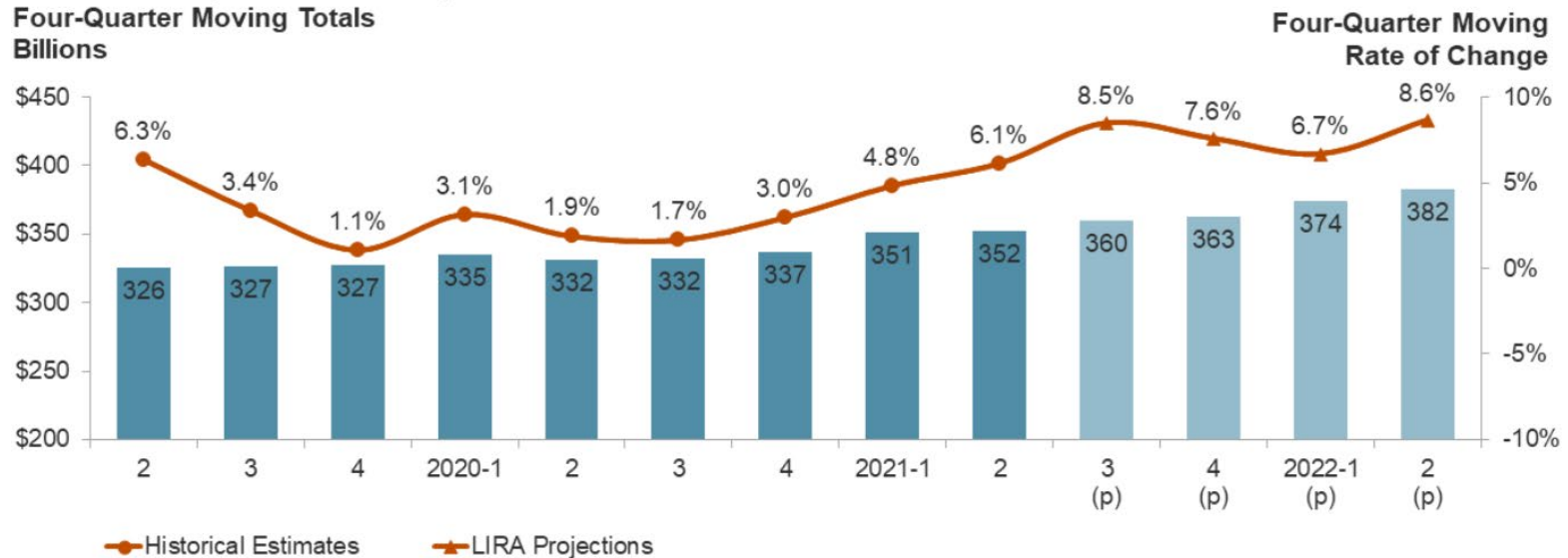
Source: U.S. Census Bureau.

Source: Freddie Mac – “Housing Supply a Growing Deficit”, May 2021

Remodeling Continues

Leading Indicator of Remodeling Activity – Second Quarter 2021

Homeowner Improvements & Repairs
Four-Quarter Moving Totals
Billions



Notes: Improvements include remodels, replacements, additions, and structural alterations that increase the value of homes. Routine maintenance and repairs preserve the current quality of homes. Historical estimates since 2019 are produced using the LIRA model until American Housing Survey benchmark data become available.

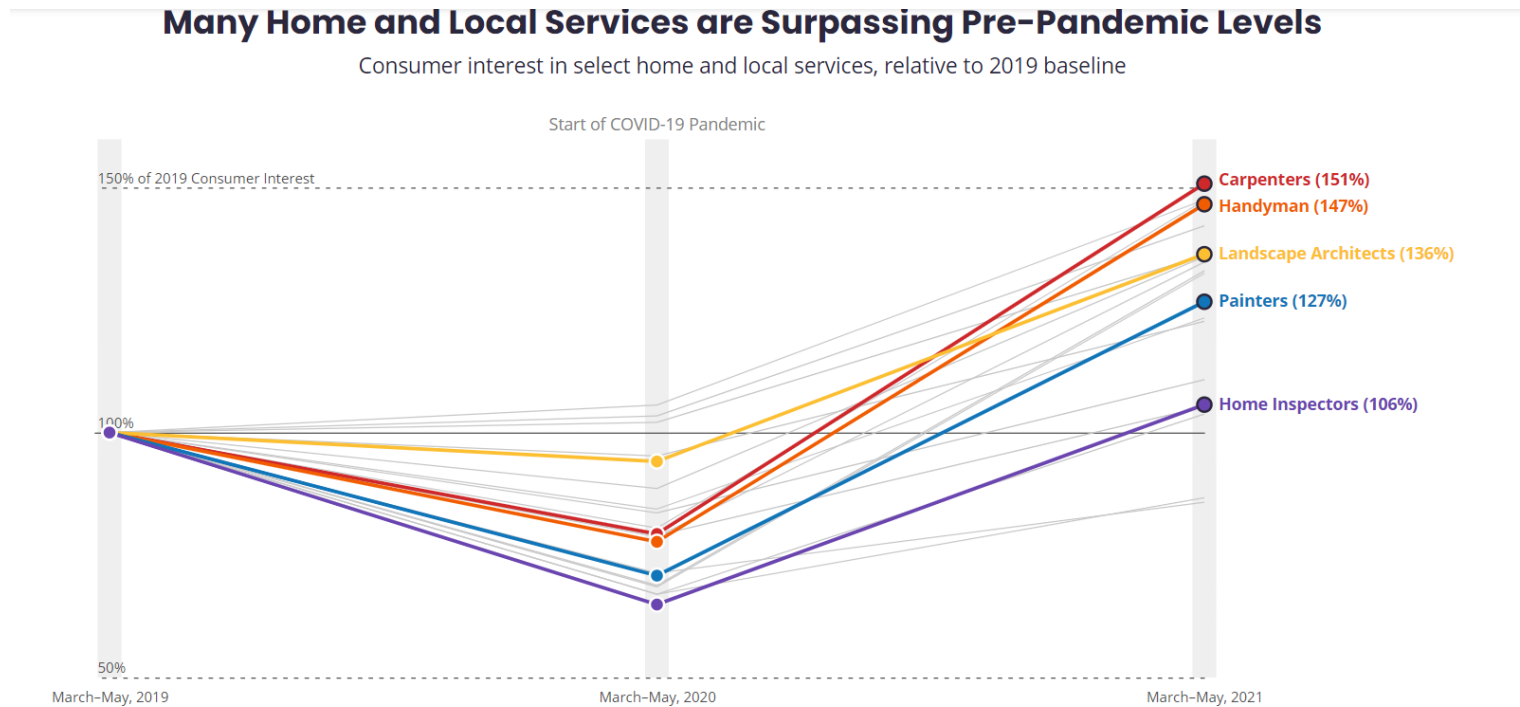
© PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University



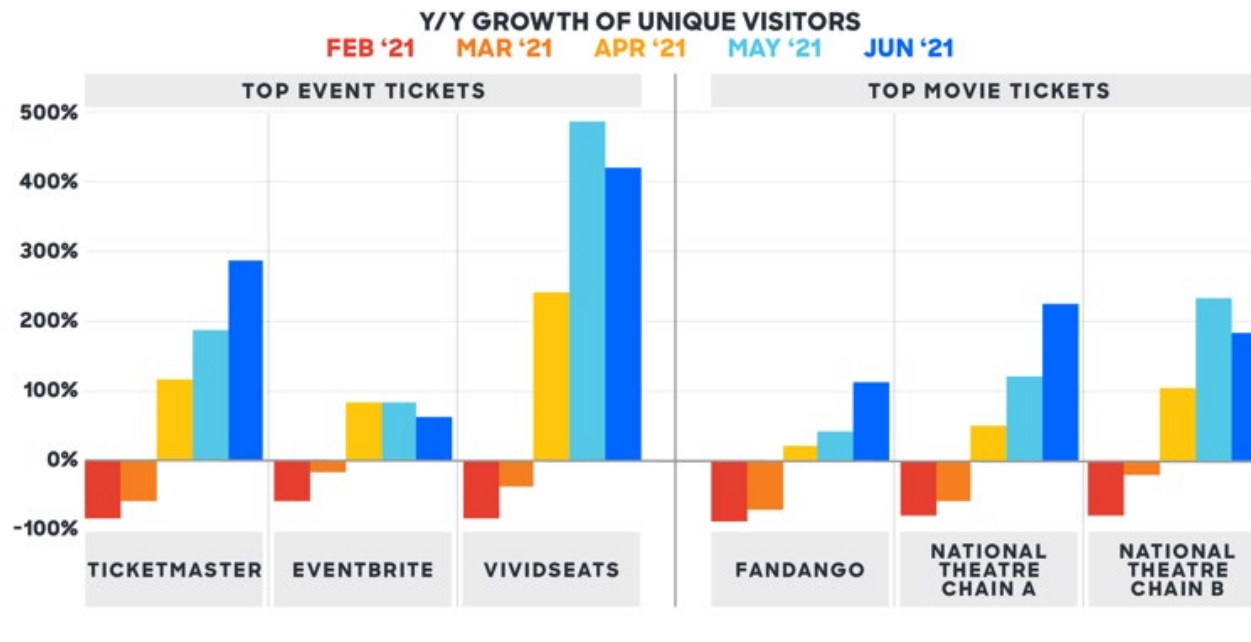
Source: Joint Center for Housing Studies Harvard University– July 15, 2021

Reopening Trends



Yelp Consumer Interest Data, June 23, 2021

In Person versus Virtual Events

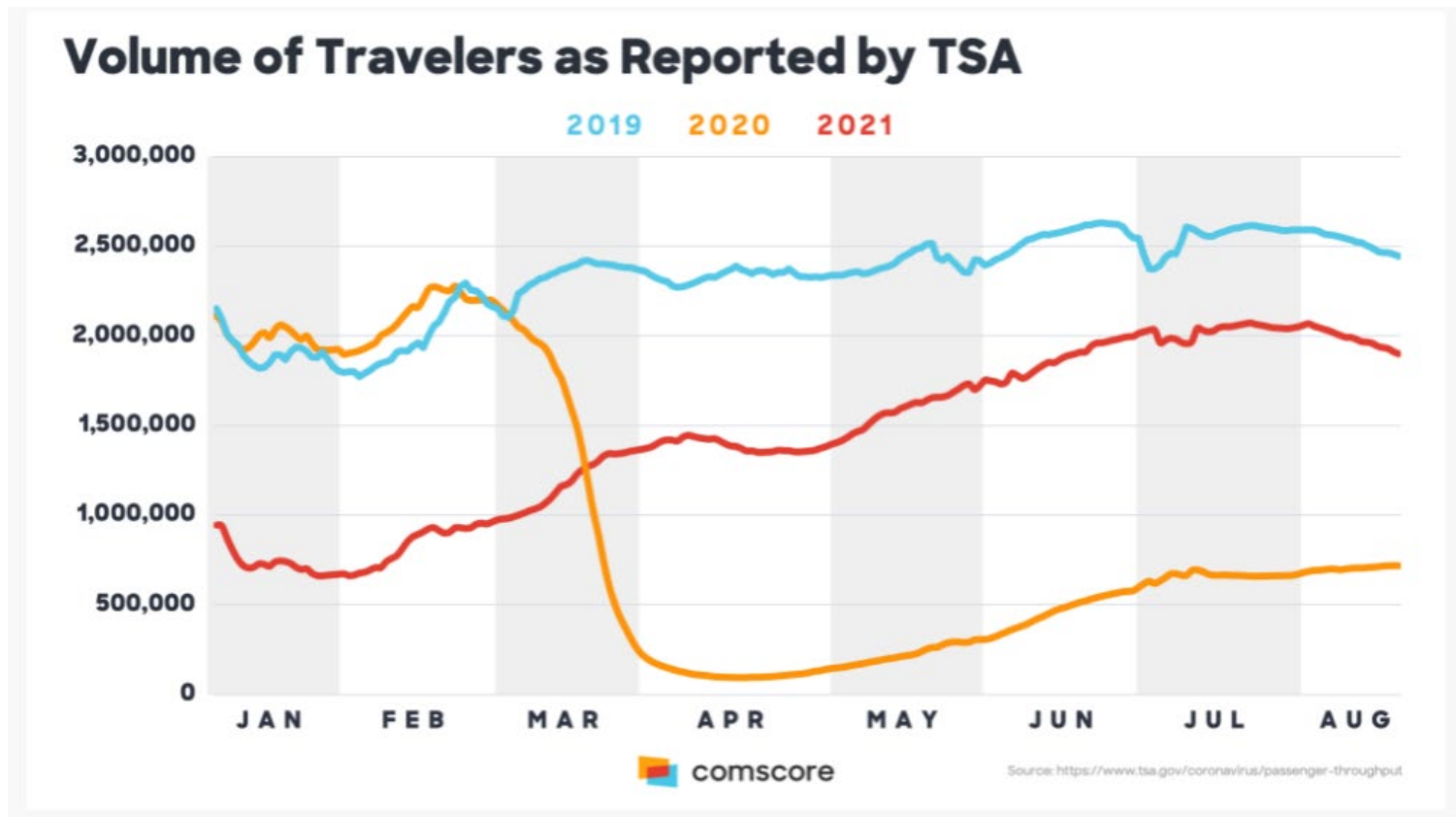


Sources:
Comscore Media Metrix® Multi-Platform, Feb 2021 – Jun 2021, U.S.



Source: comscore

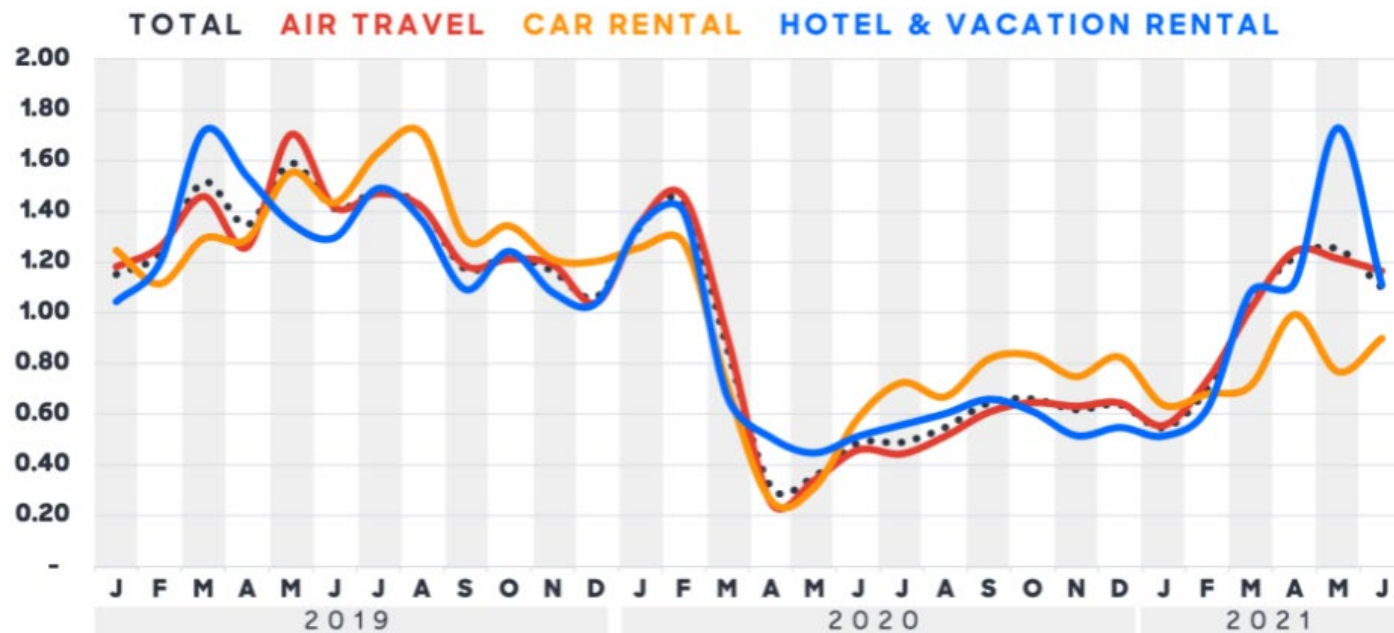
Travel Trends Trends



Source: comscore

Travel Rebounds

Consumer Spend by Sector

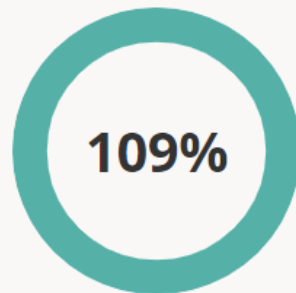


Travel Trends

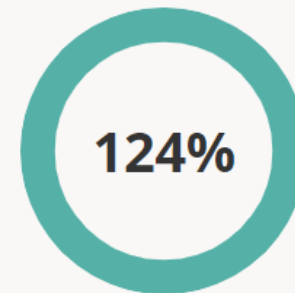
Zip Code 17601, Lancaster County, Pennsylvania Foot Traffic Recovery

Aug, 2021 Compared To Aug, 2019

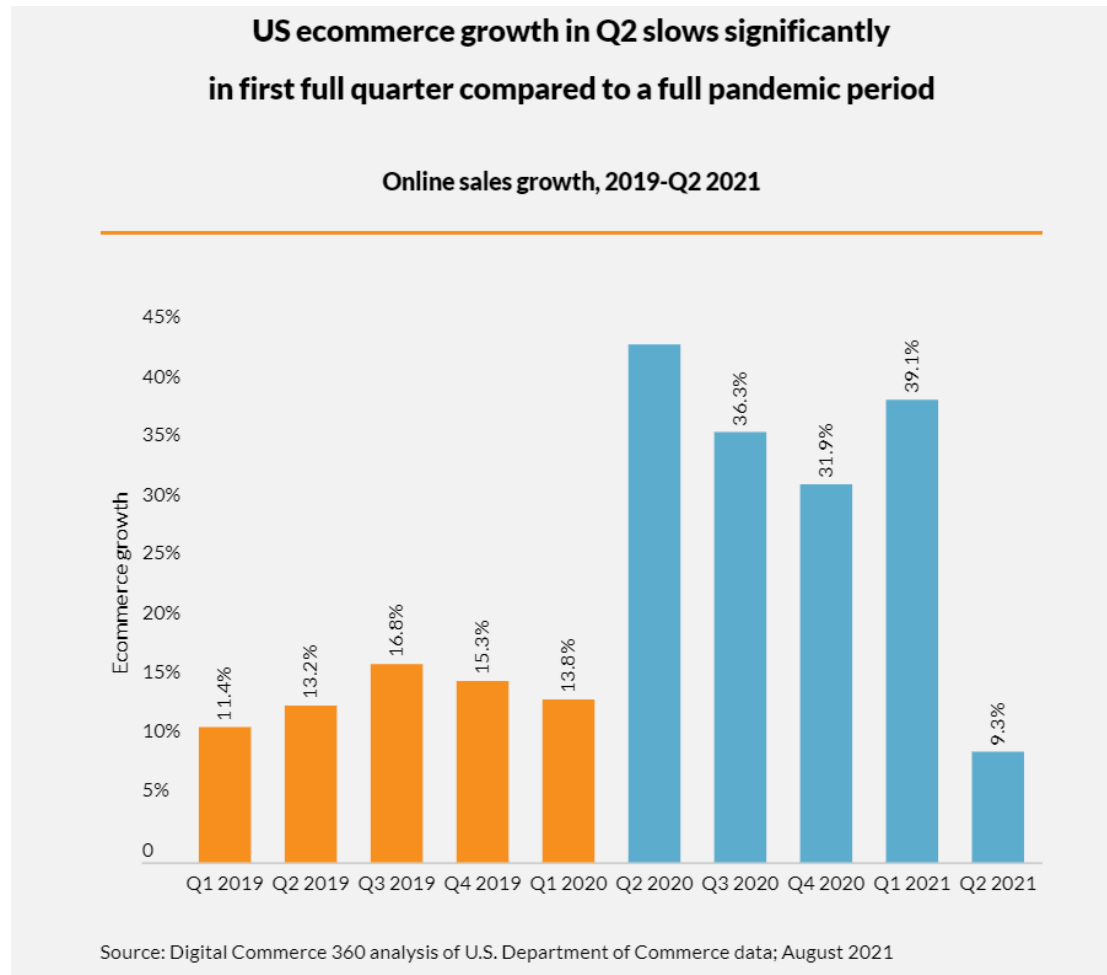
Retail Chains Recovery



Domestic Tourism Recovery



Ecommerce – 2nd Quarter 2021



Source: Digital Commerce 360, August 2021

Foot Traffic

Customer Foot Traffic Growth to Physical Stores by Business Type Since January 2021

Bars / Nightclubs (July)

+42.99%

Cafes / Bakery / Dessert (July)

+73.33%

Restaurants (July)

+44.34%



Source: Small Business, "Trends, Foot Traffic Up 60% to Small Business Retail Shops", August 2021

Retail Foot Traffic – January – August 2021

Customer Foot Traffic Growth to Physical Stores Since January 2021 (all industries)



Source: Small Business, "Trends, Foot Traffic Up 60% to Small Business Retail Shops", August 2021

Target

Target, Nationwide - Foot-traffic Change Compared to Two Years Ago

?

Date Range

Since February 2020



Source: placer.ai, The Square, September, 2021

TJ Maxx

T.J. Maxx, Nationwide - Foot-traffic Change Compared to Two Years Ago

Date Range

Since February 2020



Source: placer.ai, The Square, September, 2021

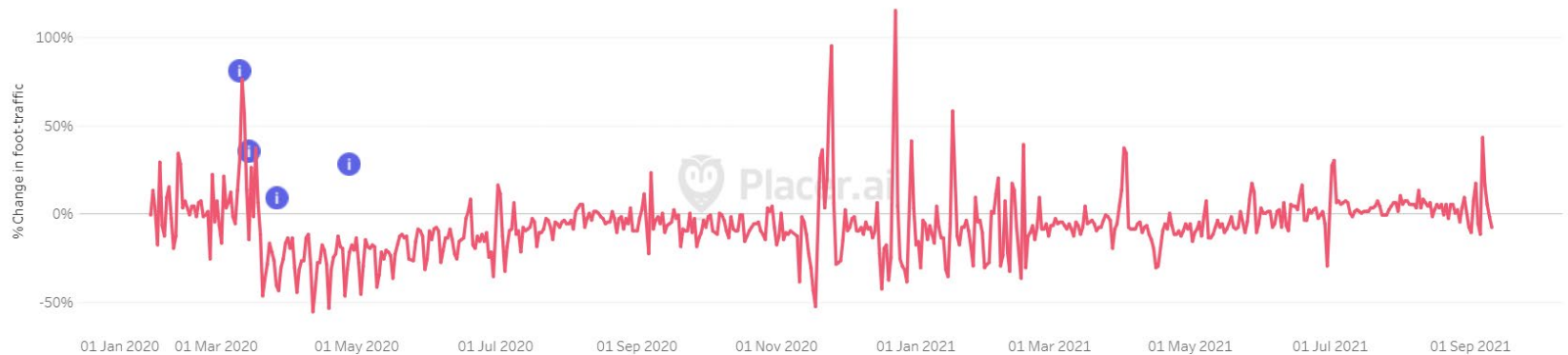
Wegmans

Wegmans, Nationwide - Foot-traffic Change Compared to Two Years Ago

?

Date Range

Since February 2020 ▾



Source: placer.ai, The Square, September, 2021

Total Wines

Total Wine & More, Nationwide - Foot-traffic Change Compared to Two Years Ago

?

Date Range

Since February 2020



Source: placer.ai, The Square, September, 2021

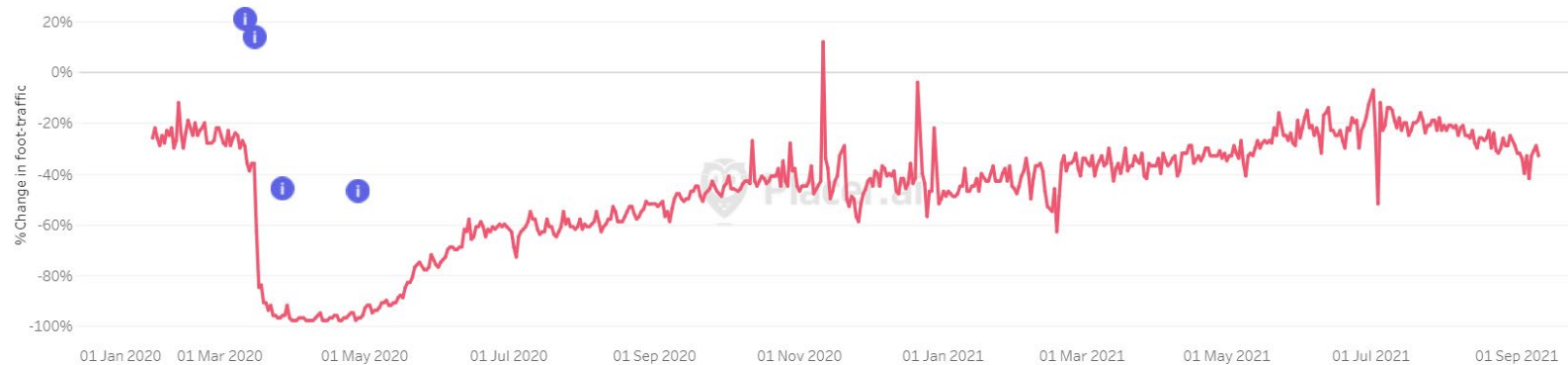
Gold's Gym

Gold's Gym, Nationwide - Foot-traffic Change Compared to Two Years Ago

?

Date Range

Since February 2020



Source: placer.ai, The Square, September, 2021

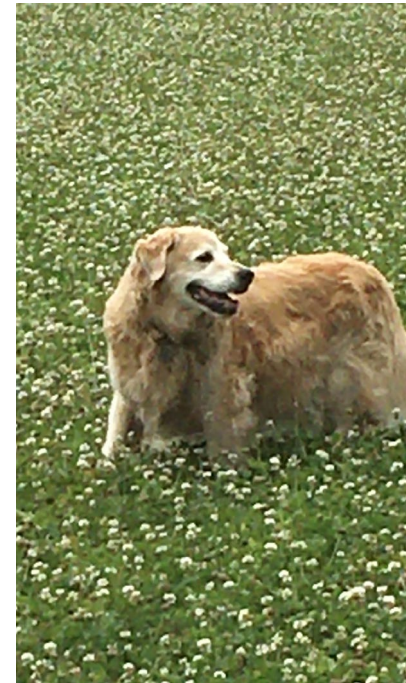
Pet Trends 2021

Pandemic puppies returned to shelters as COVID-19 restrictions lift

Pet adoptions rose 12 percent in 2020.

By Jenna Romaine | May 12, 2021

- Shelters are reporting high rates of returning and surrendering dogs adopted during the pandemic, as well as other pets.
- Some animal rescues have noted a large portion of the owners surrendering their dogs were first-time pet owners.
- The returns coincide with the easing and lifting of coronavirus restrictions in many states.



Source: Changing America, May 12, 2021

We Still Love the Great Outdoors in 2021

12 Months Ended May 2021

- Kayak Sales Up 30%
- Backpacking Tents Up 50%
- Sleeping Bags Up 28%

January 2021 Survey of 1,000 Consumers by NPD & Civic Science

- 48% More Hiking and Walking
- 32% Use Home Gym
- 13% Outdoor Cycling
- 11% More Golf

Athletic Footwear Sales +21% in 2021 vs 2019

Active Apparel Sales +27% in 2021 vs 2019

The RV Keeps Improving in 2021



We're Still There – September 10, 2021





“While there was a lot to want to forget last year, most notably my COVID related unemployment, there was also much to celebrate. Andy graduated from medical school and matched in orthopedic surgery. Max turned 13 and he and his buddy Murphy loved having the whole family under one roof for many months. 2020 gave us the opportunity to slow down and reflect on what’s most important – family, friends, health and happiness. It also gave us the opportunity to truly enjoy the great outdoors by spending lots of fun time at our RV at The Farm.”



Life – Happily Ever After – June 12, 2021

