

# *Kansas in Crisis*

## *What Does Historic Unemployment Mean for the Recovery?*

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**KU** INSTITUTE FOR  
POLICY &  
SOCIAL RESEARCH  
The University of Kansas



**IPSR: Social Science & Policy Research for the State of Kansas**

# Caveats

- These slides were completed on May 17, 2020
- Things will have changed by the time you see this presentation.
- This presentation is based on my readings and data from sources noted throughout.

## IPSR Goals for COVID-19 Crisis

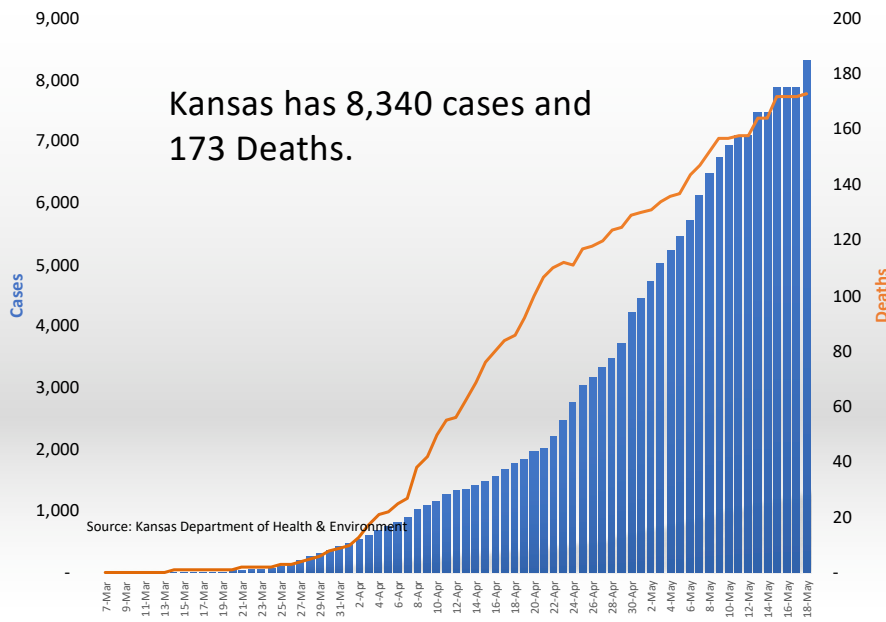
- Synthesize the data on the Coronavirus in Kansas
- Report economic indicators
- Inform the public and policymakers on these issues on a bi-weekly basis.
- Data and briefings available at <http://ipsr.ku.edu/covid19/>

# Overview

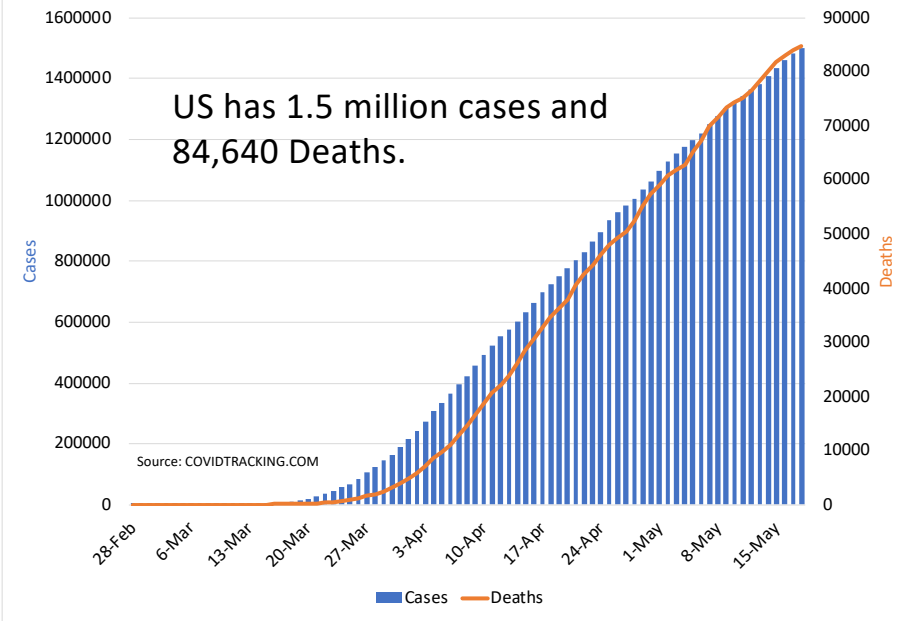
- Update on the Coronavirus in Kansas and the United States
  - Status of cases and deaths.
  - Testing Updates
- What's happened to the economy so far?
  - GDP, Unemployment
- What do the new data tell us about the future economy?
  - This is going to take much longer than we would prefer.

# The US and Kansas Have a Pandemic (data through May 18, 2020 4:00 PM)

Covid-19 Cases in Kansas: March 7- May 18, 2020



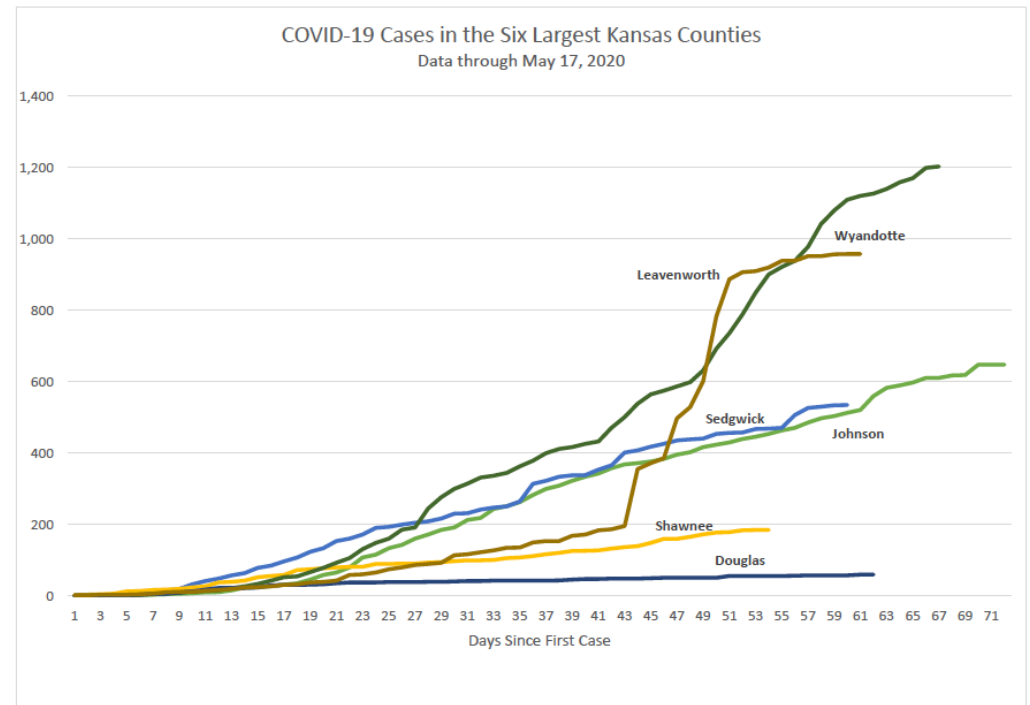
US COVID-19 Cases and Deaths, March 4 - May 18, 2020



In Kansas cases grew by 17% in the past week and deaths were 9% higher. Cases and deaths have slowed from the previous week. In the US cases grew by 12% and deaths were 13% higher in the past week. Both rates were slower than the previously.

# Growth in COVID-19 Cases Has Varied by County

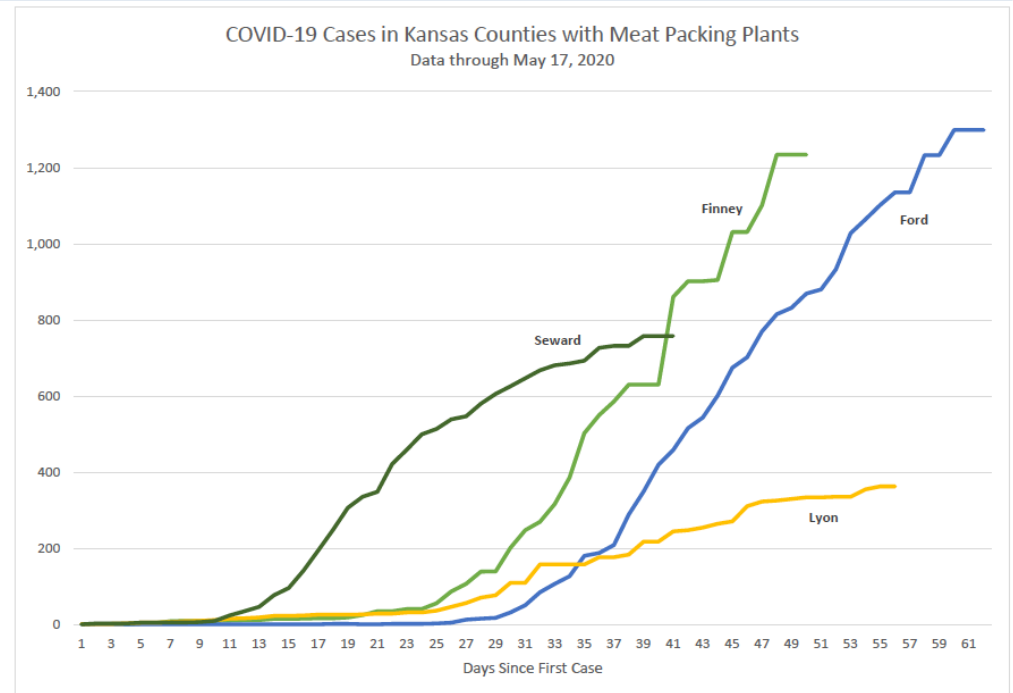
- In the six largest counties, growth rates have varied significantly.
  - Douglas and Shawnee counties have flattened the curve.
  - Johnson & Sedgwick growing at a slower rate.
  - Wyandotte has accelerating cases (prisons).



Source: Institute for Policy & Social Research, The University of Kansas; data from The New York Times.

# Counties with Meatpacking Have Steep Increases

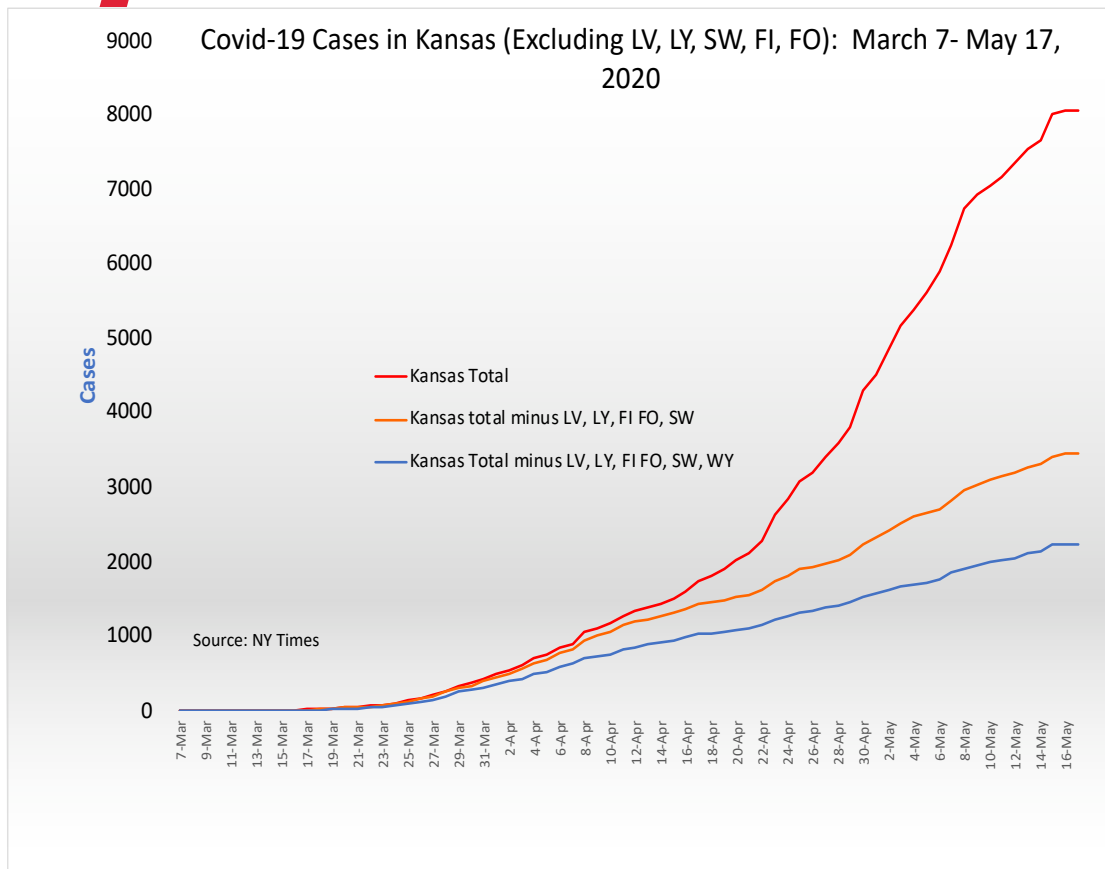
- In counties with meatpacking plants cases are growing but at a slower rate. Since May 9<sup>th</sup>:
  - Ford County 24% increase
  - Finney County 44% increase
  - Seward 15% increase



Source: Institute for Policy & Social Research, The University of Kansas; data from The New York Times.



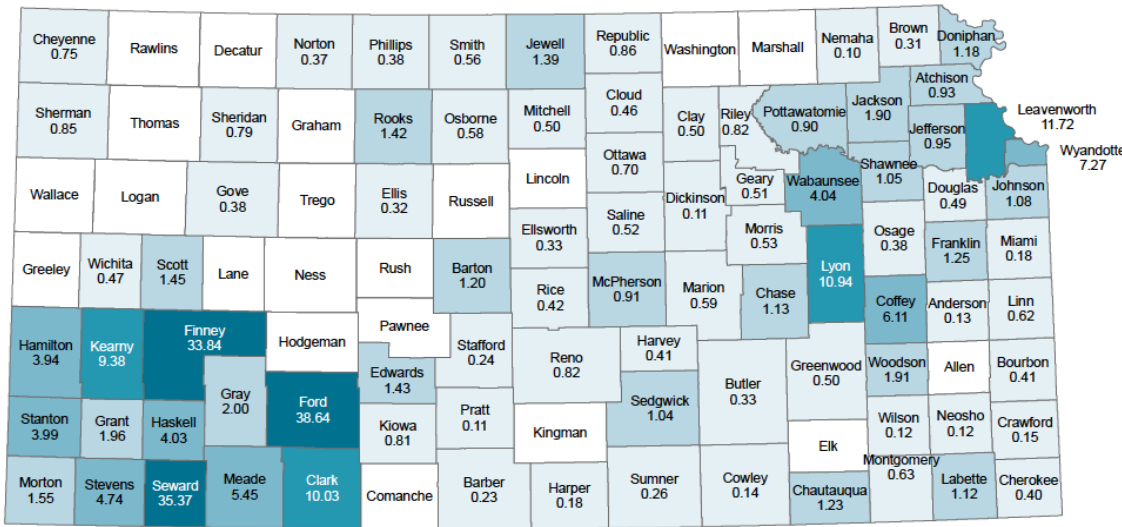
# What is the Net Contribution to Overall Kansas Cases?



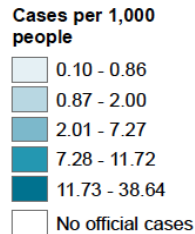
- Red line—Total Cases
- Orange line—remove meatpacking & prisons
- Blue line—remove meatpacking, prisons & Wyandotte County
- Over two-thirds of cases are in meatpacking & prisons
  - Slowing growth in rest of the state.

# Case Rates by County

COVID-19 Cases per 1,000 People in Kansas, by County as of May 17, 2020



Source: Institute for Policy & Social Research, The University of Kansas; data from The New York Times and U.S. Census Bureau.

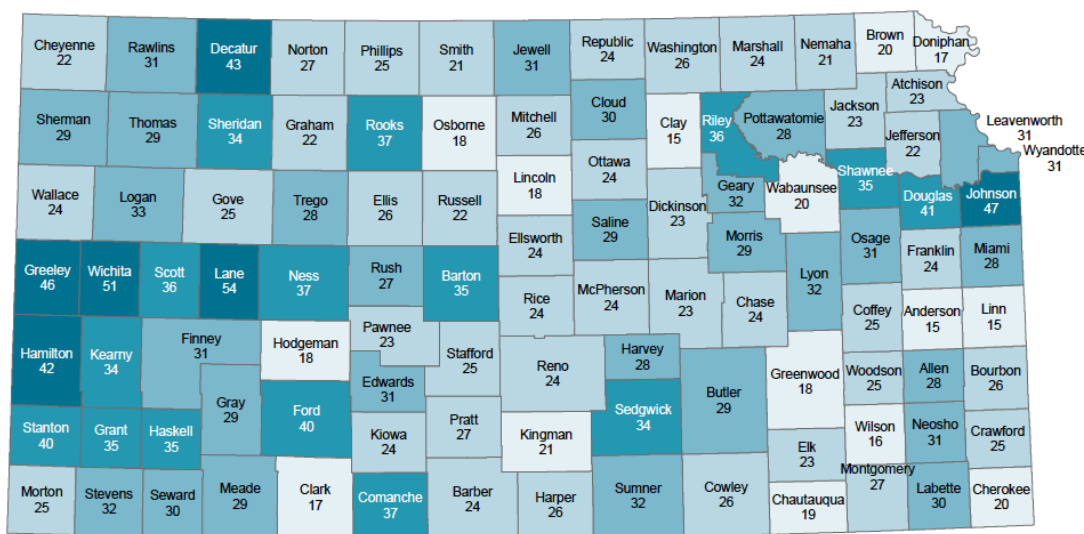


- Darker colors indicate that these counties have higher case rates:
  - Ford, Seward, and Finney Counties have case rates that are > 33 per 1,000
  - Sedgwick & Johnson Counties ~1 per 1,000
  - Leavenworth & Wyandotte Counties have case rates 7-12 per 1,000

Source: New York Times & US Census Bureau

# Social Distancing by County

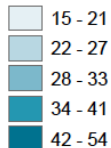
Average Social Distancing Index in Kansas, by County  
May 9 - 15, 2020



Source: Institute for Policy & Social Research, The University of Kansas; data from University of Maryland, COVID-19 Impact Analysis Platform, <https://data.covid.umd.edu/>.

Social Distancing Index is an integer from 0-100 that represents the extent residents and visitors are practicing social distancing. "0" indicates no social distancing is observed in the community, while "100" indicates all residents are staying at home and no visitors are entering the county.

Average Social Distancing Index

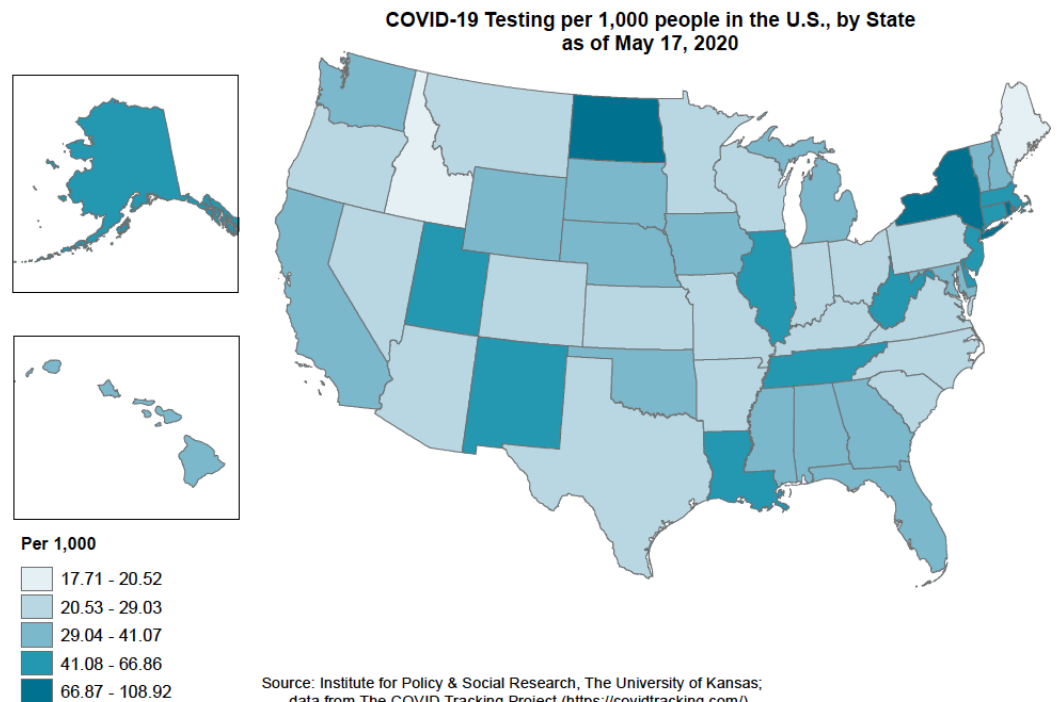


- Darker colors indicate that these counties have higher social distancing
- Ford County has higher distancing than Seward or Finney.
- Johnson has the highest social distancing rate of the most populous counties.
- Leavenworth, Wyandotte have lower social distancing despite higher case rates.

Source: University of Maryland Covid 19 Impact Platform

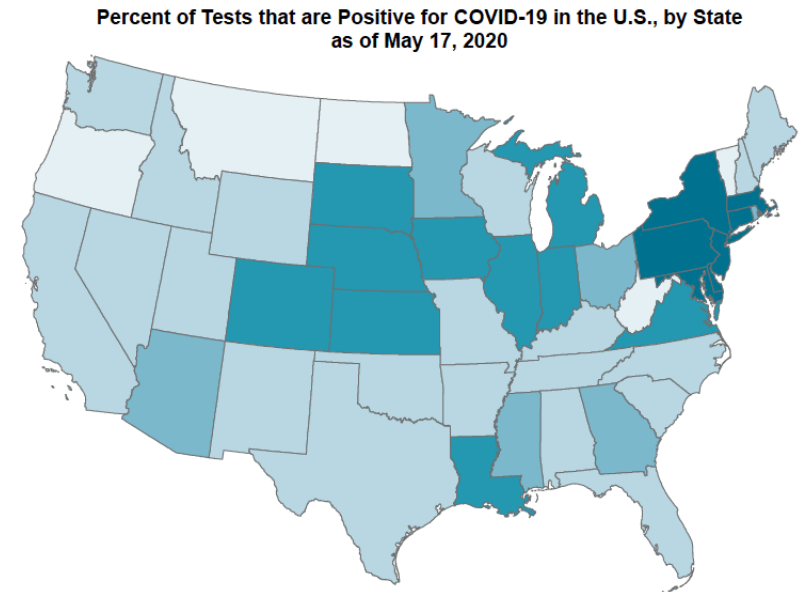
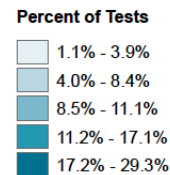
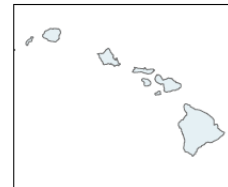
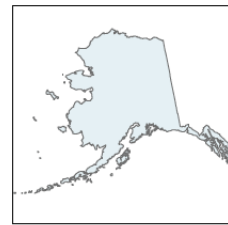
# Testing Has Been Uneven Across the Country

- Using data from the COVID Tracking project, we calculated the number of tests per 1,000 people in each state.
  - Kansas has performed only 23 tests per 1,000 people.
  - The US average is 38 tests per 1,000.



# Testing Results Are Also Uneven

- Calculated the share of positive tests.
  - 12.4% of Kansas tests are positive.
  - 10.2% of US tests are positive.
  - This is being driven by the meatpacking outbreak.



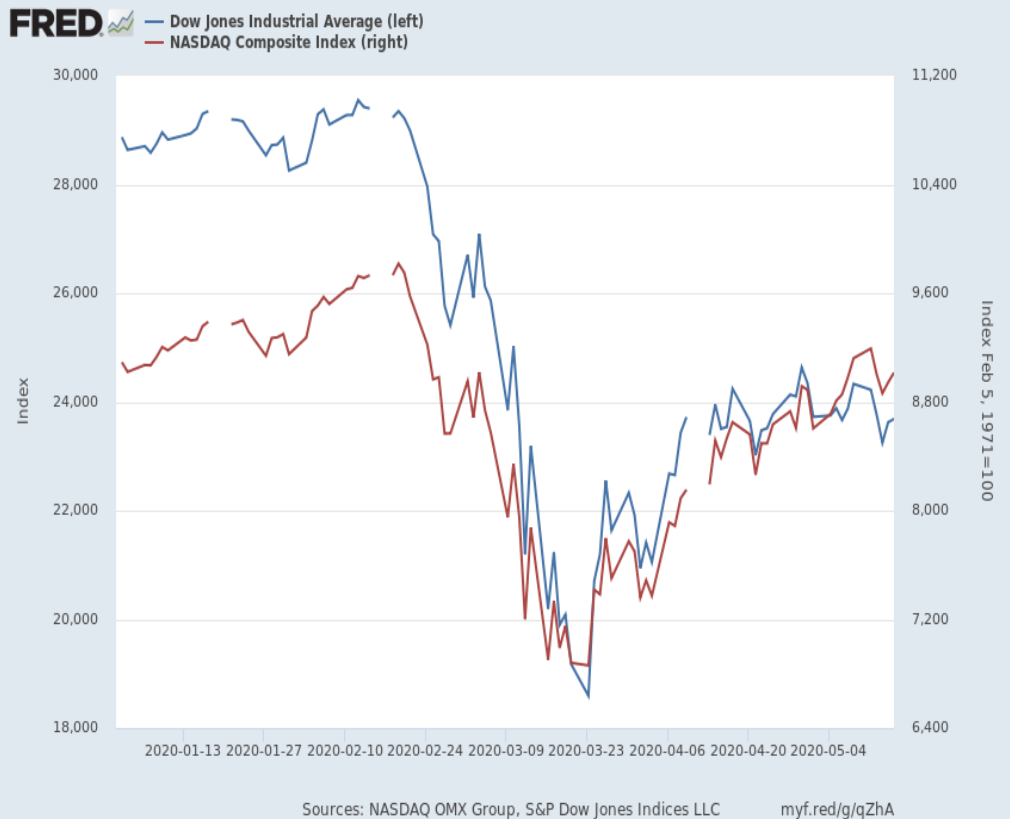
Source: Institute for Policy & Social Research, The University of Kansas; data from The COVID Tracking Project (<https://covidtracking.com/>).



# COVID-19 and the US & Kansas Economies

Massive Unemployment

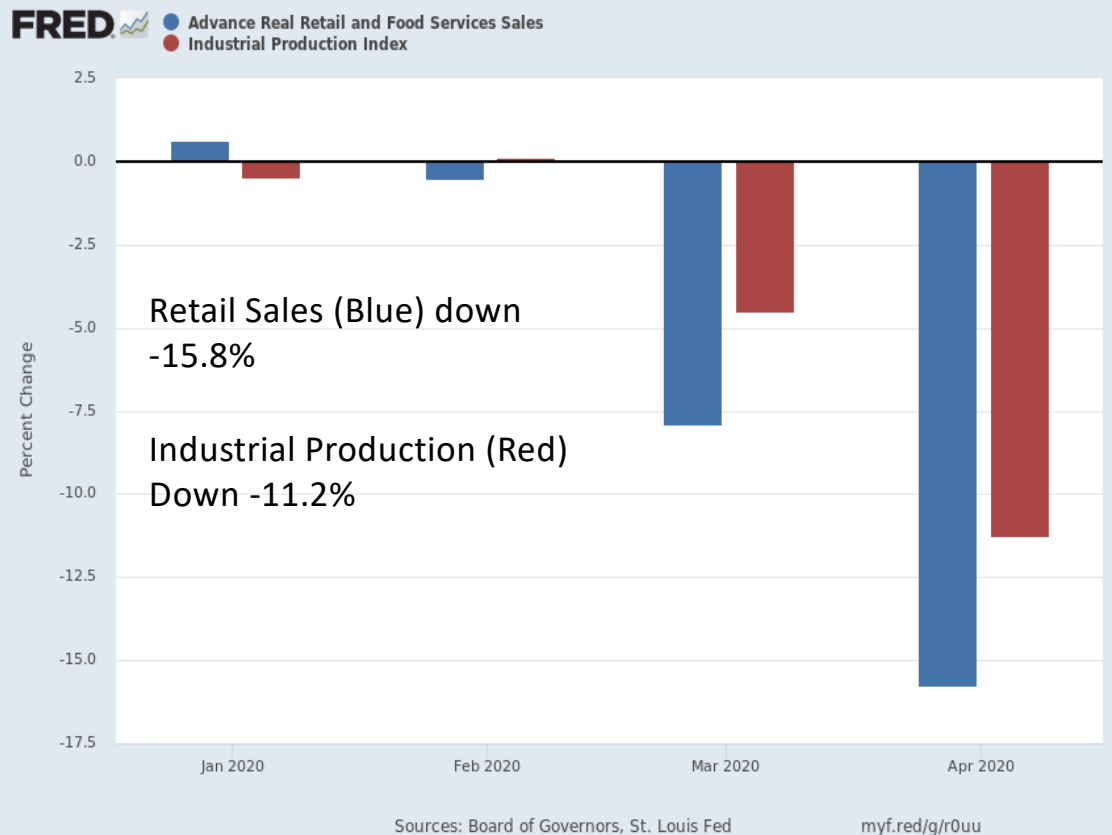
# The Stock Market: January 1 – May 15, 2020



Source: FRED <https://fred.stlouisfed.org/series/DJIA>

- The Dow Jones Industrial Average peaked at 29,348 on February 12<sup>th</sup>.
  - It bottomed out on March 23<sup>rd</sup>, and recovered to 23,685 on May 15<sup>th</sup>.
  - Down about 19% since the peak
- Nasdaq has tracked the Dow.

# April Economic Data: Industrial Production & Retail Sales

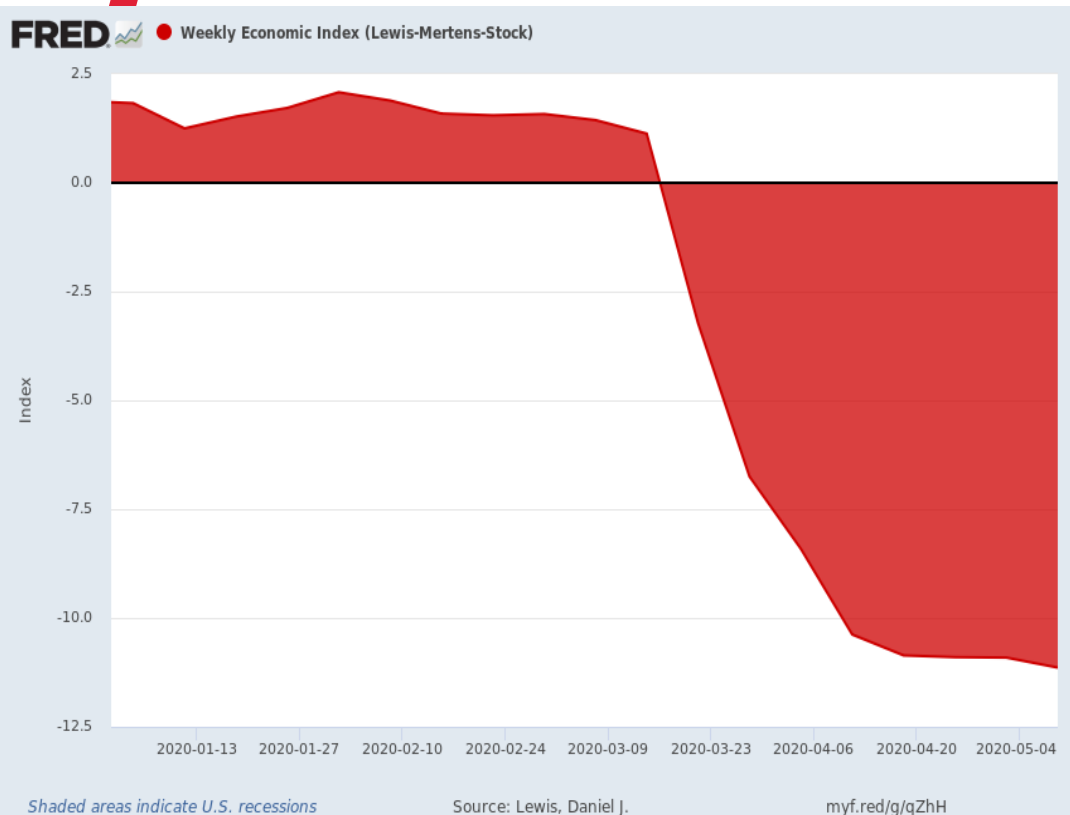


Source: <https://fred.stlouisfed.org>

- Retail Hard hit sectors:
  - Clothing -79%
  - Furniture -59%
  - Restaurants/Bars -30%
  - Motor Vehicles -13%
  - Electronics -60%
  - Miscellaneous Retail -14%
- Online sales increased 8.4%



# Weekly Economic Activity Index



- Lewis, Mertens & Stock have developed a Weekly Economic Activity Index that is scaled to 4<sup>th</sup> Quarter 2019 GDP growth.
  - The index has dropped to -11.4%
  - This indicates that GDP for this quarter is forecast to be nearly 12% lower for Q2.

Source: Lewis, Daniel J., Mertens, Karel and Stock, James H., Weekly Economic Index (Lewis-Mertens-Stock) [WEI], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/WEI>, May 17, 2020.

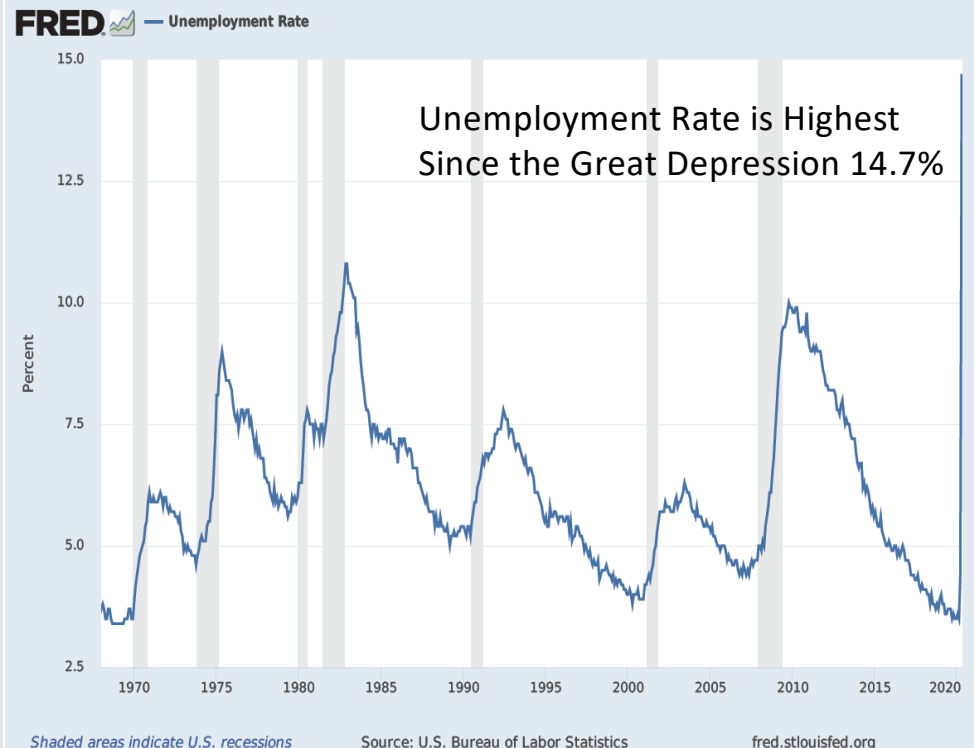
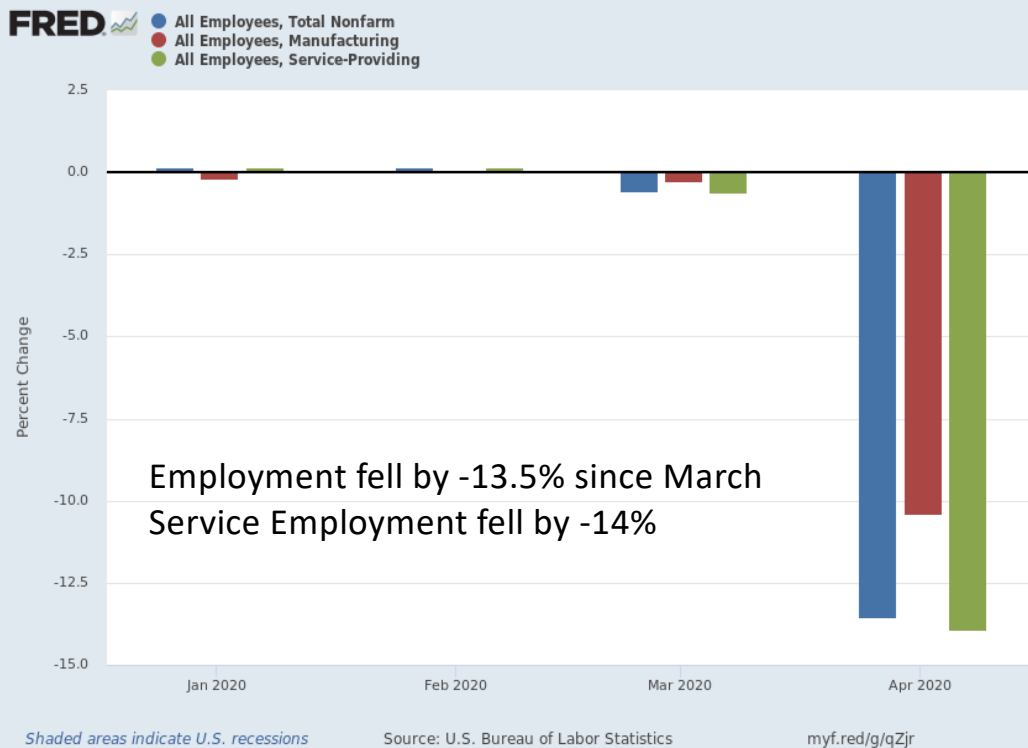
# Unemployment Rate Facts

- The monthly jobs report is based on two surveys:
  - Establishment Survey that reports total employment
  - Household Survey that reports total unemployment
- The Unemployment Rate is defined as the share of people looking for work divided by the labor force (employed + unemployed) (U-3 rate).
- The Unemployment rate does not count people who are discouraged workers and working part-time for economic reasons (U-6 rate).
  - Total unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force.

## Unemployment Rate Facts

- Our calculations of the state and county unemployment rate will be somewhere between U-6 than U-3.
- The US Unemployment Rate for April only includes data through mid-April.
- Both provide a similar picture of the employment situation in the US.
  - Employment fell by -13.5%
  - Unemployment rate is 14.7%--highest recorded since the Great Depression.

# Employment & Unemployment April, 2020



Source: <https://fred.stlouisfed.org/>

# A Tale of Two Downturns: This Time is Different

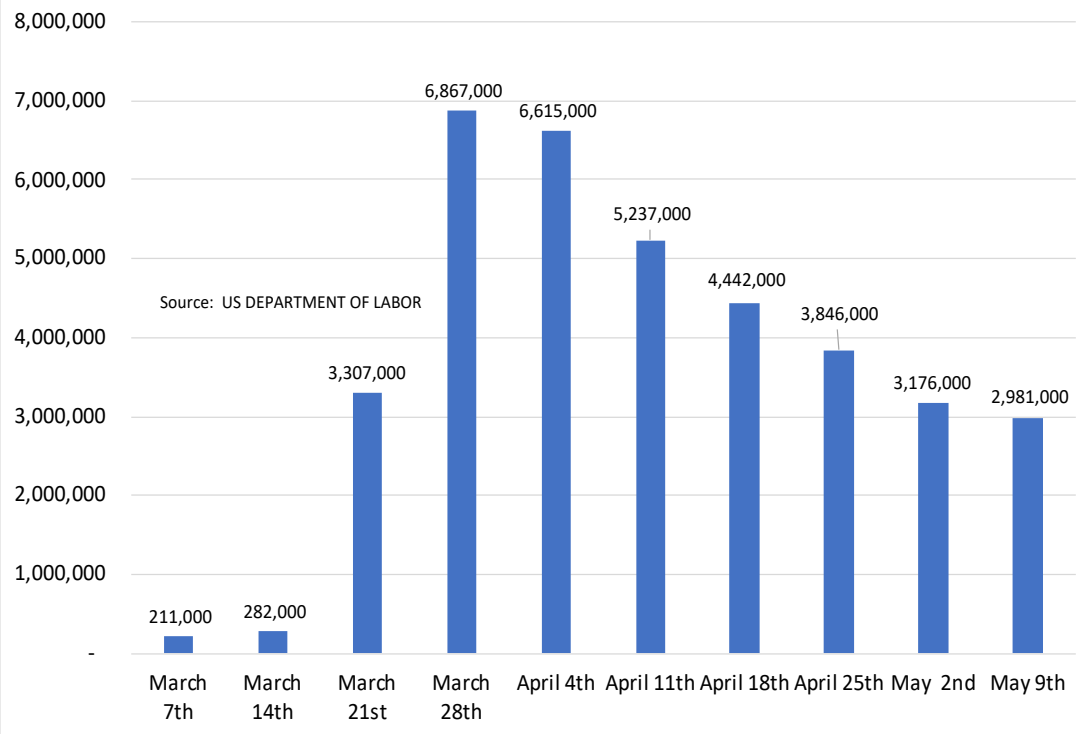
Unemployment by Characteristic	April, 2010	April, 2020
Total	9.9%	14.7%
Men, Age 20+	10.1%	13%
Women, Age 20+	8.2%	15.5%
Age 25+		
Less than High School	14.7%	21.2%
High School	10.6%	17.3%
Some College	8.3%	15.0%
Bachelor's Degree +	4.9%	8.4%
Temporary Layoff	8.9%	79.4%
U-6	16.6%	22.4%

- Women are more likely to be unemployed than men.
  - Since 1980 we've had "Mancessions"
- Only Bachelor's degree or higher have lower rates.
- Temporary Layoffs are higher.
- U-6 nearly a quarter of the labor force.

Sources: <https://www.bls.gov/news.release/pdf/empst.pdf>  
[https://www.bls.gov/news.release/archives/empst\\_05072010.pdf](https://www.bls.gov/news.release/archives/empst_05072010.pdf)

# Unemployment Claims Continue to Soar

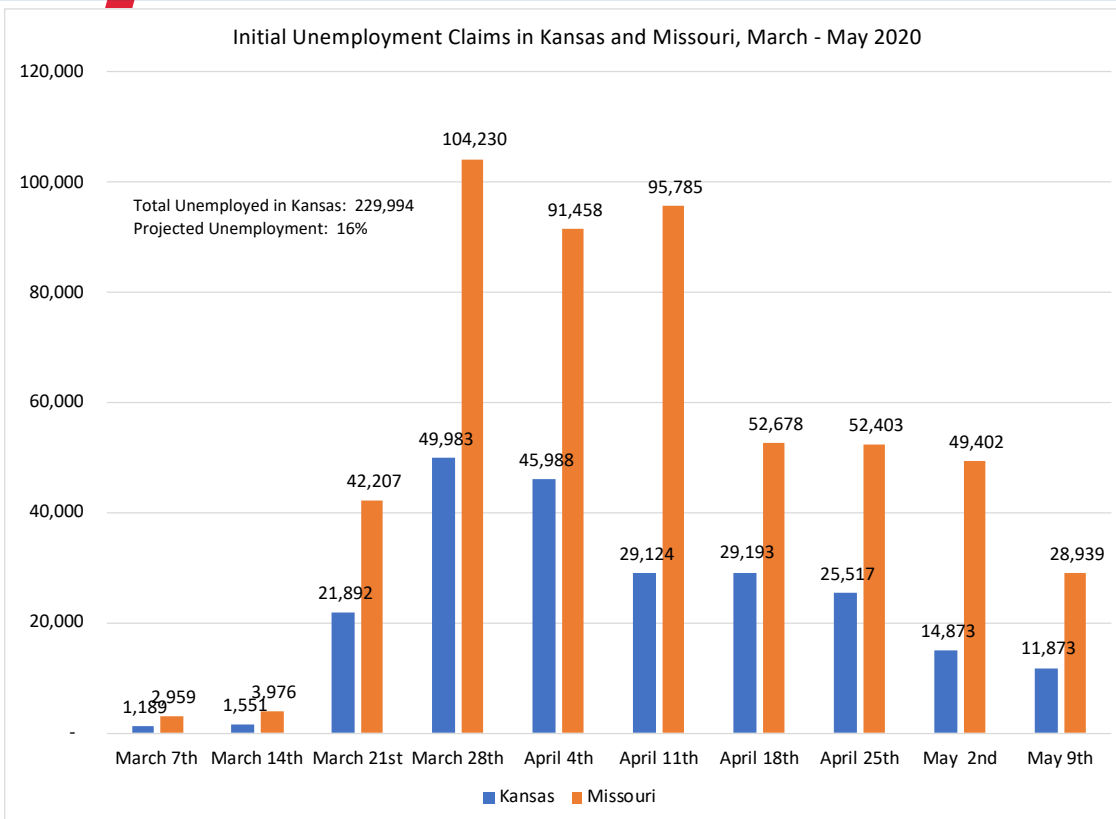
Initial Unemployment Claims (Seasonally Adjusted),  
Months of March - May 2020



Source: <https://www.dol.gov/ui/data.pdf>

- US Initial Unemployment Claims are still at historic highs
  - Over 36 million unemployed since March.
- Based on the US Labor Force in March 2020 the US the unemployment rate is over 16%
  - The majority of these workers have lost employer-backed health insurance.

# Unemployment Claims in Kansas and Missouri



Source: Calculations using KS and MO Department of Labor Data

- Since March 14<sup>th</sup> a total of 229,994 workers have filed initial unemployment claims in Kansas.
- Based on March Labor Force projections the Unemployment Rate in Kansas is approximately 16%.
  - Data from March 14<sup>th</sup> – May 9<sup>th</sup>

# Kansas Initial Unemployment Claims by Industry as a Share of Total Employment—Data as of April 25th

Industry	Unemployment within Industry
Government	1.03%
Health care and social assistance	14.41%
Manufacturing	34.50%
Retail trade	17.27%
Accommodation and food services	33.40%
Administrative & waste management	18.02%
Professional, scientific & technical serv.	9.02%
Transportation and warehousing	13.17%
Construction	14.49%
Finance and insurance	3.19%
Wholesale trade	8.32%
Other services	31.72%
Management of companies	0.96%
Educational services	28.80%
Information	13.86%
Real estate and rental and leasing	21.86%
Arts, entertainment, and recreation	50.74%
Mining and oil and gas extraction	19.20%
Utilities	1.05%

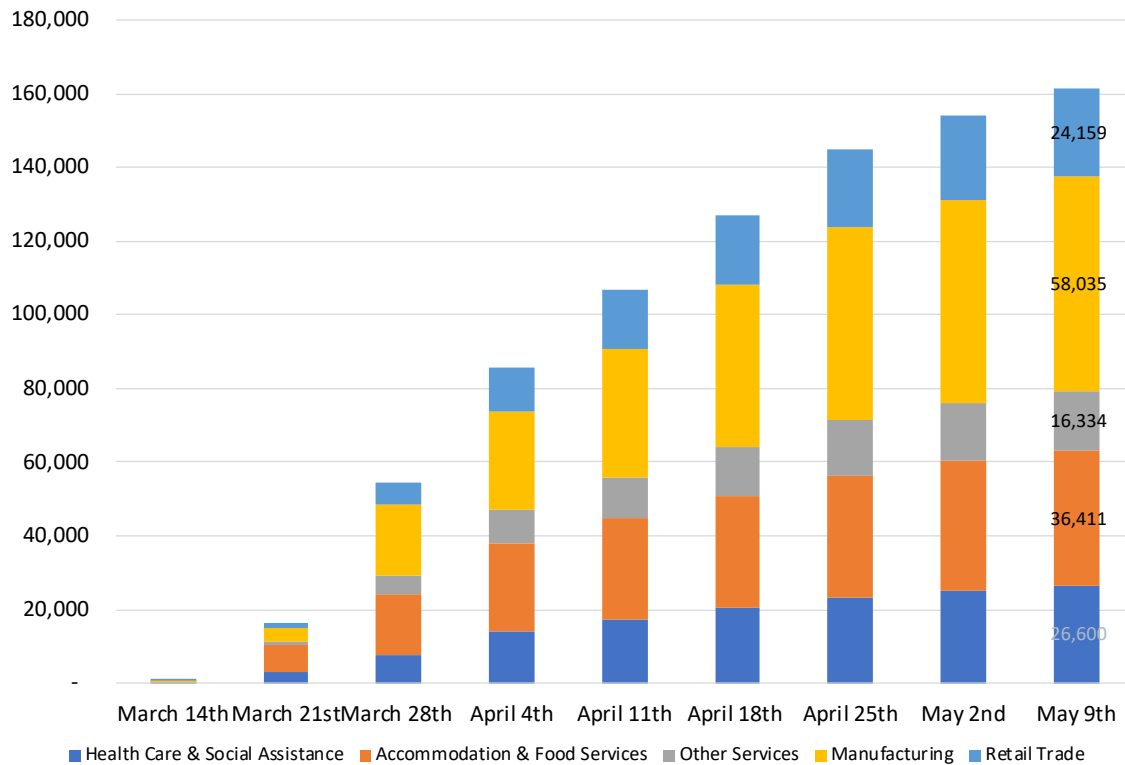
- I calculated the share of initial unemployment claims for all of March – May over total employment by industry in March, 2020.
  - Industries are ranked by share of total employment.
  - Government, health care, manufacturing and retail trade are 53% of total employment in the state.





# Unemployment Claims by Industry

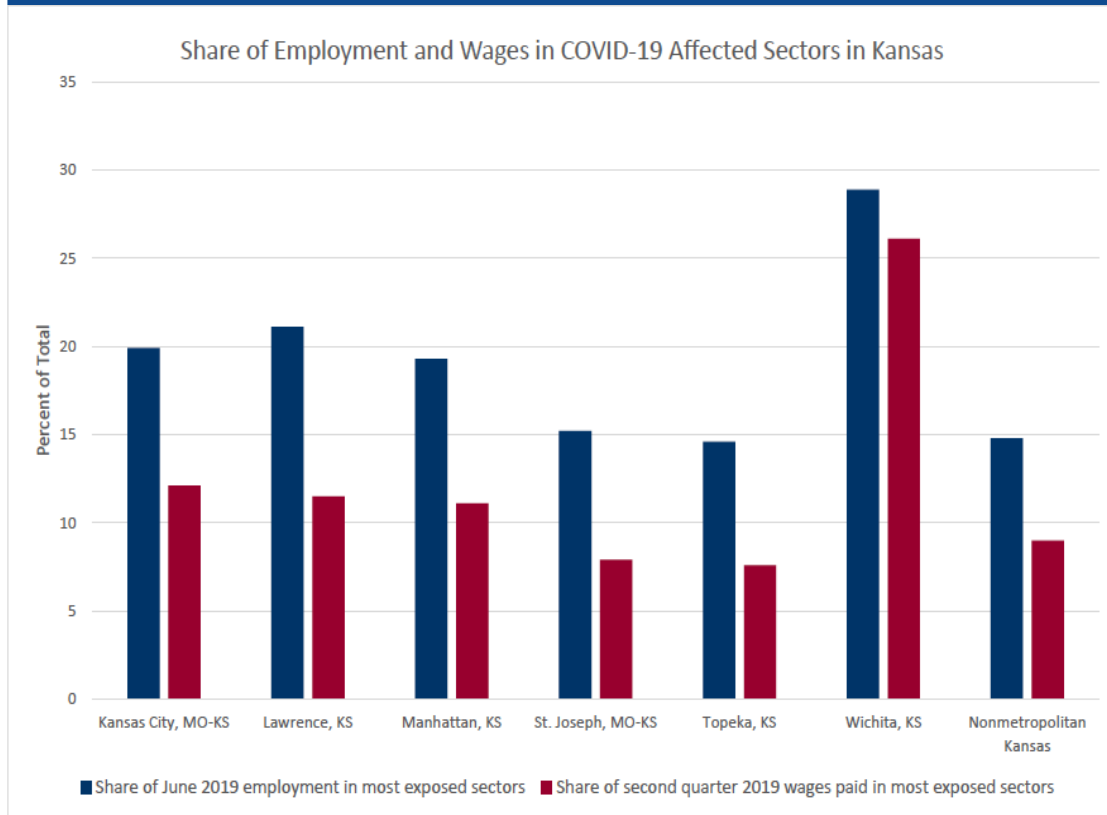
Kansas Industries with Largest Cumulative Job Losses March 14 - May 9



Source: Calculations using KS and MO Department of Labor Data

- Industries hardest hit include:
  - Manufacturing: 58,035
  - Accommodation & Food Services: 36,411
  - Health care & Social assistance: 26,600
  - Other Services: 16,334
- These five industries account for 71% of people who have lost their jobs.

# Share of Workers in Vulnerable Sectors



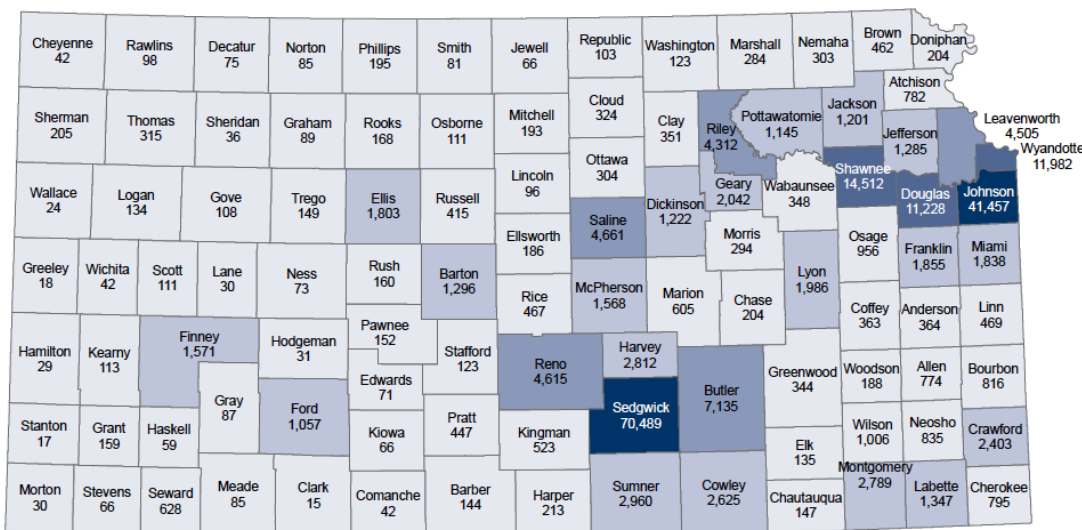
Source: Institute for Policy & Social Research, The University of Kansas; data from Bureau of Labor Statistics.

Source: Calculations using BLS Occupational Employment Statistics

- Sectors hardest hit include:
  - Restaurants & Bars
  - Travel & Transportation
  - Entertainment
  - Personal Services
  - Retail
  - Manufacturing
- Wichita, Lawrence & the KC Metro have over 20% employment in these vulnerable sectors.

# Cumulative Unemployment Claims by County

Initial Jobless Claims in Kansas, by County  
March 21 - May 9, 2020

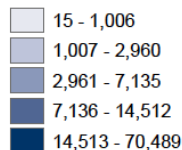


## • Top 5 Counties by Cumulative Initial Claims:

- Sedgwick 70,489
- Johnson 41,457
- Shawnee 14,512
- Wyandotte 11,982
- Douglas 11,228
- Data calculated March 21<sup>st</sup> – May 9<sup>th</sup>

Source: Institute for Policy & Social Research, The University of Kansas; data from Kansas Department of Labor, Labor Market Information Services.

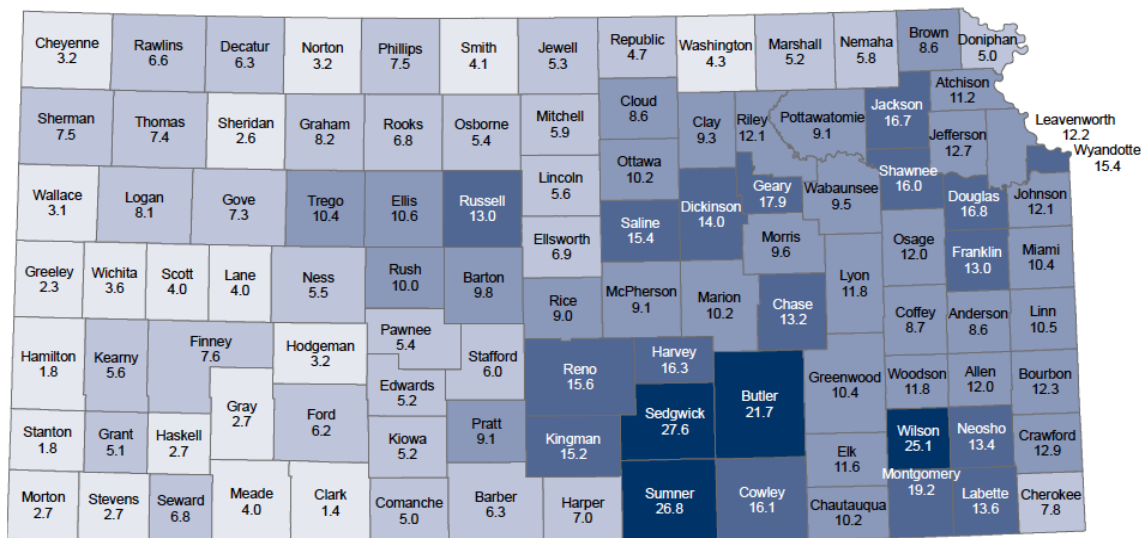
Initial Claims, March 21 - May 9



Source: IPSR calculations using Kansas Department of Labor Data

# Estimated Unemployment Rate by County

Projected Unemployment Rate in Kansas, by County  
March 21 - May 9, 2020

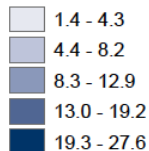


- Top 5 counties by unemployment rate:
  - Sedgwick 27.6%
  - Sumner 26.8%
  - Wilson 25.1%
  - Butler 21.7%
  - Montgomery 19.8%
- Unemployment rate for the state ~ 16%

Source: Institute for Policy & Social Research, The University of Kansas; data from Kansas Department of Labor, Labor Market Information Services and U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics.

Projected unemployment rate derived using initial jobless claims from March 21 - May 9 and preliminary, not seasonally adjusted, civilian labor force for March 2020.

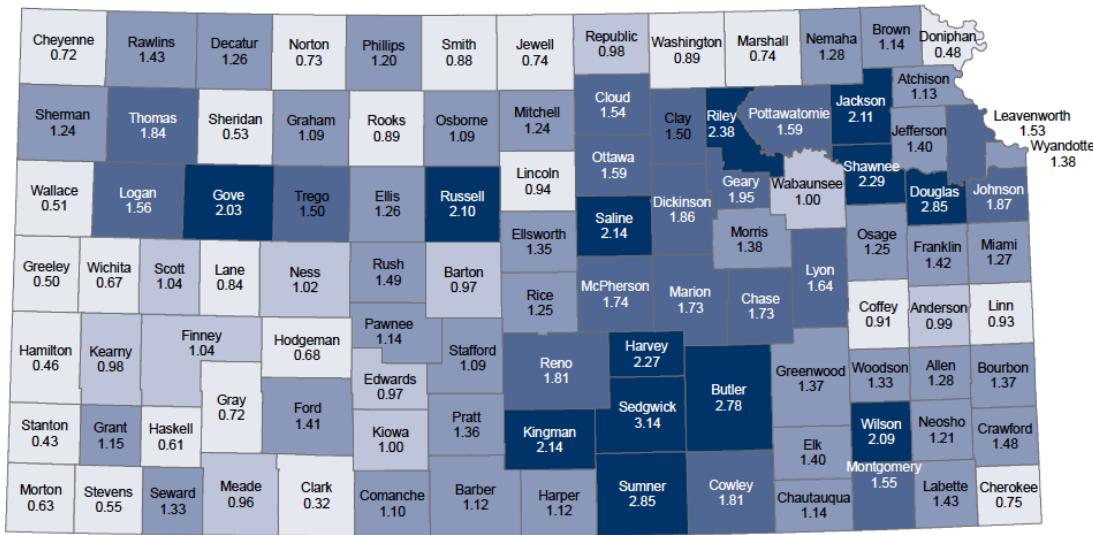
Projected Unemployment Rate



Source: IPSR calculations using Kansas Department of Labor Data

# Projected Unemployment Compared to Peak, 1976-2018

Ratio of Projected Unemployment Rate to Historic Maximum in Kansas, by County



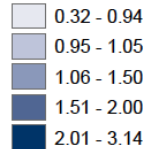
- Unemployment is this many times higher than previous maximum unemployment
- Darker colors > 1 times higher
  - Sedgwick 3.14
  - Douglas 2.85
  - Shawnee 2.29
  - Wyandotte 1.38
  - Johnson 1.87

Source: Institute for Policy & Social Research, The University of Kansas; data from Kansas Department of Human Resources, Kansas Department of Labor, Labor Market Information Services and U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics.

Projected unemployment rate derived using initial jobless claims from March 21 - May 9 and preliminary, not seasonally adjusted, civilian labor force for March 2020.

Historic maximum determined for each county from annual unemployment rates from 1976-2018.

**Ratio**



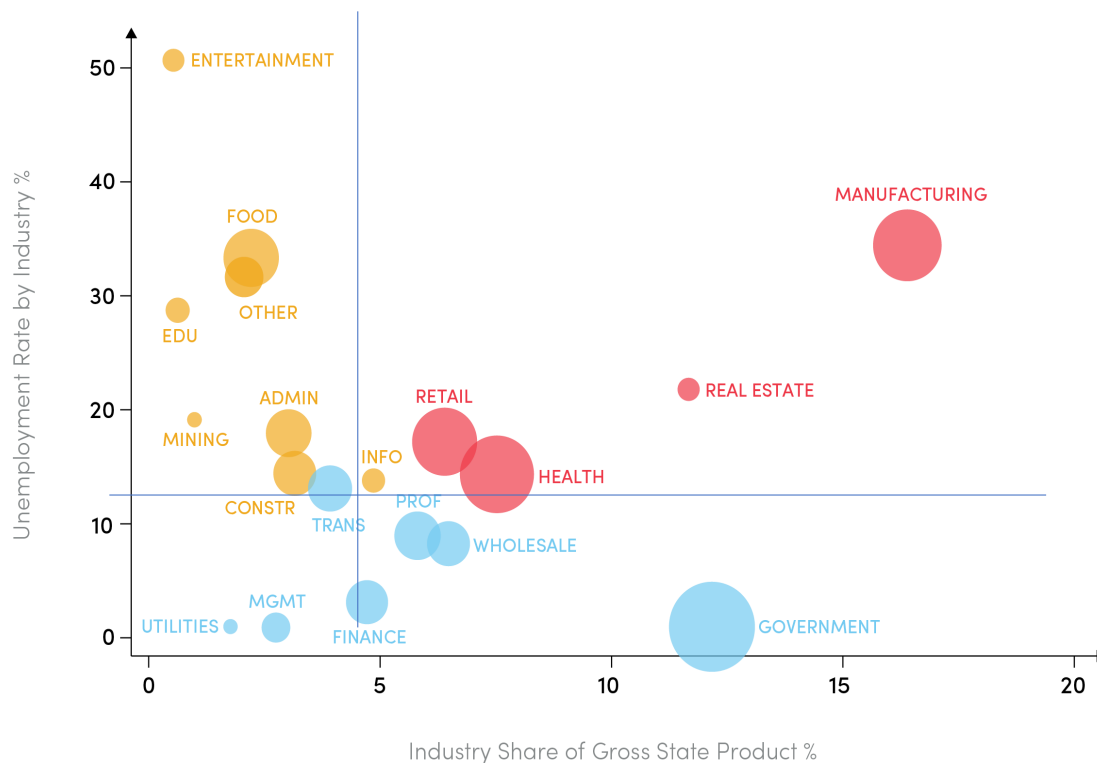
Source: IPSR calculations using Kansas Department of Labor Data

## Historically Bad Economic Numbers

- GDP = Consumption (68%) + Investment (17%) + Government (18%) + Net Exports (-2.9%)
- GDP fell **-4.8%** in Q1 2020
  - Consumption fell -5.6%
- Unemployment rate increased to **14.7%** in April
  - The highest recorded rate in our lifetimes
  - This is undercounting actual unemployment
- Industrial Production fell **-11.2%** in April
- Retail Sales fell **-15.8%** in April

# Unemployment Relative to Gross State Product

Unemployment Rate Relative to Industry Share of Gross State Product  
Weighted by Employment Share

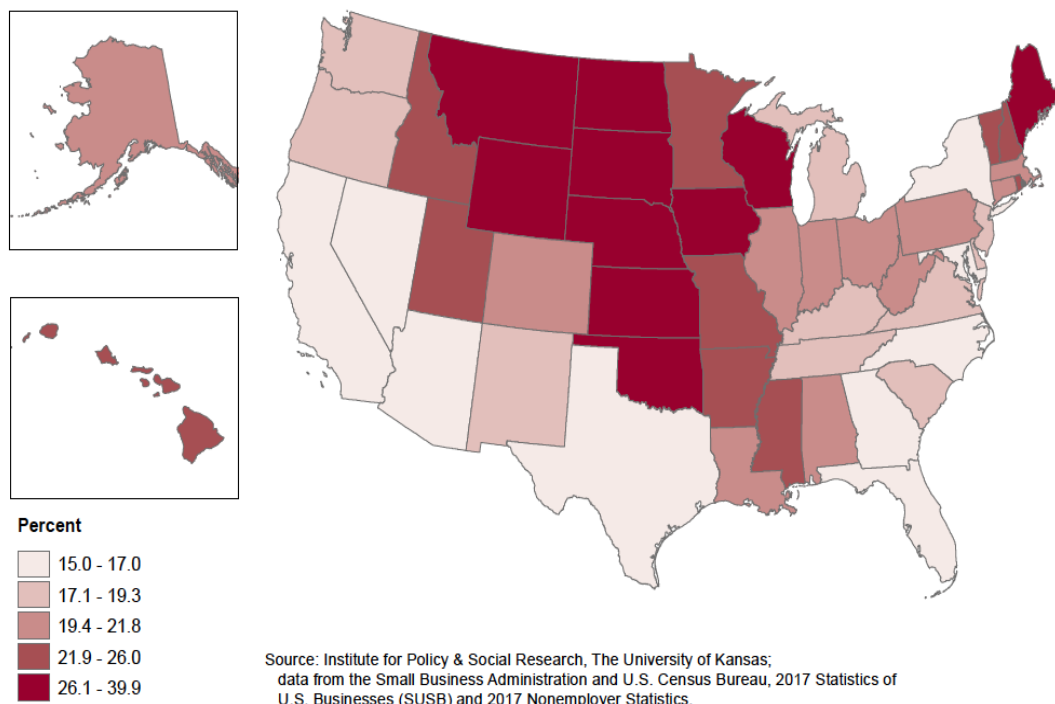


SOURCE: AUTHOR'S CALCULATIONS.

- Sectors that contribute most to Kansas growth with above average unemployment:
  - Manufacturing  
34.5% UE & 16% of GSP
  - Health Services  
14.4% UE & 7.5% of GSP
  - Retail  
17.3% UE & 6.4% of GSP

# Paycheck Protection Program Benefited Kansas

PPP Loans as a Percent of Small Businesses and Nonemployers in the U.S., by State as of May 16, 2020



Source: IPSR calculations using 2017 Statistics of US Businesses  
Small Business Pulse: <https://portal.census.gov/pulse/data/>

- Total of \$9.2 billion in loans in Kansas.
  - 74,475 Loans made
  - Average loan 124,072
- The need is great:
  - 55,682 Small Businesses
  - 201,268 Nonemployer Establishments.
- Only 29% of Kansas firms were funded (22% in US)
- Small Business Pulse: 38.7% of Kansas small businesses report a large negative effect, US average is 51%.





# A Tale of Two Counties

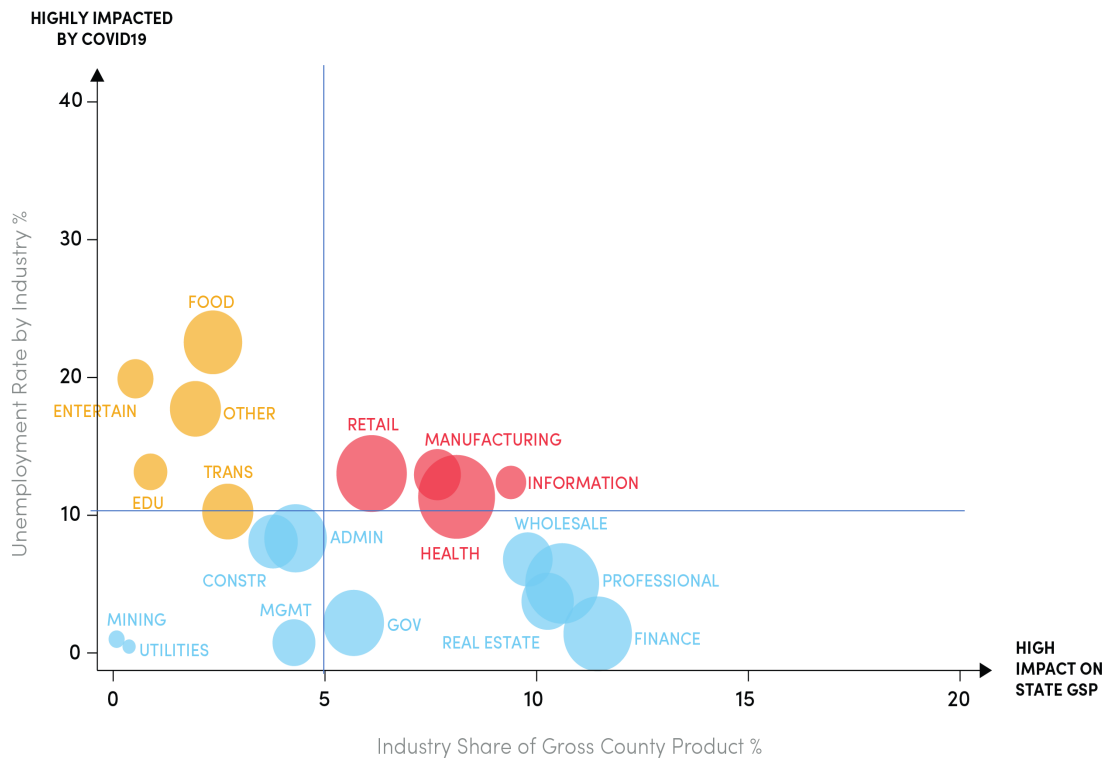
Johnson & Sedgwick

## Compare Unemployment, Share of County Product

- Data are from 2018 Bureau of Economic Analysis
  - Since the gross product and employment data are from 2018, this analysis is more suggestive.
- As such, these are approximations, but provide useful information on the overall impact on the county level.
- Johnson County is economically well-balanced
- Sedgwick County faces significant difficulty

# Unemployment Relative to Gross Product—Johnson County

Unemployment Rate Relative to Industry Share of Gross County Product  
Weighted by Employment Share - Johnson County

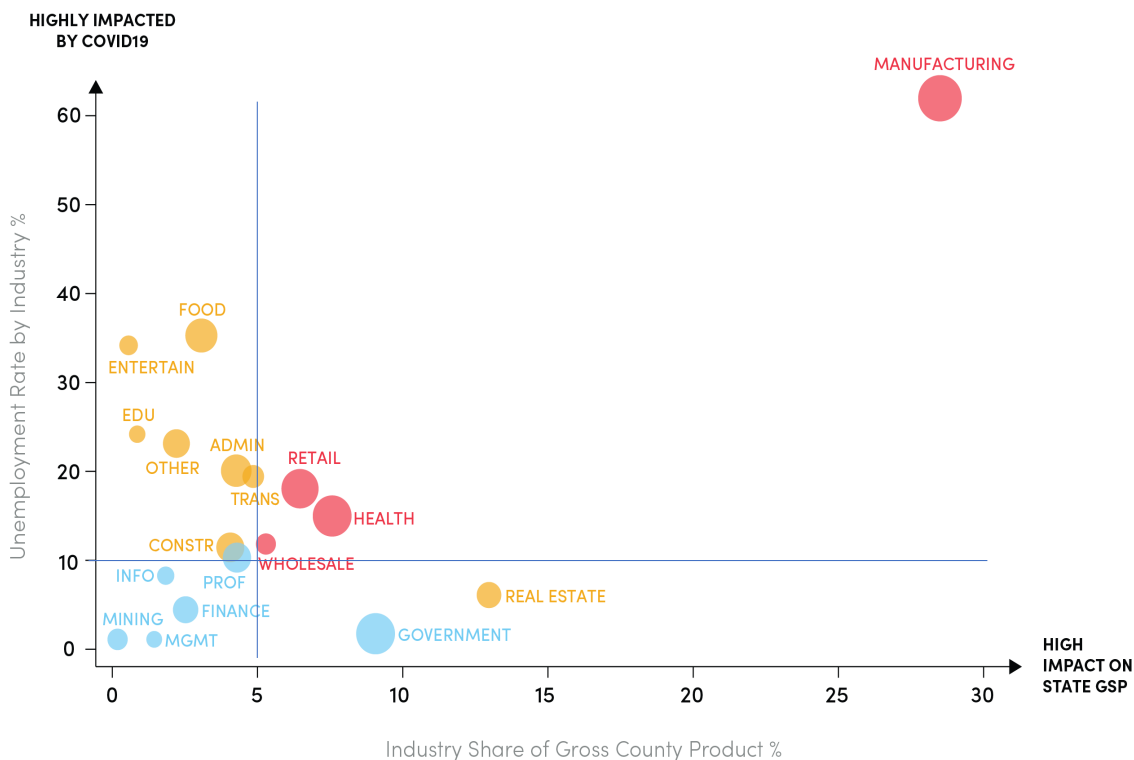


Source: Author's calculations.

- Johnson County is well-positioned to weather this crisis.
  - Major sectors as a share of economic product including finance, professional, whole sale, and real-estate have low unemployment.
  - Health care, retail, manufacturing, and information are struggling.

# Unemployment Relative to Gross Product—Sedgwick County

Unemployment Rate Relative to Industry Share of Gross County Product  
Weighted by Employment Share - Sedgwick County

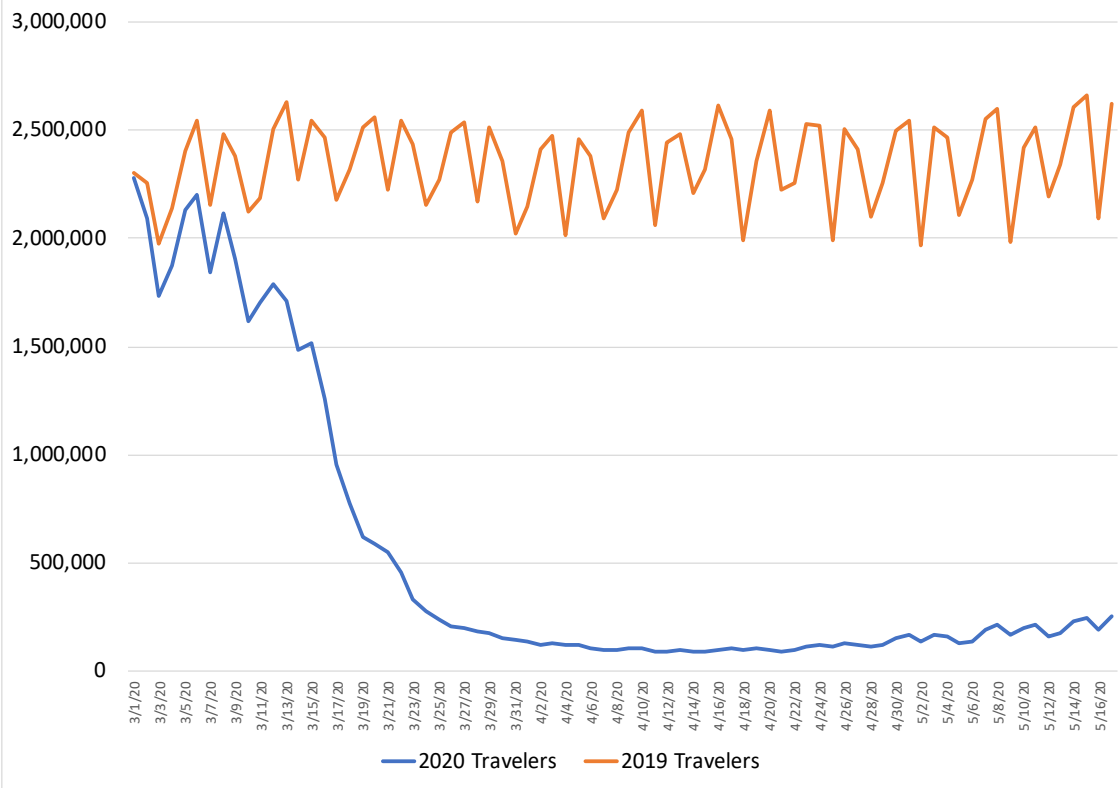


Source: Author's calculations.

- Sedgwick County scale has changed.
  - Manufacturing has 60% unemployment and makes up nearly 30% of economic product.
  - Only government and real estate are doing OK
  - Health & Retail are also in trouble.

# Air Travel has been Grounded

Travelers Passing Through TSA Checkpoints in March/April 2020 v. 2019



Source: <https://www.tsa.gov/coronavirus/passenger-throughput>

- In 2019 over 2.6 million people traveled by air per day in the US.
- On May 17th, only 253,807 people traveled by air.
  - This is a 91% decrease in air travel.
  - Less air travel means less demand for aircraft.
  - Southwest CEO Gary Kelly: “We don't need the Max right now. We don't need all the airplanes that we have”

# Boeing's Persistent Problems and Sedgwick County

- Boeing had no new orders in April, 2020 and its backlog of order has fallen below 5,000 first the first time since 2013
  - 304 cancellations and only 49 new orders for the year.  
<https://www.wsj.com/articles/boeing-orders-slip-below-5-000-on-max-cancellations-11589295600>
- In an interview with NBC on May 12, Boeing's CEO predicted that a large US airline is likely to go out of business because of the pandemic and said that: "Apocalyptic does accurately describe the moment." <https://www.cnn.com/2020/05/12/business/boeing-orders-deliveries-coronavirus/index.html>
- Boeing supplier, Spirit AeroSystems laid off 1,450 Kansas employees on May 1<sup>st</sup>
  - <https://www.marketwatch.com/story/boeing-supplier-spirit-aerosystems-lays-off-1450-kansas-employees-2020-05-01>



# The Shape of the Recovery

The Fed Warns Against Inaction

# The Fed Warns Against Inaction

## *Powell Warns of a Possible Sustained Recession From Pandemic*

Source: <https://www.nytimes.com/aponline/2020/05/13/business/bc-us-federal-reserve-powell.html?searchResultPosition=3>

By The Associated Press

May 13, 2020

- Powell cautioned that numerous bankruptcies among small businesses and extended unemployment for many people remain a serious risk.
- “Deeper and longer recessions can leave behind lasting damage to the productive capacity of the economy,” the chairman warned in his prepared remarks before holding an online discussion with the Peterson Institute for International Economics. “Avoidable household and business insolvencies can weigh on growth for years to come.”



# The Fed Warns Against Inaction

## *Fed Chair Says Economic Recovery May 'Stretch' Through End of 2021*

Jerome H. Powell, who heads the central bank, predicted a slow economic recovery and reiterated that policymakers may need to do more.

By Jeanna Smialek

May 17, 2020

- Jerome H. Powell, the Federal Reserve chair, said that the United States would have a slow recovery from what he called the “biggest shock that the economy’s had in living memory,” suggesting that a full rebound from virus-induced lockdowns could take until the end of 2021.

Source <https://www.nytimes.com/2020/05/17/business/economy/fed-powell-economic-recovery.html>

# The Fed Warns Against Inaction

- “For the economy to fully recover, people will have to be fully confident, and that may have to await the arrival of a vaccine.”
- “It may well be that the Fed has to do more,” he said. “It may be that Congress has to do more. And the reason we’ve got to do more is to avoid longer-run damage to the economy.”
- Asked whether state and local governments needed more congressional assistance, he pointed out that many provided crucial services and were required to balance their budgets, so such a policy “deserves a careful look.”

Source <https://www.nytimes.com/2020/05/17/business/economy/fed-powell-economic-recovery.html>

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# Covid-19 and Federal Reserve Survey of Economic Well-Being

Figure A. At least doing okay financially (by job loss or work hours reduced since March 2020)



Note: April 2020 supplemental survey data.

Table 32. Financial resiliency measures (by year and employment disruptions since March 1)

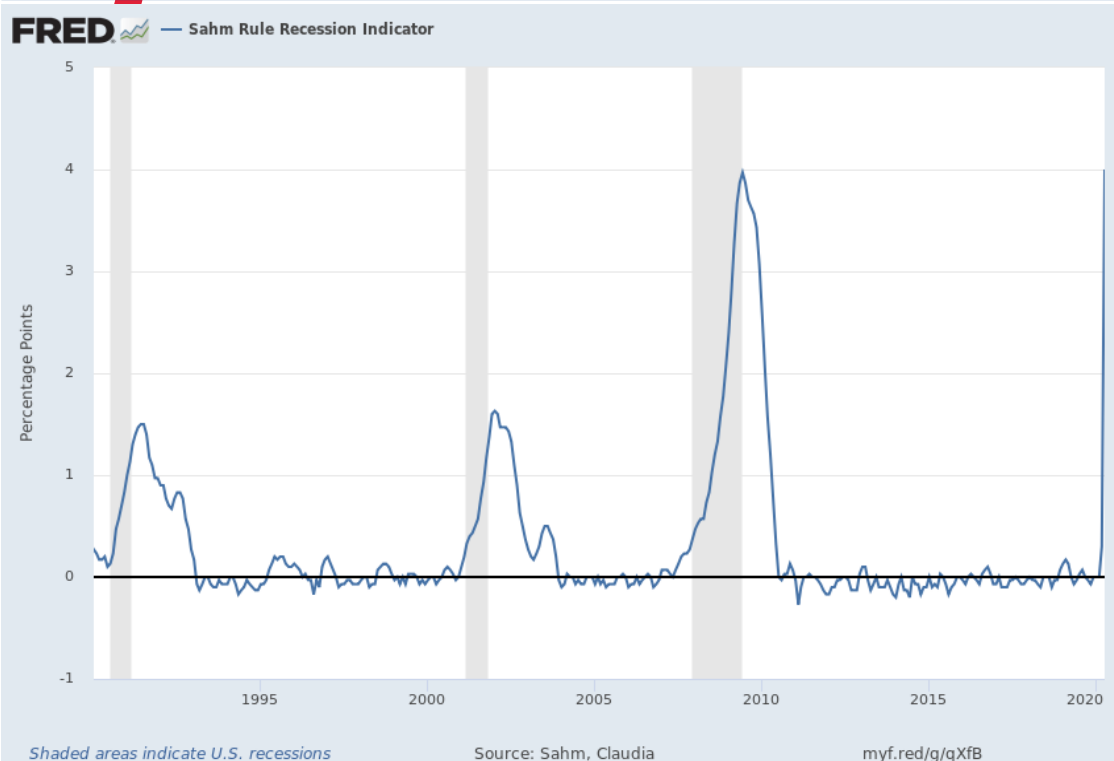
Year and employment disruption	Percent	
	Able to pay all current month's bills in full	Would pay \$400 expense with cash or equivalent
<b>2019 SHED</b>		
Overall	84	63
<b>2020 April supplement</b>		
Lost job or hours reduced	64	46
No job loss or hours reduction	85	68
Overall	81	64

Note: Data from both the 2019 SHED and April 2020 supplemental survey.

Source: <https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf>

- Half of those who lost their jobs are financially resilient.
- Less than half with a lost job (46%) could pay a \$400 expense with cash.
  - Only 68% of those with no job loss could do so.

# We are Definitely in a Recession



Source: <https://fred.stlouisfed.org/>

- **Sahm Rule Recession Indicator** signals the start of a **recession** when the three-month moving average of the national unemployment rate (U3) rises by 0.50 percentage points or more relative to its low during the previous 12 months.

## Shape of the Recovery

- V-shape is unlikely—we do not have the virus under sufficient control for people to feel safe returning to “normal.”
- Forecasting firms have argued for a “Swoosh-shaped recovery:



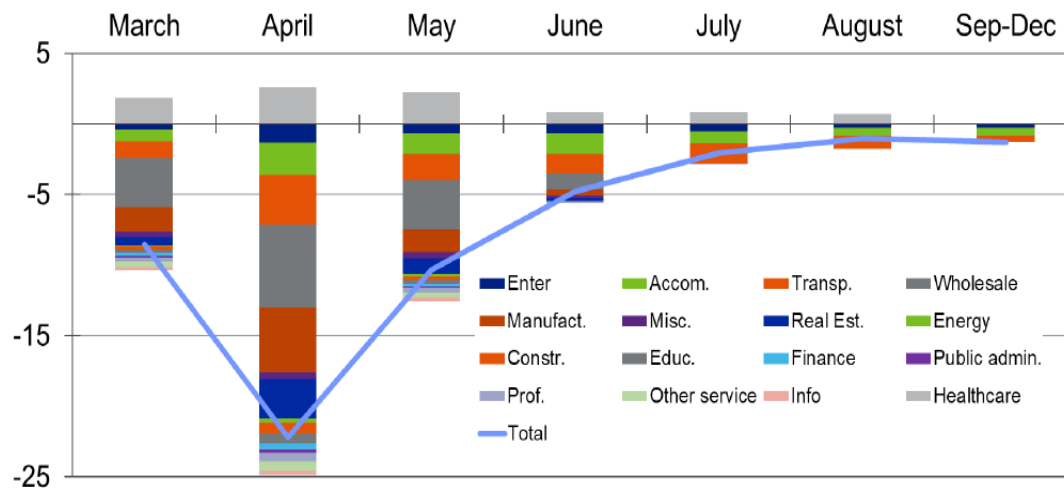
- Without additional federal stimulus, we will likely have an

**L** shaped recovery.

# Moody's is Forecasting a Swoosh Recovery

## Lockdown Hits Business Hard

Deviation from typical U.S. GDP, annual comparisons by industry 2020



Source: Moody's Analytics

MOODY'S ANALYTICS

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Source: [https://ma.moody's.com/rs/961-KCJ-308/images/Reis%20Quarterly%20Briefing%20Slides%202020Q1\\_vF.pdf](https://ma.moody's.com/rs/961-KCJ-308/images/Reis%20Quarterly%20Briefing%20Slides%202020Q1_vF.pdf)

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- Similar to what we've seen in the Kansas data, Services and Manufacturing will be hit hard.
- Forecasted downturn for Q2 is -25%

# The Argument for a Swoosh

- Some people are willing to venture out and return to economic activity.
  - This could be aided by improved testing and tracing.
- Good news:
  - Kansas got \$9.2 billion from the PPP
  - As of now only 7.2 of 36 million unemployed are permanently laid off. The majority expect to return to their old jobs.
  - Fed's Mainstreet Lending program will come online soon allowing for mid-sized companies to borrow directly from the Fed at 3% interest rates.

## The Argument for the L

- Unless the consumer feels confident and has a job, they're not going to spend money.
- The Federal government fails to support state and local governments leading to layoffs in the government sector. This is ~20% of the Kansas economy.
- Uncertainty will cause the recession to drag on, and more people will lose their jobs permanently.
- It's easier to permanently destroy the productive capacity of the economy than it is to rebuild it.



## Two Dates Loom Large in the Near Term

- July 1, 2020

- This is the start of the new fiscal year. If state and local governments do not receive some federal support, the government sector will have to start laying off workers, increasing the jobless numbers.

- August 1, 2020

- This is the end of the \$600 per week unemployment payments. Given the forecast, it is very likely that we will have double-digit unemployment.

- Fed Chair Powell suggests that we need additional policy intervention.

- There's no time like the present.

## Economic Impacts of COVID-19

- We will be posting weekly updates on data.
- We are moving to update these briefings every two weeks.
- Data and briefings are featured on the IPSR website:  
<http://ipsr.ku.edu/covid19/>
- We will also monitor the policy responses.
- I hope that you all stay healthy!

Thank You!

**Thank You** *Mahalo*  
*Kiitos*  
*Tack*  
*Grazie* **T** *Toda*  
*Obrigado* **hanks**  
*Takk* **Merci**  
**Danke** **Gracias**