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**April 27, 2020** 



The University of Kansas



### Caveats

- These slides were completed on April 27, 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.





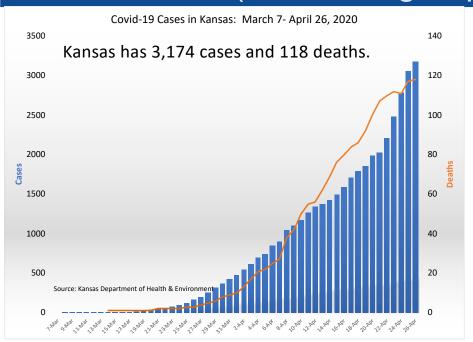
### Overview

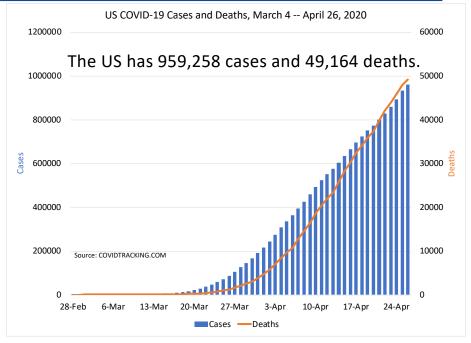
- Update on the Coronavirus in Kansas and the United States
  - Have we bent the curve?
  - Testing Updates
- What's happened to the economy so far?
  - State budget problems
- Hard Choices:
  - When and how to reopen the economy?





# The US and Kansas have a Pandemic (data through April 26, 2020 4:00 PM)





In both Kansas cases grew by 72% in the past week and deaths were 28% higher. Cases accelerated but deaths have fallen. In the US cases grew by 28% and deaths were 37% higher in the past week.

Both rates were slower than the previously.

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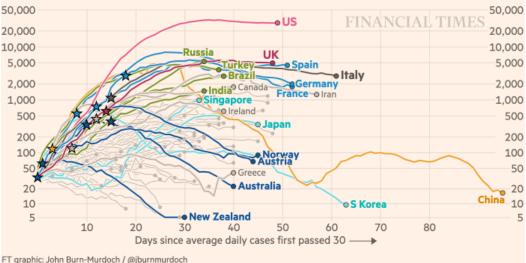
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# **COVID-19 Cases by Country**

### Several countries have turned the corner, with numbers of new cases now in decline

Daily confirmed cases (7-day rolling avg.), by number of days since 30 daily cases first recorded Stars represent national lockdowns \*



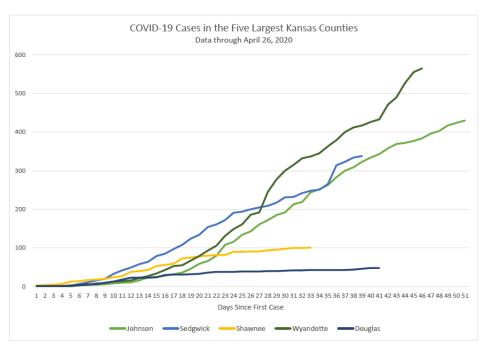
FT graphic: John Burn-Murdoch / @jburnmurdoch Source: FT analysis of European Centre for Disease Prevention and Control; FT research. Data updated April 25, 20:22 BST © FT

- Financial Times shows that US has started to bend the curve.
- Source: https://www.ft.com/coronavirus-latest



### Growth in COVID-19 Cases has varied by County

- In the five largest counties, growth rates have varied significantly.
  - Douglas and Shawnee counties have flattened the curve.
  - Johnson and Wyandotte, counties—not so much
  - Sedgwick has accelerated cases.



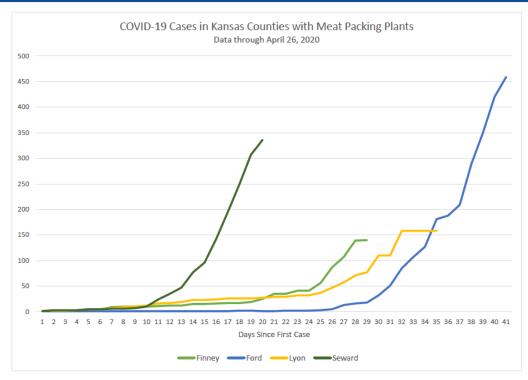
Source: Institute for Policy & Social Research, The University of Kansas; data from The New York Times.





### Counties with Meatpacking have an uncontrolled Pandemic

- In counties with meatpacking plants cases have spiked.
  - Ford county cases are 2 times higher this week.
  - Seward county cases are 3.5 times higher.
  - Lyon and Finney counties appear to have reporting delays.



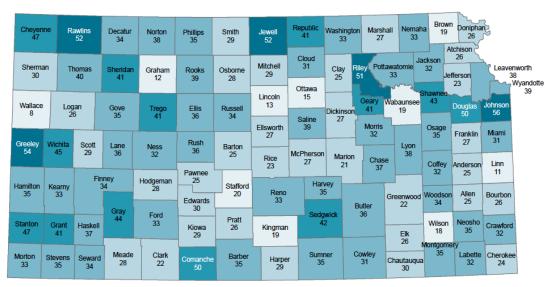
Source: Institute for Policy & Social Research, The University of Kansas; data from The New York Times.





### Social Distancing Across the State

Social Distancing Index in Kansas, by County April 24, 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. "O' 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.

#### Social Distancing Index



31 - 40

41 - 50 51 - 56

Source: University of Maryland COVID-19 Impact Analysis

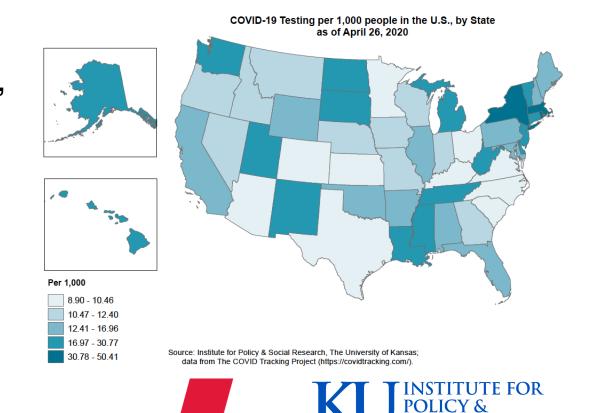
https://data.covid.umd.edu/

- Data based on travel and cellphone mobility.
  - April 24<sup>th</sup>
- Darker colors indicate that these counties are doing a better job of social distancing.
  - Johnson County has done the best in terms of social distancing



### 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 9 tests per 1,000 people
  - The US average is 16.5 tests per 1,000.

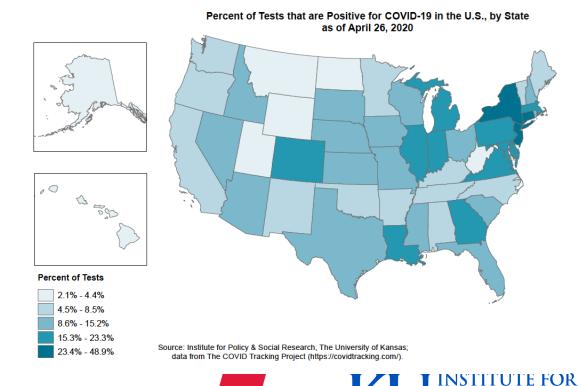


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### Testing Results are also Uneven

- Calculated the share of positive tests.
  - 12.1% of Kansas tests are positive.
  - 12.7% of US tests are positive



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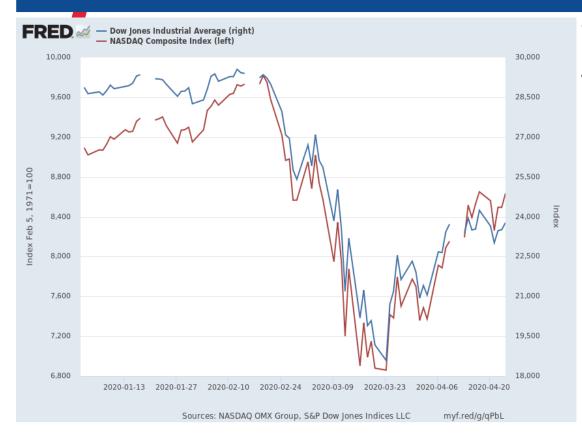


# COVID-19 and the US & Kansas Economies

It's not good.



# The Stock Market: January 1 – April 3, 2020



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 on April 24<sup>th</sup>. 23,775
- Down about 19% since the peak

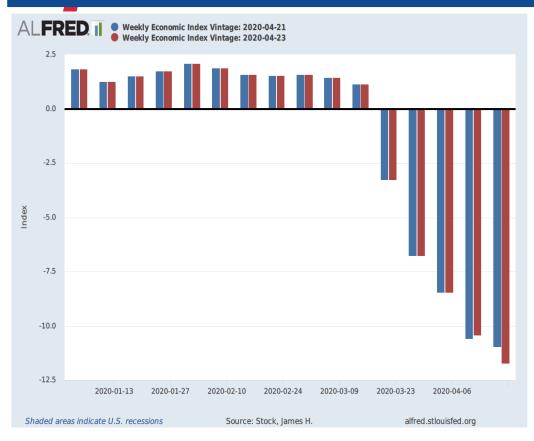
Nasdaq has recovered more relative to the Dow.

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





### Weekly Economic Activity Index



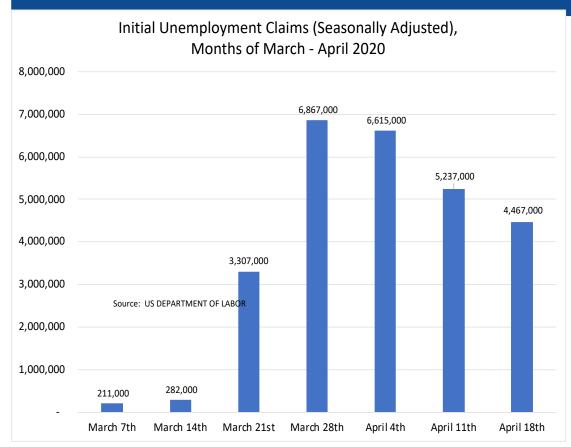
Source: FRED https://fred.stlouisfed.org/

- James Stock has developed a Weekly Economic Activity Index that is scaled to 4<sup>th</sup> Quarter 2019 GDP growth.
  - The index has dropped to -11.7%
  - This indicates that GDP for this quarter is forecast to be nearly 12% lower.





### **Unemployment Claims Continue to Soar**

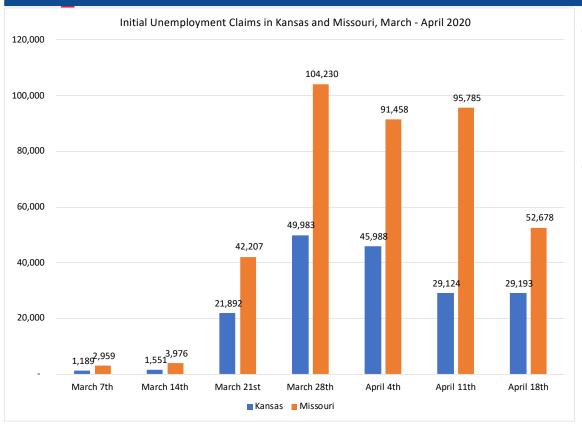


Source: https://www.dol.gov/ui/data.pdf

- US Initial Unemployment Claims are still at historic highs
  - Over 26.5 million unemployed in a month.
- Based on the US Labor Force in February 2020 the US the unemployment rate is approximately 20%
  - 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 177,731 workers have filed initial unemployment claims in Kansas.
- Based on February Labor
   Force projections the
   Unemployment Rate in Kansas
   is approximately 13%.
  - Data from March 14<sup>th</sup> April 18<sup>th</sup>



# Kansas Initial Unemployment Claims by Industry as a Share of Total Employment—Data as of April 11th

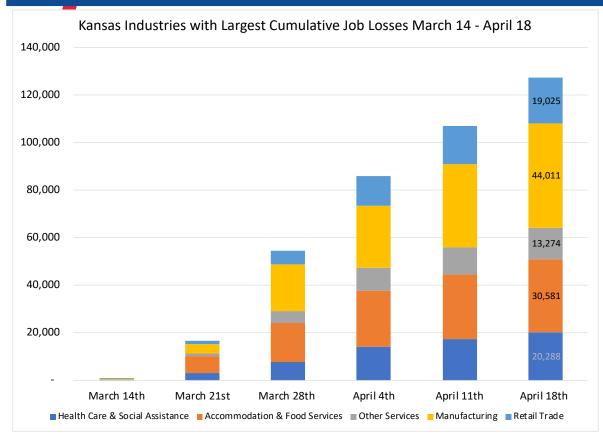
Industry	Unemployment within Industry			
Government	0.59%			
Health care and social assistance	10.92%			
Manufacturing	26.28%			
Retail trade	13.12%			
Accommodation and food services	26.62%***			
Administrative & waste management	11.84%			
Professional, scientific & technical serv.	6.70%			
Transportation and warehousing	8.35%			
Construction	11.61%			
Finance and insurance	2.33%			
Wholesale trade	5.78%			
Other services	25.48%***			
Management of companies	0.70%			
Educational services	21.52%			
Information	10.30%			
Real estate and rental and leasing	15.89%			
Arts, entertainment, and recreation	43.41%***			
Mining and oil and gas extraction	14.24%			
Utilities	0.00%			

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





# Cumulative Unemployment Claims in Kansas



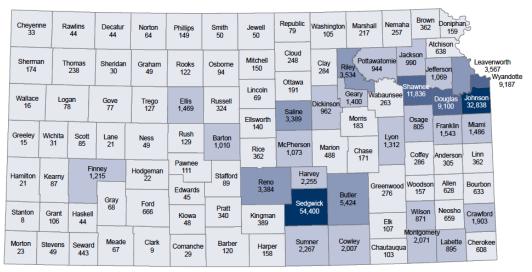
Source: Ginther calculations using Kansas Department of Labor Data

- Top 5 Industries with Cumulative Jobs Lost:
  - Manufacturing 44,011
  - Accommodation & Food Service 30,581
  - Health Care & Social Assistance 20,288
  - Retail Trade 19,025
  - Other Services 13,274
  - Data March 14—April 18



# Cumulative Unemployment Claims by County

Initial Jobless Claims in Kansas, by County March 14 - April 18, 2020



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



Source: IPSR calculations using Kansas Department of Labor Data

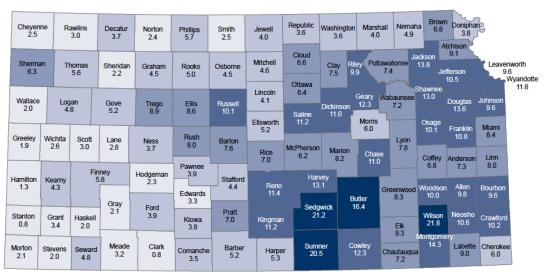
- Top 5 Counties by Cumulative Initial Claims:
  - Sedgwick 54,400
  - Johnson 32,838
  - Shawnee 11,836
  - Wyandotte 9,187
  - Douglas 9,100
  - Data calculated March 14<sup>th</sup> April 18<sup>th</sup>





# Estimated Unemployment Rate by County

Projected Unemployment Rate in Kansas, by County March 14 - April 18, 2020



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 14 - April 18 and preliminary, not seasonally adjusted, civilian labor force for February 2020.





6.1 - 9.3

9.4 - 14.3

14.4 - 21.8

Source: IPSR calculations using Kansas Department of Labor Data

- Top 5 Counties by unemployment rate:
  - Wilson 21.8%
  - Sedgwick 21.2%
  - Sumner 20.5%
  - Butler 16.4%
  - Montgomery 14.3%
- Unemployment rates are lower on the Kansas side of KC Metro:
  - Jackson 11.3%; Clay 13.7%



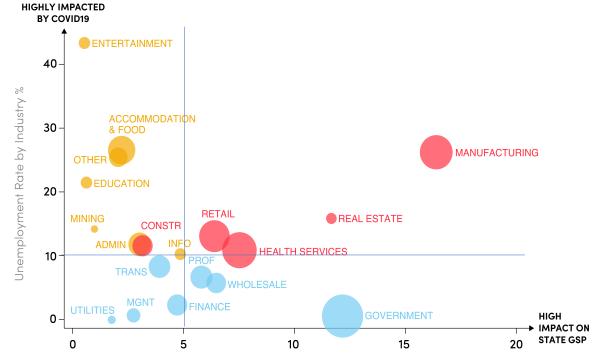
# What's Happening to Economic Growth (GDP)

- GDP = C + I + G + (X-M)
  - C = Consumption (68%)
  - I = Investment (17%)
  - G = Government (18%)
  - X M = Net Exports (-2.9%)
- Consumption patterns have changed dramatically
  - Retail sales fell by a historic -8.7% last month
- Government Expenditures will increase
- WTO projects trade to fall by 13%
  - -32%



### Unemployment Relative to Gross State Product

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



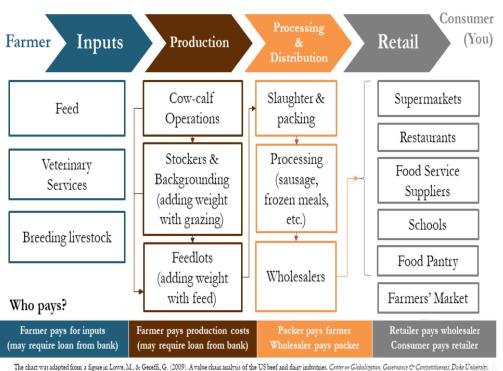
Industry Share of Gross State Product %

Source: Author's calculations.

- Sectors that contribute most to Kansas growth with above average unemployment:
  - Manufacturing 26% UE & 16% of GSP
  - Health Services 11% UE & 7.5% of GSP
  - Retail 13% UE & 6.4%
     GSP



### Meatpacking has been identified as a weak link in food supply chain



- Covid-19 outbreaks in meatpacking plants put the meat supply chain at risk.
- Kansas Counties with meatpacking plants have seen exponential growth in cases.

Source: Federal Reserve Bank of Kansas City:

https://www.kansascityfed.org/en/publications/ten/articles/2020/food%20supply%20chains



### Meatpacking has outbreaks across the US

#### The Washington Post

Democracy Dies in Darkness

Coronavirus Live updates U.S. map World map FAQs Flattening the curve

# As they rushed to maintain U.S. meat supply, big processors saw plants become covid-19 hot spots, worker illnesses spike

Several big meat companies failed to provide masks to all workers, some of whom said they were told to keep working in crowded plants, Post investigation finds

By Taylor Telford and Kimberly Kindy

April 25, 2020 at 3:28 p.m. CDT

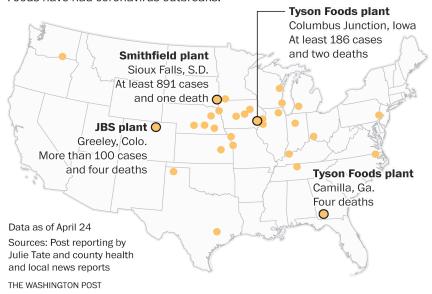
Source: The Washington Post:

https://www.washingtonpost.com/business/2020/04/25/meat-workers-safety-jbs-smithfield-tyson/

24 Donna K. Ginther, PhD

#### Meat processing plant outbreaks

At least 31 meat processing plants owned by Smithfield, JBS and Tyson Foods have had coronavirus outbreaks.



At least 31 meat processing plants owned by Smithfield, JBS and Tyson Foods have had coronavirus outbreaks. (Tim Meko)





### **Economic Research on COVID-19**

- Goldstein & Lee (2020) estimated period of life expectancy is down three years and the estimated cost of mortality in the US in terms of statistical life is \$6 - \$10 trillion.
  - Source: https://www.nber.org/papers/w27430
- Mulligan (2020) estimates the cost of the shutdown in economic activity to be \$7 trillion at an annual rate.
  - Source: https://www.nber.org/papers/w27060
- Gupta et al (2020) analyze individual responses to social distancing policy. They find significant increases in social distancing before policies were implemented, but that once a state implemented policy social distancing increased.

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Source: <a href="https://www.nber.org/papers/w27027">https://www.nber.org/papers/w27027</a>

# COVID-19 and Economic Policy

States are Facing Budget Shortfalls

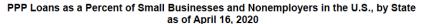


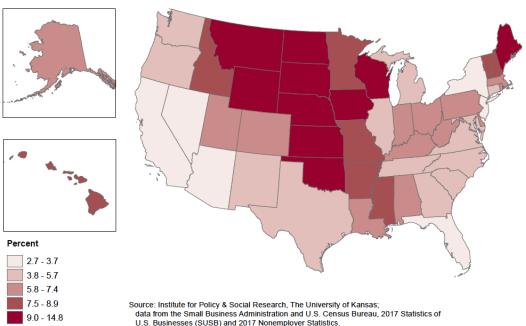
### Coronavirus Aid, Relief and Economic Security (CARES) Act

- Paycheck Protection Program lends money to small businesses via banks.
  - Loan forgiveness if the small business keeps workers on the payroll
  - Many problems reported with getting access to money
  - Not enough money to meet the need
  - Congress added \$310 billion in addition to the \$350 billion already loaned out.
- Today was the first day to apply for additional funds and the system is crashing.



# Paycheck Protection Program Benefited Kansas because of Community Banking





#### The Washington Post

Democracy Dies in Darkness

Coronavirus Live updates U.S. map World map FAQs Flattening the curv

### How a family-owned Nebraska bank became a leader on coronavirus loans

Working from home, employees hustled to process small-business applications under the Paycheck Protection Program

 Businesses who had strong relationships with banks and smaller banks associated with more PPP loans.

Source: IPSR calculations using 2017 Statistics of US Businesses





#### Still Need CARE—The States

- Paycheck Protection Program did not include additional funding to support state governments.
  - During the Great Recession the federal government did support the states.
  - Sen McConnell suggested that states could declare bankruptcy.
- State governments by law are required to balance their budgets.
  - Reduced tax revenue will lead to slashes in public services without federal intervention.



### Still Needing CARE—The States FY2020 Revenue

TABLE 1

### **COVID-19 Pandemic Expected to Cause Sharp Revenue Drops in States**

State	Amount	Percent of Pre- COVID-19 projections	Source	Date and Source			
Preliminary Estimated General Fund Revenue Declines in Fiscal Year 2020							
Alaska	\$612 million	11 percent	Department of Revenue	April 6			
Arizona	\$1.4 billion	12 percent	Joint Legislative Budget Committee	April 9			
Arkansas	\$353 million	6 percent	Department of Finance and Administration	March 23			
Colorado	\$451 million	3 percent	University of Colorado	April 14			
Maryland	\$2.8 billion	15 percent	Comptroller	April 10			
Massachusetts	\$3.8 - \$4.5 billion	13-15 percent	Federal Reserve Bank of Boston	April 22			
Michigan	\$1 to \$3 billion	4-12 percent	Treasury, Budget Office, press report	March 30			
Missouri	\$500 million	5 percent	Governor, press report	April 1			
Pennsylvania	\$1.2-\$1.8 billion	4-5 percent	Independent Fiscal Office	April 8			
Oklahoma	\$416 million	6 percent	Governor, press report	April 3			
South Carolina	\$507 million	5 percent	Board of Economic Advisors	April 9			
Vermont*	\$228 million	14 percent	Joint Fiscal Office	April 17			
West Virginia	\$500 million	11 percent	Revenue Secretary	April 13			

- The Consensus Revenue Estimating Committee announced that Kansas FY 2020 General Fund Revenues projected to fall \$826.9 million 7.4%
  - Source: https://www.cbpp.org/research/statebudget-and-tax/states-start-grappling-with-hitto-tax-collections





# Still Needing CARE—The States FY2021 Revenue

	Preliminary Estima	ited General Fund Revenue	Declines in Fiscal Year 2021	
Alaska	\$815 million	15 percent	Department of Revenue	April 6
Arizona	\$758 million	6 percent	Joint Legislative Budget Committee	April 9
Arkansas	206 million	3 percent	Department of Finance and Administration	April 2
Colorado	\$2.4 billion	18 percent	University of Colorado	April 9
Delaware	\$500 million	11 percent	Governor, press report	April 15
Hawaii official	\$319 million	4 percent	Council on Revenues	March 11
Hawaii projected	\$800 million to \$2 billion	10-25 percent	University of Hawaii Economic Council	April 3
Illinois*	\$4.4-\$14.1 billion	11-35 percent	Institute of Government and Public Affairs	April 9
Kentucky	\$115 million	1 percent	State budget	April 1
Massachusetts	\$4.2-\$7.2 billion	14-23 percent	Federal Reserve Bank of Boston	April 22
Michigan	\$1-\$4 billion	4-16 percent	Treasury and Budget Office, press report	March 30
Minnesota*	\$1.5-\$3 billion	5-9 percent	State Economist, press report	April 7
New Mexico	\$1.5-\$2 billion	20-27 percent	Senate Finance Committee, press report	March 31
Naw Vark	\$4-\$7 billion	5-8 percent	Comptroller, State Budget Director, press report	March 17
New York	\$9-\$15 billion	9-17 percent		March 24
Oklahoma	\$1.4 billion	19 percent	Board of Equalization	April 20
Pennsylvania	\$1.4-\$2.2 billion	4-6 percent	Independent Fiscal Office	April 8
South Carolina	\$643 million	6 percent	Board of Economic Advisors	April 9
Virginia	\$1-2 billion	4-9 percent	Secretary of Finance, press report	March 24
Wisconsin	\$2 billion	10 percent	Governor	April 15

- The Consensus Revenue Estimating Committee announced that Kansas FY 2021 General Fund Revenues projected to fall \$445 million 5.8%
  - Source: https://www.cbpp.org/research/statebudget-and-tax/states-start-grappling-with-hitto-tax-collections





### Still Need CARE—The States

- States are requesting \$500 billion in additional financial assistance.
- The Center for Budget Policy Priorities Recommends:
  - Increasing the federal share of Medicaid costs to prevent Medicaid cuts when more people will be needing health care.
  - Frees up state resources to spend on other parts of the government.
  - Increase Coronavirus Relief Fund and allow more flexibility in spending these funds.



# Making Hard Choices

When to Reopen the Economy?



### Some States Have Started to Reopen

- Many states have shelter in place orders until the end of the month.
- Georgia started to reopen on April 24<sup>th</sup>.
- Texas:
  - All retail stores, restaurants, movie theaters, malls, museums, and libraries are permitted to reopen on Friday, May 1, but must limit their capacity to 25% of their listed occupancy.
- Virginia Stay at Home until June 10<sup>th</sup>.





### Lifting the Stay-at-Home Order

- Governor Kelly was interviewed by the New York Times (4/25/20):
  - "We are nowhere near where we need to be with testing supplies," she said on Thursday. "I'm looking down a lot of rabbit holes trying to figure out how we are going to get those test kits here. It's imperative if we are going to be able to lift that stay-athome order "

Kansas: 'There Will Be Death.'



"We are nowhere near where we need to be with testing supplies," Gov. Laura Kelly of Kancac caid John Hanna / Accordated Drace



### Lifting the Stay-at-Home Order

### Dr. Lee Norman:

- "What is an acceptable level of risk?" Dr. Norman asked. "We cannot get it down to zero, so how can we guarantee that people won't get sick?"
- Whatever the course of action, he said, "there will be death."

• Source: The New York Times <a href="https://www.nytimes.com/2020/04/25/us/politics/virus-testing-shortages-states-trump.html">https://www.nytimes.com/2020/04/25/us/politics/virus-testing-shortages-states-trump.html</a>





### Disinfectant as a Cure?

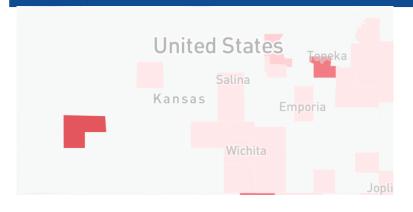
Kansas reports 40 percent increase in chemical cases since Trump's comments about disinfectants

- Kansas health officer Lee Norman said at a news conference in Topeka that one case included "a fellow over the weekend who drank a product because of the advice he'd received." Norman did not offer any details.
  - Source: The Washington Post https://www.washingtonpost.com/world/2020/04/27/coronavirus-latest-news/





### Surveys as Alternative Approaches to Testing



Survey is non-random sample of people responding To Facebook, Google and other online surveys.

Source: https://covid-survey.dataforgood.fb.com/

- Facebook & Carnegie Mellon University are surveying people.
- As of April 25, 2020 these surveys suggest that the following share of people in the counties are reporting symptoms:
  - Johnson County 0.22% (1,325 Cases)
  - Sedgwick County 1.02% (5,264 Cases)
  - Saline County 0.1% (54 cases)





### **Economic Impacts of COVID-19**

- In future lectures we will continue to monitor the economic fallout from the COVID-19 epidemic.
- We will also monitor the policy responses.
- I hope that you all stay healthy!





### Thank You!



