

The Economic Recovery: What's in Store for Douglas County

Donna K. Ginther

Roy A. Roberts Distinguished Professor of Economics

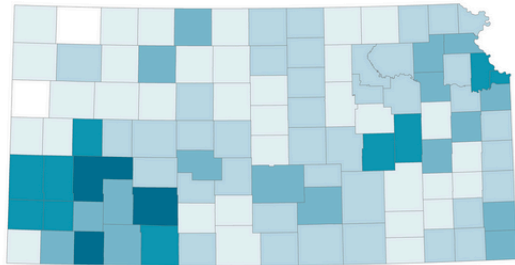
Director, Institute for Policy & Social Research, University of Kansas

Research Associate, National Bureau of Economic Research

September 16, 2020

KU INSTITUTE FOR
POLICY &
SOCIAL RESEARCH
The University of Kansas

2020 Kansas Economic Policy Conference—October 22nd



2020 Kansas Economic Policy Conference

What is the Role of Government in a Crisis?

October 22, 2020
Virtual Conference

- The 2020 Kansas Economic Policy Conference will be virtual. Thanks to support from the U.S. Economic Development Administration registration is free but is required.
- Program includes Dr. Lee Norman, Lt. Governor Lynn Rogers (invited)
- <https://ipsr.ku.edu/conferen/kepc2020/registration.shtml>

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 **monthly** basis.
- Data and briefings available at <http://ipsr.ku.edu/covid19/>
- Thanks to Xan Wedel, Thomas Becker & Lindsay Jorgenson who helped with the data, visualizations & slides.

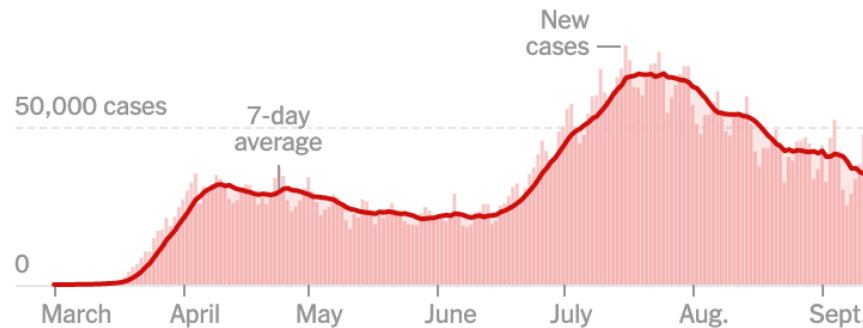
Overview

- Update on the Coronavirus in Kansas and how that affects the recovery
- US Economic Trends
- Kansas Economic Trends
- What do we know about the Douglas County economy?
 - What does this recession mean for the future?
- What can we expect from the recovery?

We have Exceeded 6 Million Cases & 194,000 Deaths

By The New York Times Updated September 14, 2020, 12:02 P.M. E.T.

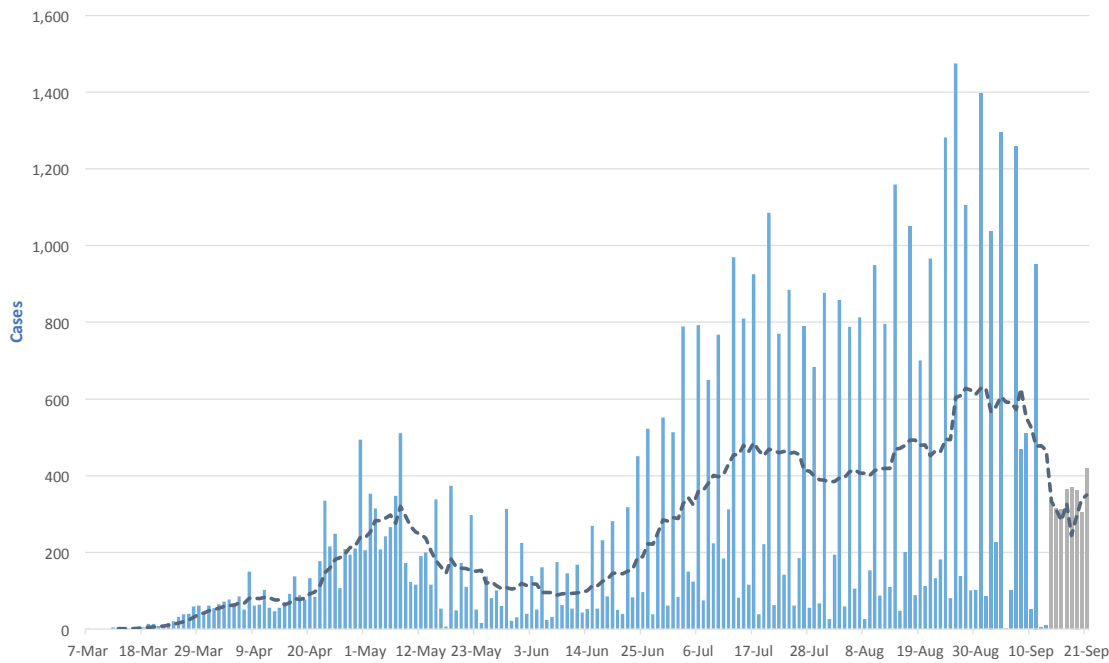
[Leer en español](#)



- The past week we've averaged 36,731 cases per day.

Troubling News: Kansas Daily Cases are Increasing

New COVID-19 Cases and 7-day Trend Line in Kansas

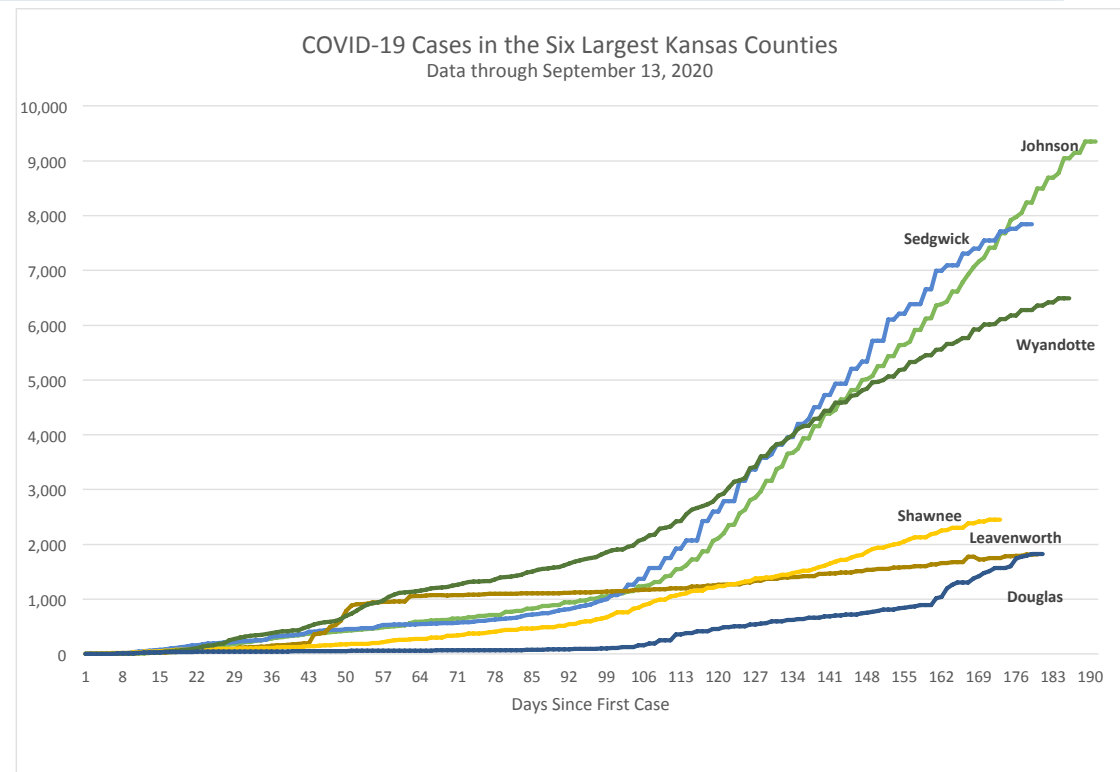


Source: Institute for Policy & Social Research, The University of Kansas; cases (blue) from the New York Times and projected cases (grey) from The University of Kansas Medical Center.

- Data through September 13th
- The 7-day moving average of new cases has slowed down at a high plateau.
- Cases are predicted to decrease:
 - According to KU Medical Center forecasts, cases may decelerate in coming weeks.

Growth in COVID-19 Cases Has Varied by County

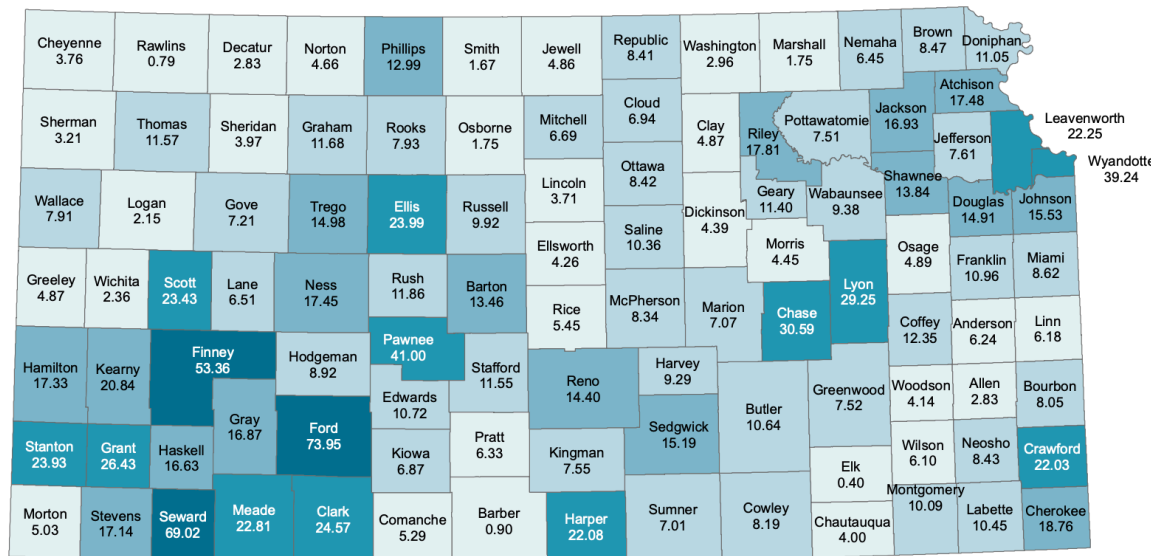
- In the six largest counties, growth rates have varied significantly.
 - All curves except Leavenworth are increasing.
 - Douglas county cases are over 27 times higher than on June 2nd.
 - Sedgwick, Johnson & Wyandotte Counties are Accelerating.



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

Case Rates by County

COVID-19 Cases per 1,000 People in Kansas, by County
as of September 13, 2020

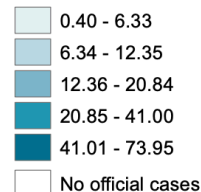


- Darker colors indicate that these counties have higher case rates:

- Ford, Seward, and Finney Counties have case rates that are > 53 per 1,000
- Douglas, Sedgwick & Johnson Counties 15 per 1,000
- Leavenworth & Wyandotte Counties have case rates 22-39 per 1,000

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

Cases per 1,000 people



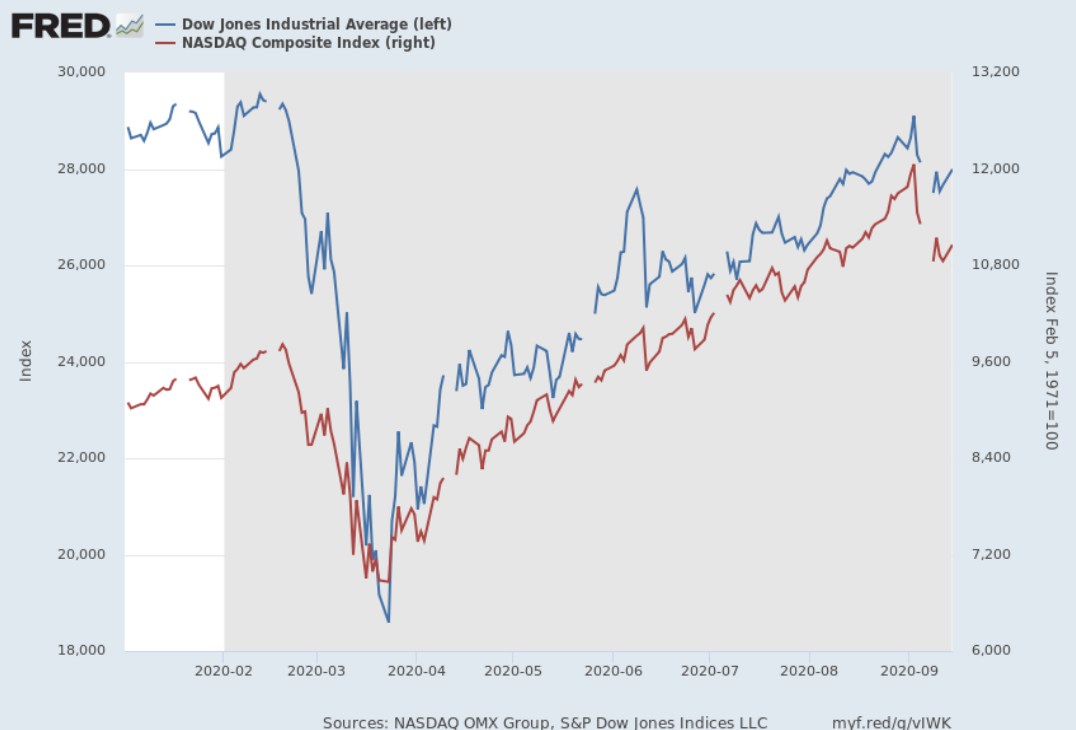
SOURCE: NEW YORK TIMES & US CENSUS BUREAU



COVID-19 and the US & Kansas Economies

Unemployment & Uncertainty

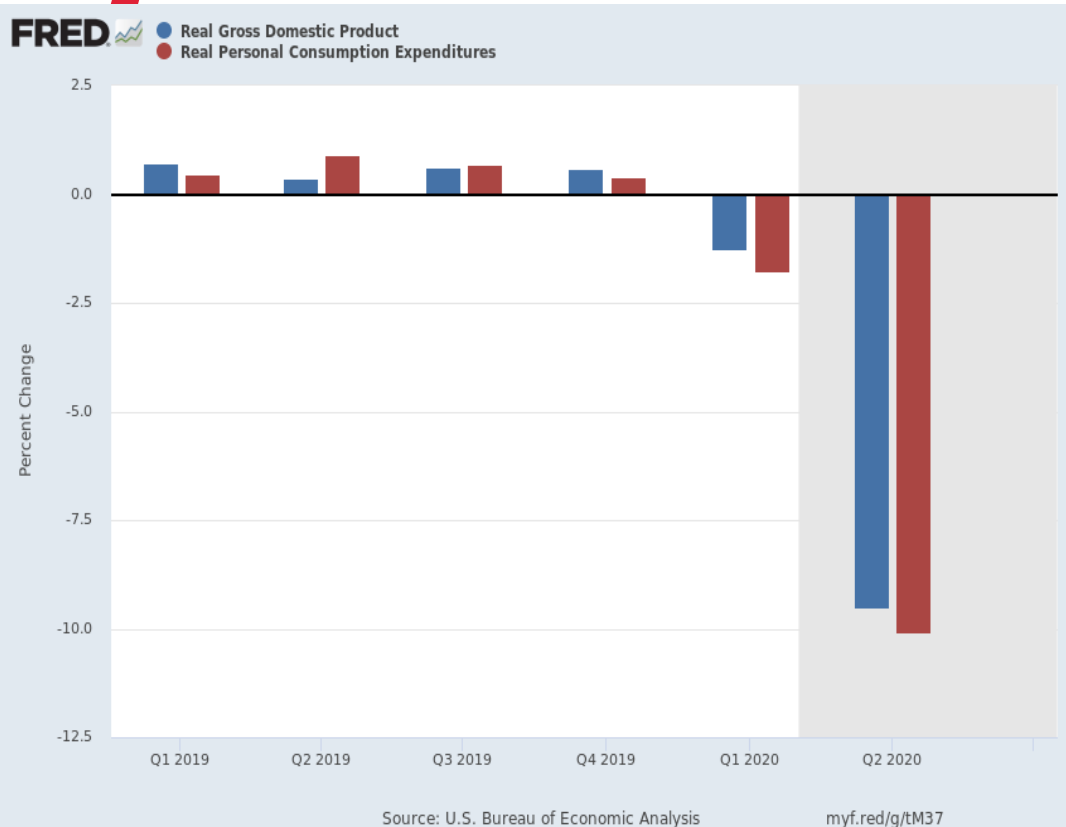
The Stock Market: January 1 – September 14th



- The Dow Jones Industrial Average peaked at 29,348 on February 12th.
 - It bottomed out on March 23rd, and has recovered to 28,100 on September 14th
 - Down about 4% since the peak
- Nasdaq has is up 23% for the year.
- Market continues to be volatile.

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

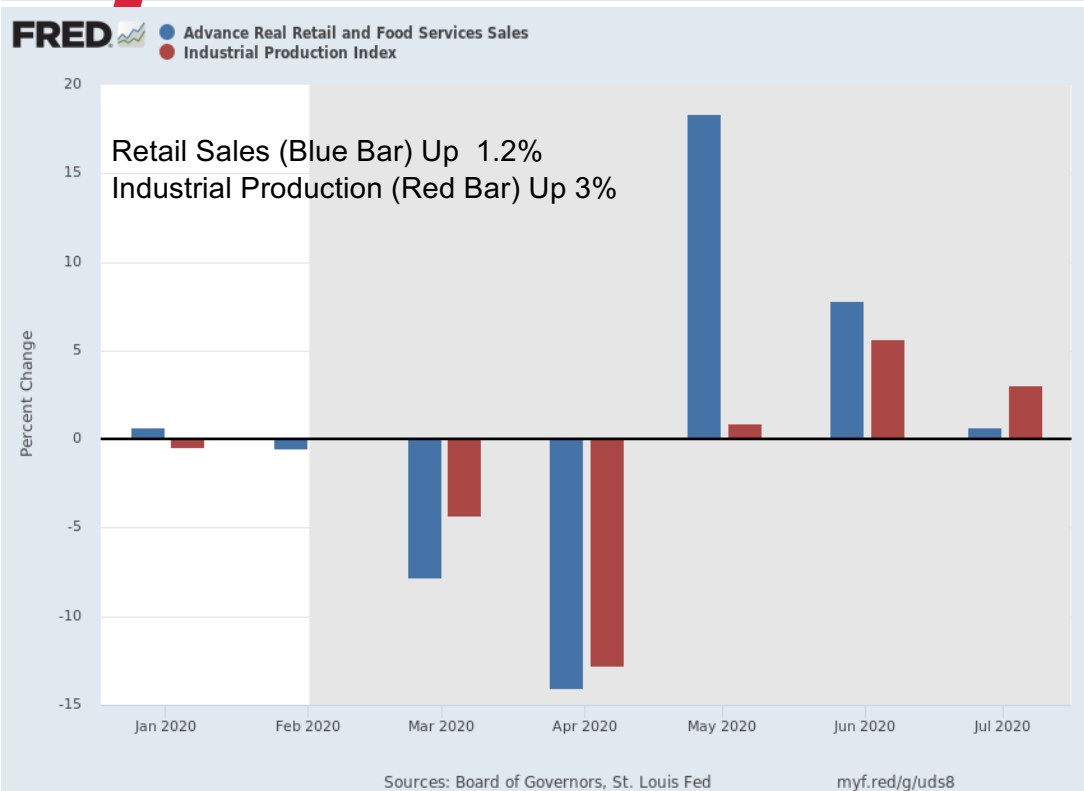
Gross Domestic Product Fell at Historic Rate



Source: Lewis, FRED, Federal Reserve Bank of St. Louis;

- Gross Domestic product fell by 9.5% compared to the previous quarter.
- At an annualized rate, this is -33%
- Consumption (2/3rds of GDP) fell by 10%
- This makes the Great Recession look like a mere blip.

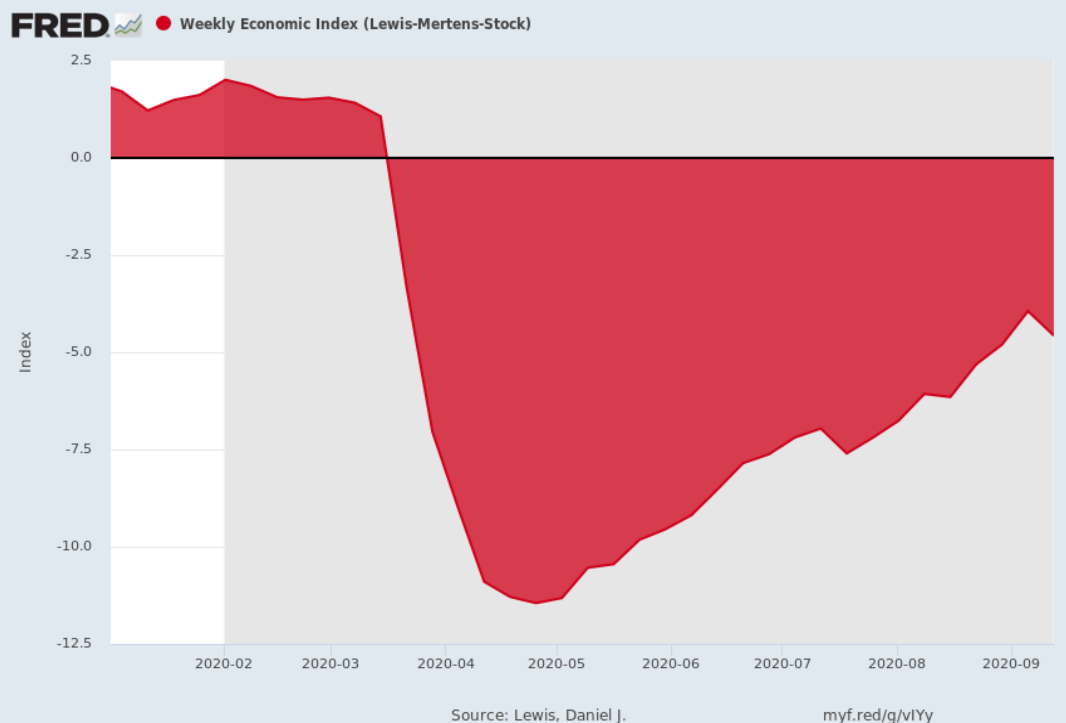
Industrial Production & Retail Sales--July



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

- Retail sectors up:
 - Clothing 5.7%
 - Furniture 0%
 - Restaurants/Bars 5%
 - Motor Vehicles -1.2%
 - Electronics 22.9%
 - Miscellaneous 6.2%
- Retail sales were up 2.7% compared to a year ago.

Weekly Economic Activity Index



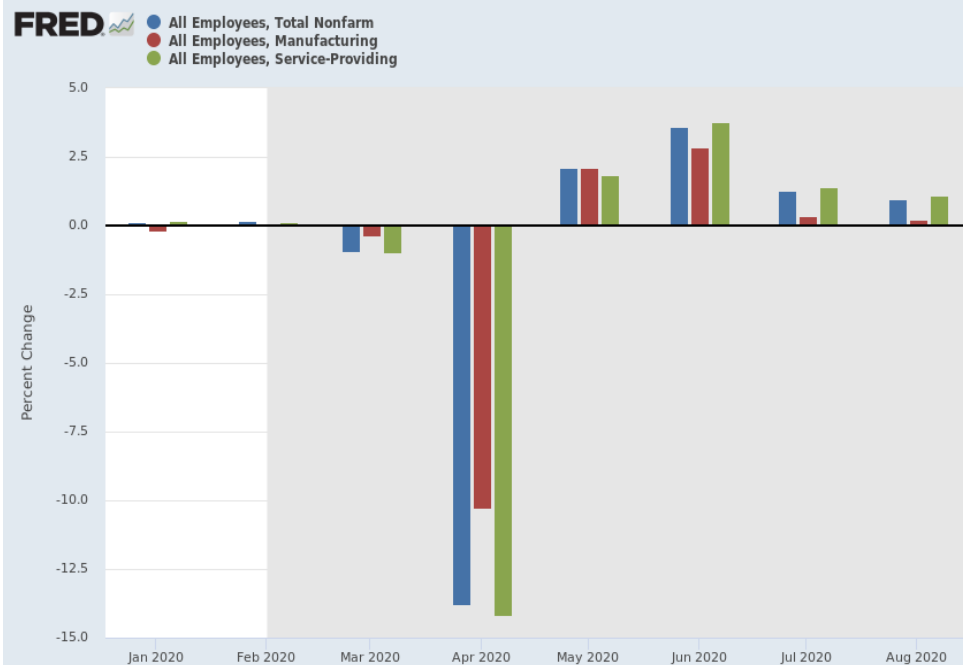
- Lewis, Mertens & Stock have developed a Weekly Economic Activity Index that is scaled to 4th Quarter 2019 GDP growth.
 - The index has risen to -4.57%
 - This indicates that GDP for this quarter is forecast to be 4.57% lower for Q3.

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

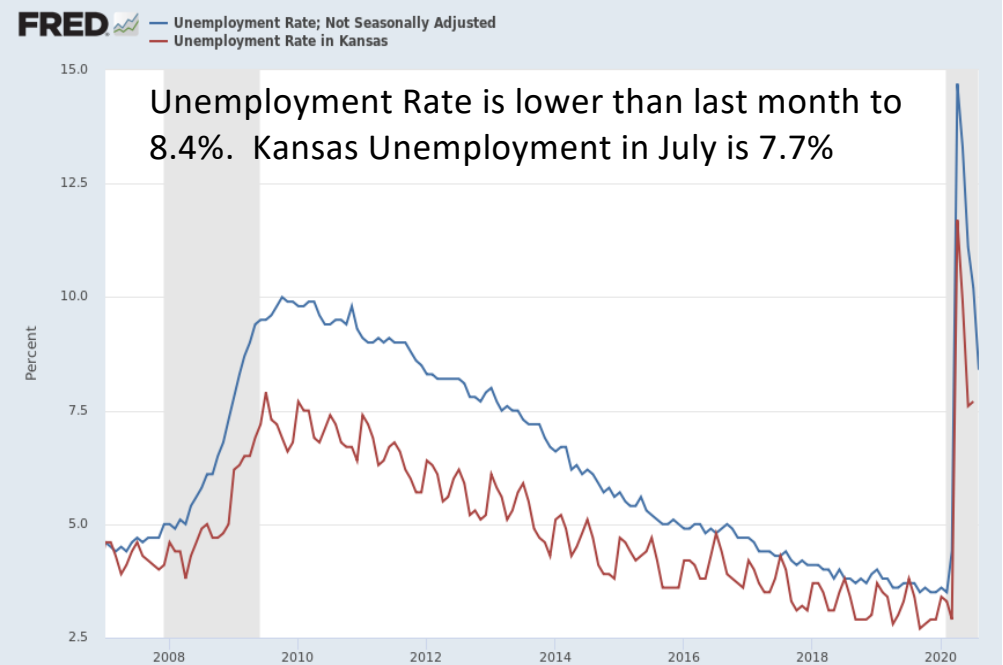
- The monthly jobs report is based on two surveys:
 - Establishment Survey that reports total employment
 - Household Survey that reports total unemployment
- The Unemployment Rate is defined as the share of people looking for work divided by the labor force (employed + unemployed) (U-3 rate).
- The 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.

Employment & Unemployment August, 2020



Source: U.S. Bureau of Labor Statistics

myf.red/g/vnUk

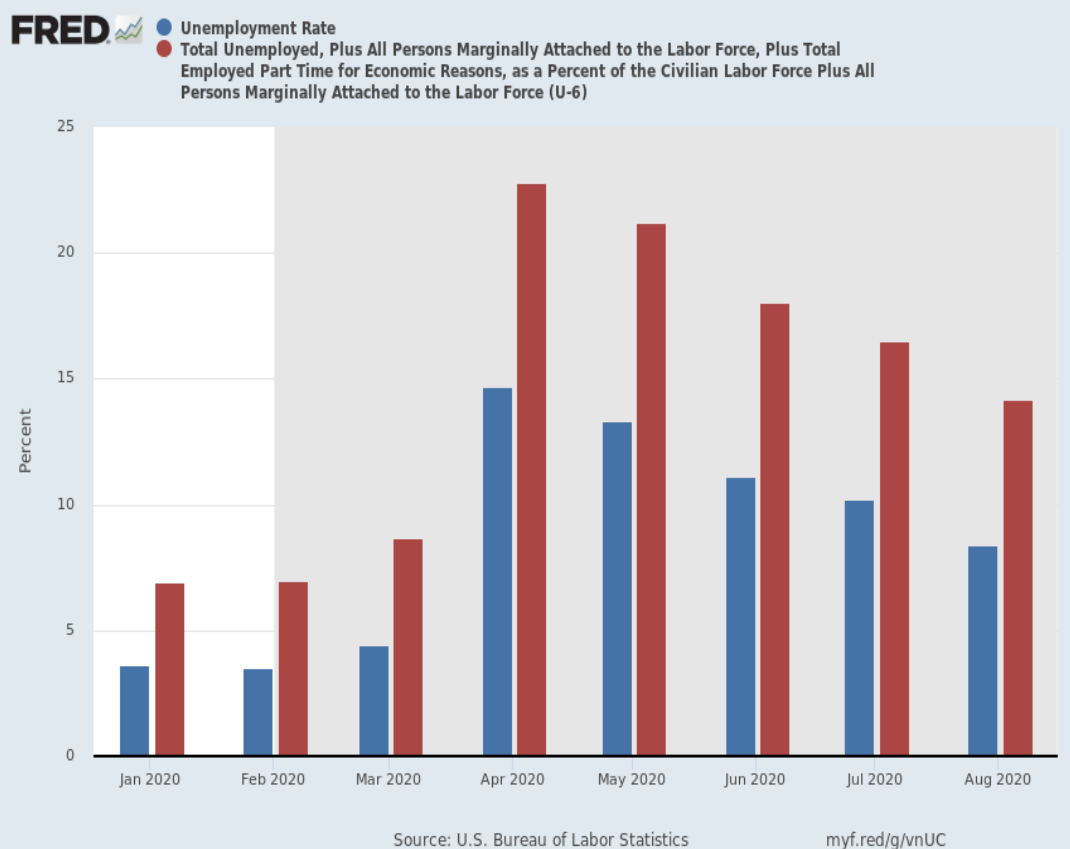


Source: U.S. Bureau of Labor Statistics

myf.red/g/vnSc

Employment rose by 1% in August,
Service Employment rose by 1.1%

U-3 and U-6 Show Continued Slack in Labor Market



Sources: <https://www.bls.gov/news.release/pdf/empst.pdf>
https://www.bls.gov/news.release/archives/empst_05072010.pdf

- U-6 rate is a broader measure of unemployment
 - 14.2% in August, 16.5% in July and 18% in June.
- U-6 indicates that a large share of the workforce is experiencing hardship.

A Tale of Two Downturns: This Time is Different

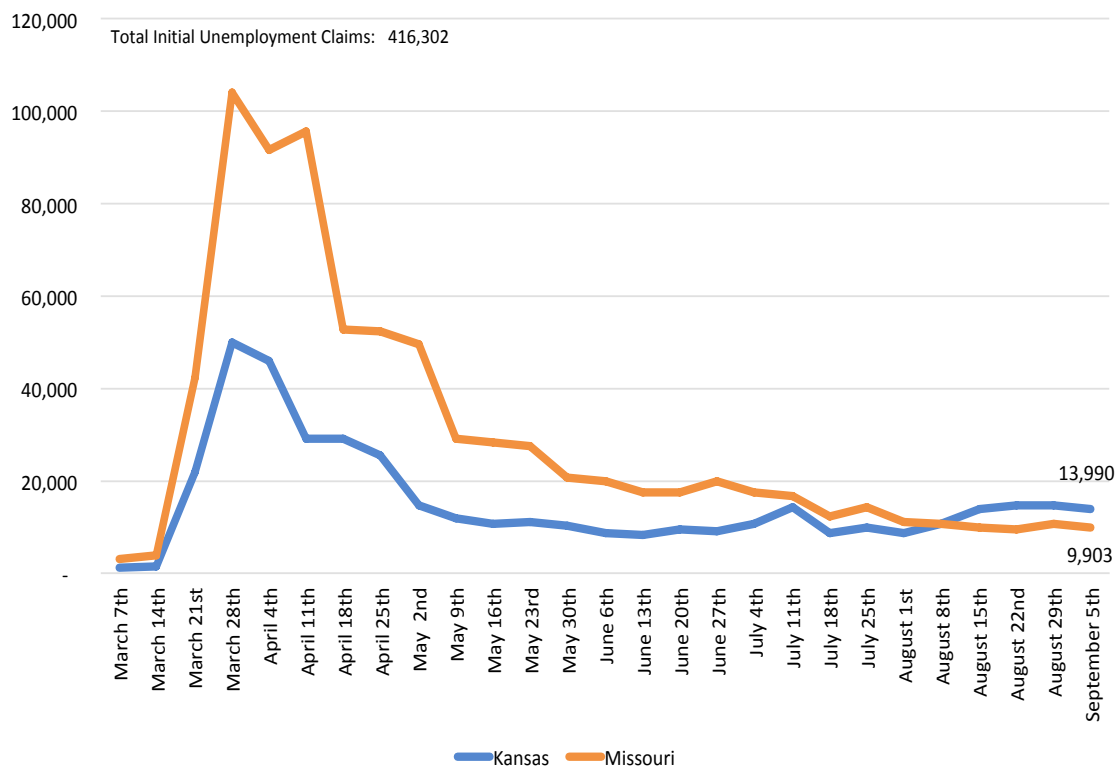
Unemployment by Characteristic	August, 2010	August, 2020
Total	9.6%	8.4%
Men, Age 20+	9.8%	8%
Women, Age 20+	8%	8.4%
Age 25+		
Less than High School	14%	12.6%
High School	10.3%	9.8%
Some College	8.7%	10%
Bachelor's Degree +	4.6%	8%
Temporary Layoff	9.2%	45.5%
U-6	16.4%	14.2%

Sources: <https://www.bls.gov/news.release/pdf/empst.pdf>
https://www.bls.gov/news.release/archives/empst_05072010.pdf

- 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.
 - Temporary Layoffs have dropped between May (73%) and August (45.5%)

Unemployment Claims in Kansas and Missouri

Initial Unemployment Claims in Kansas and Missouri, March - September 2020



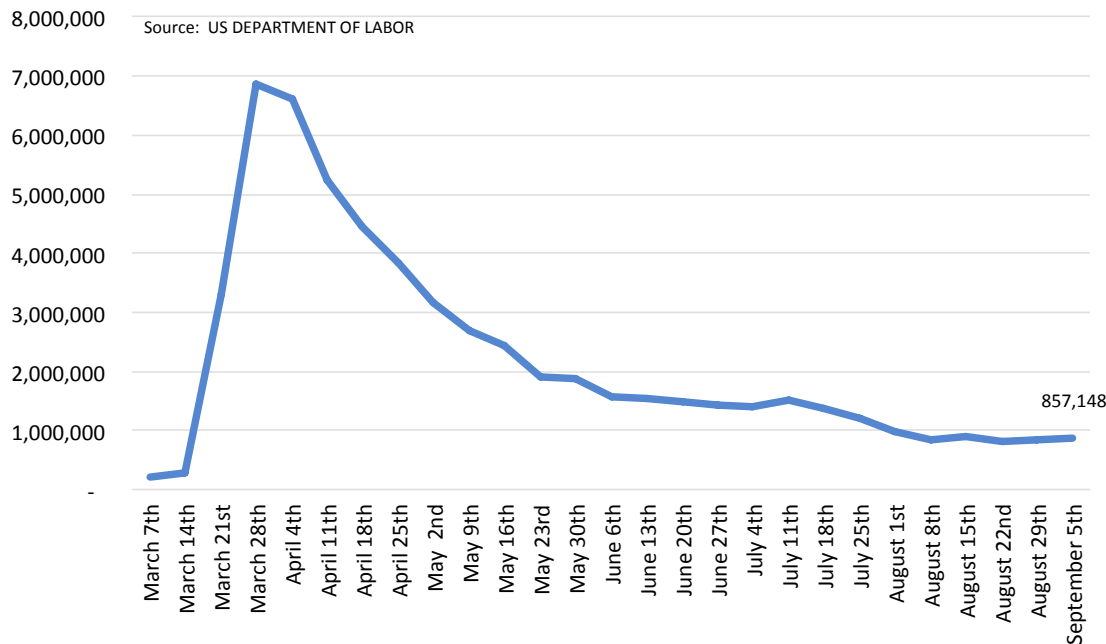
Source: Calculations using KS and MO Department of Labor Data

- 13,990 people filed an initial claim in Kansas the week of September 5th
- Since March 14th a total of 416,302 workers have filed initial unemployment claims in Kansas.
- Initial claims remain stubbornly high.
 - Data from March 14th – September 5th

Initial Unemployment Claims Continue to Grow

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

Source: US DEPARTMENT OF LABOR

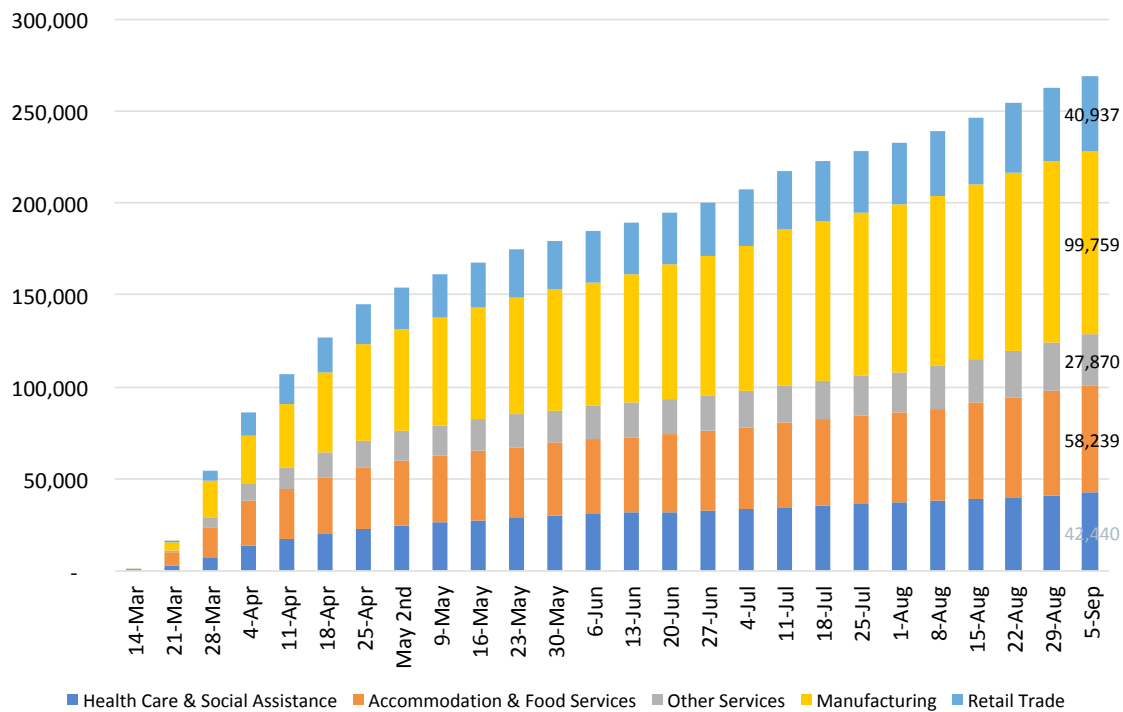


Source: <https://www.dol.gov/ui/data.pdf>

- US Initial Unemployment Claims are still at historic highs
 - Almost another million people filed initial unemployment claims
 - Almost 56 million unemployed since March.
 - Over 16 million people remain unemployed in the US.
 - Enhanced unemployment benefits have ended.

Cumulative Initial Unemployment Claims by Industry

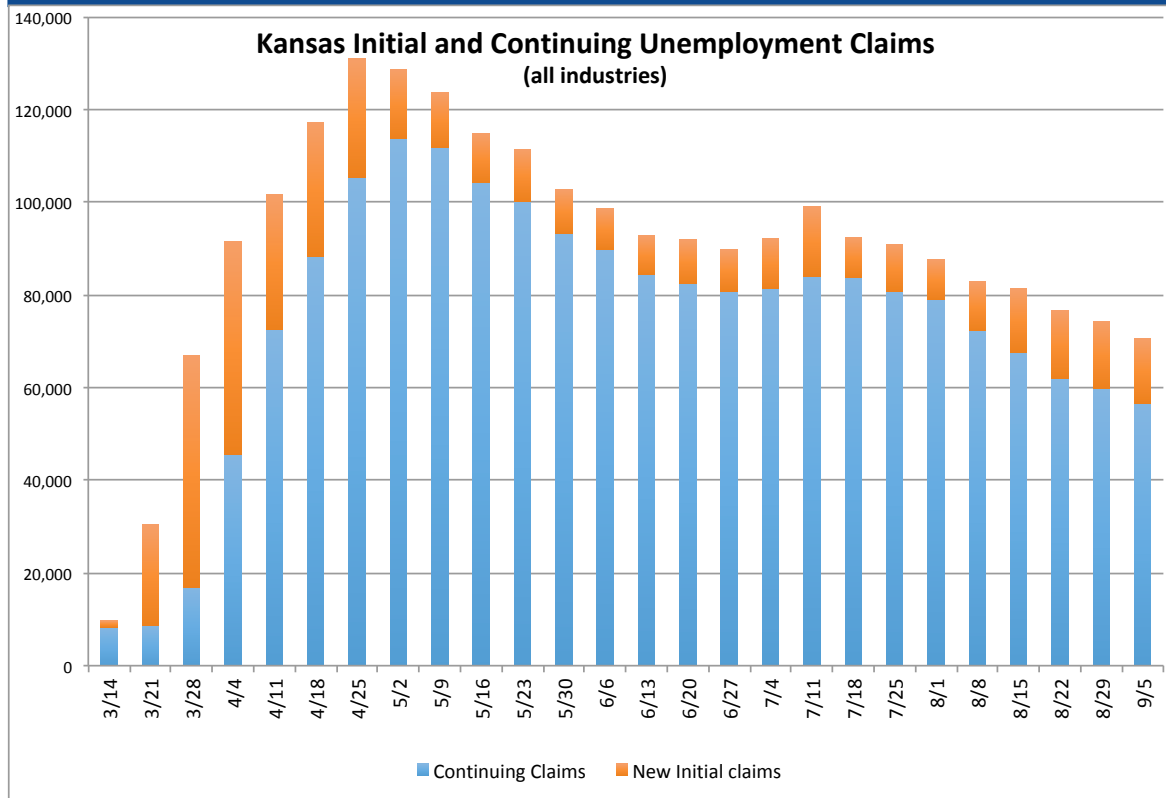
Kansas Industries with Largest Cumulative Job Losses March 14 - September 5th



Source: Calculations using KS and MO Department of Labor Data

- Industries hardest hit include:
 - Manufacturing: 99,759
 - Accommodation & Food Services: 58,239
 - Health care & Social assistance: 42,440
 - Retail Trade: 40,937
 - Other Services: 27,870
- These five industries account for 66% of people who have lost their jobs.

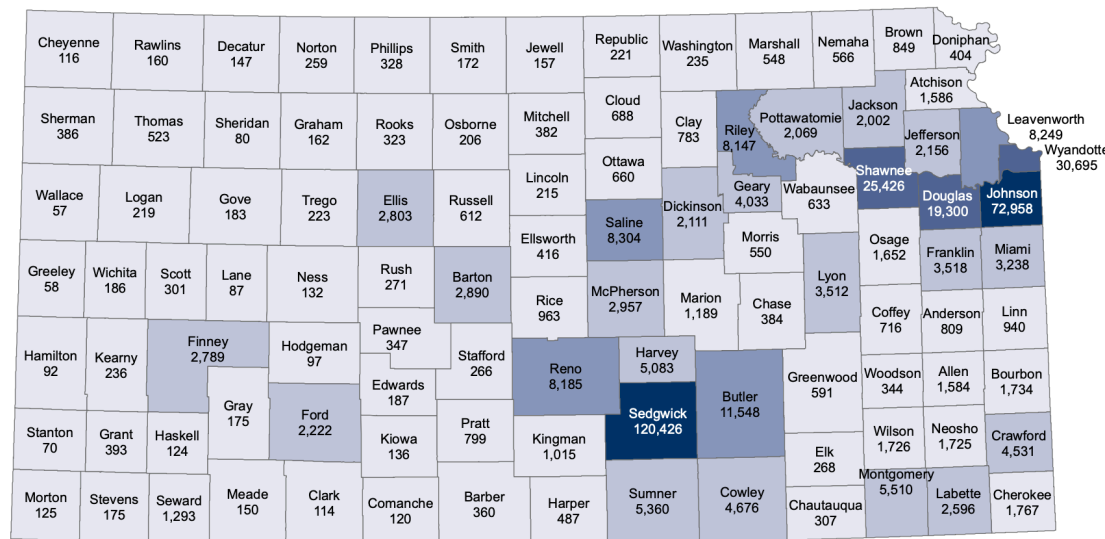
Unemployment in Kansas Remains High



- Kansas continuing + initial unemployment claims remain high
- There are 67,595 continuing claims and 13,730 new initial claims as of the week ending September 5th.
- State Unemployment ~6%

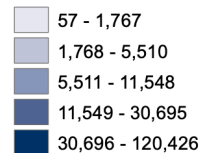
Cumulative Unemployment Claims by County

Initial Jobless Claims in Kansas, by County
March 21 - September 5, 2020



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

Initial Claims, March 21 - Sept 5

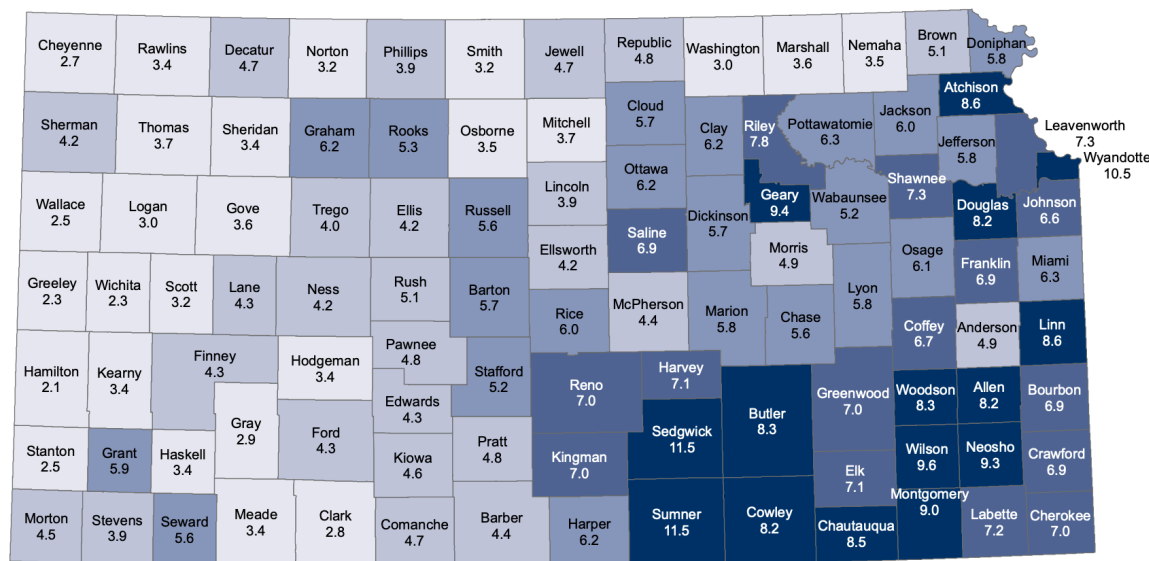


- Top 5 Counties by Cumulative Initial Claims:
 - Sedgwick 120,426
 - Johnson 72,958
 - Wyandotte 30,695
 - Shawnee 25,426
 - Douglas 19,300
- Data calculated March 21st – September 5th

Source: IPSR calculations using Kansas Department of Labor Data

July Official Unemployment

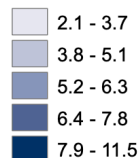
Unemployment Rate in Kansas, by County
July 2020



- Sedgwick County 11.5%
- Douglas 8.2%
- Johnson 6.5%
- Wyandotte 10.5%
- Shawnee 7.3 %
- State Unemployment 7.2%

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

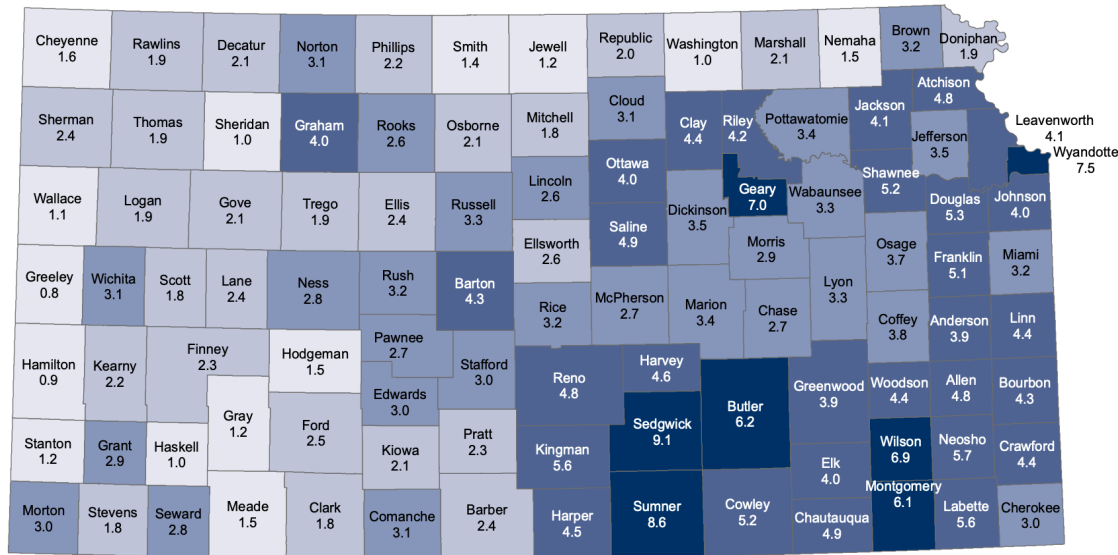
Unemployment Rate



Source: IPSR calculations using Kansas Department of Labor Data

Initial + Continued Claims as a Share of Labor Force

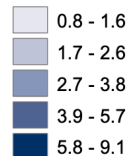
**Projected Unemployment Rate in Kansas, by County
September 5, 2020**



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

Projected unemployment rate derived using initial and continued jobless claims as of September 5th and
preliminary, not seasonally adjusted, civilian labor force for July 2020.

Projected Unemployment Rate



Source: IPSR calculations using Kansas Department of Labor Data

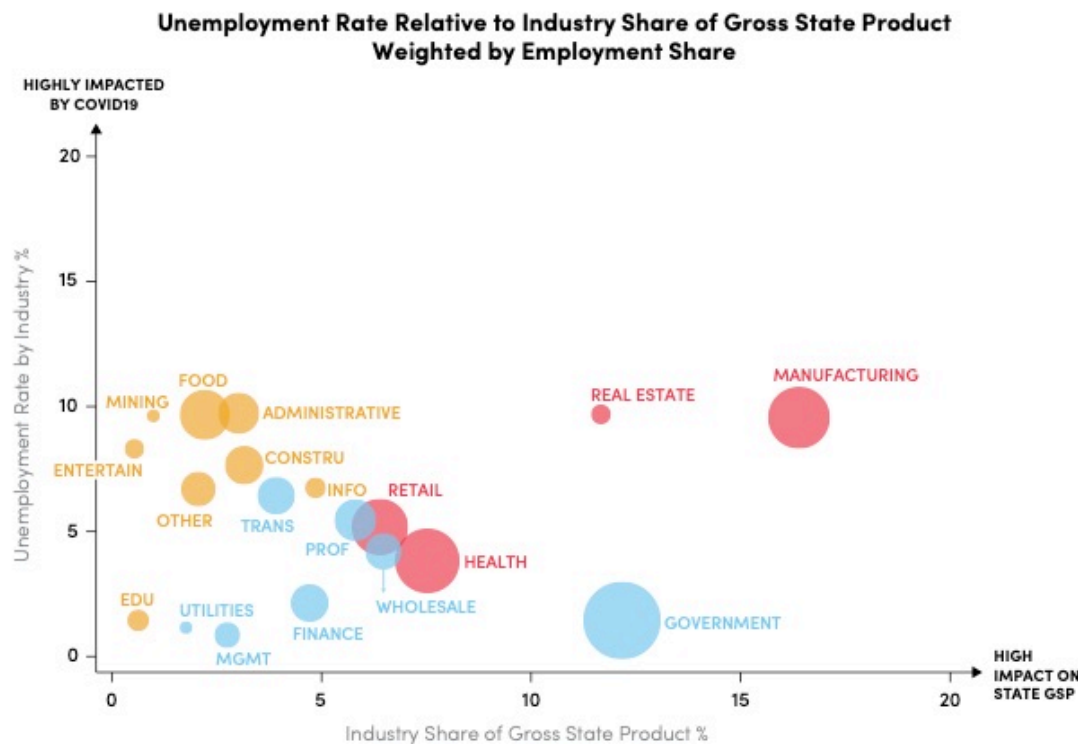
- Top 5 counties by unemployment rate:
 - Sedgwick 9.1%
 - Sumner 8.6%
 - Wyandotte 7.5%
 - Geary 7%
 - Wilson 6.9%
- This likely understates true unemployment because of people's failure to file for continued claims.

Kansas Initial Unemployment Claims by Industry as a Share of Total Employment—Data as of August 1st

Industry	Unemployment Within Industry
Government	6.9%
Health	23%
Manufacturing	59.3%
Retail	29.3%
Food	53.4%
Professional	23%
Administrative	38.3%
Construction	35.9%
Finance	8.4%
Transportation	25.5%
Wholesale	16.4%
Other	54.1%
Management	3%
Education	6.9%
Information	26%
Real Estate	47.6%
Entertainment	63.5%
Mining	35.6%
Utilities	4.3%

- I calculated the share of initial unemployment claims for all of March – September 5th 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 Relative to Gross State Product

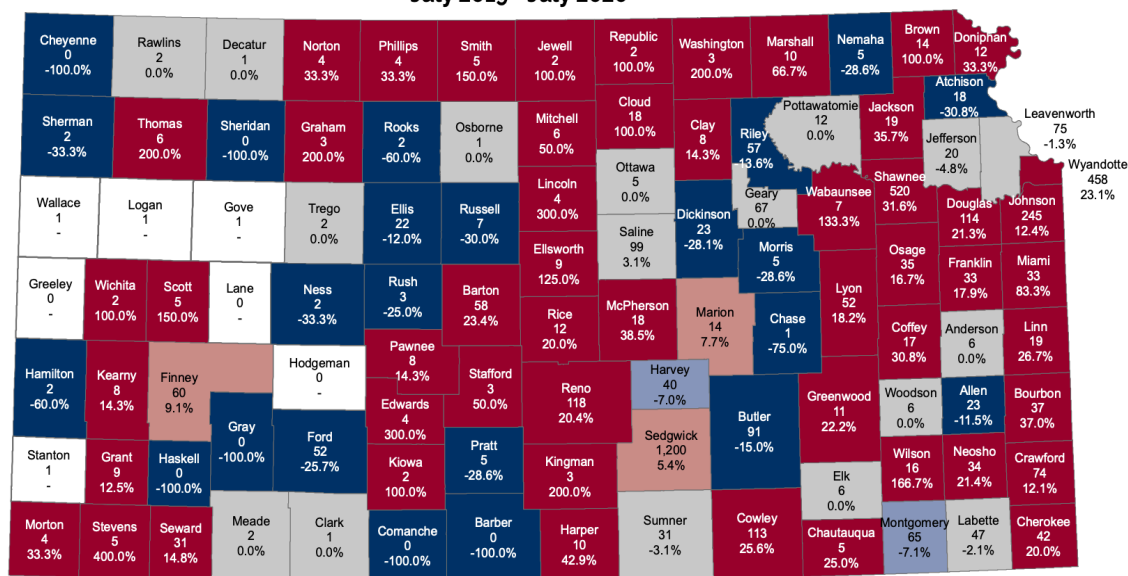


Source: Author's calculations.

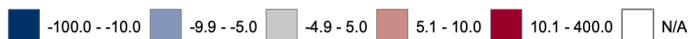
- Sectors that contribute most to Kansas growth with above average unemployment:
 - Manufacturing 9.5% UE & 16% of GSP
 - Health Services 4% UE & 7.5% of GSP
 - Health has improved a lot.
 - Retail 5% UE & 6.4% of GSP

Demand for Social Assistance has Increased

Percent Change in Households Receiving Temporary Assistance for
Needy Families (TANF) in Kansas, by County
July 2019 - July 2020



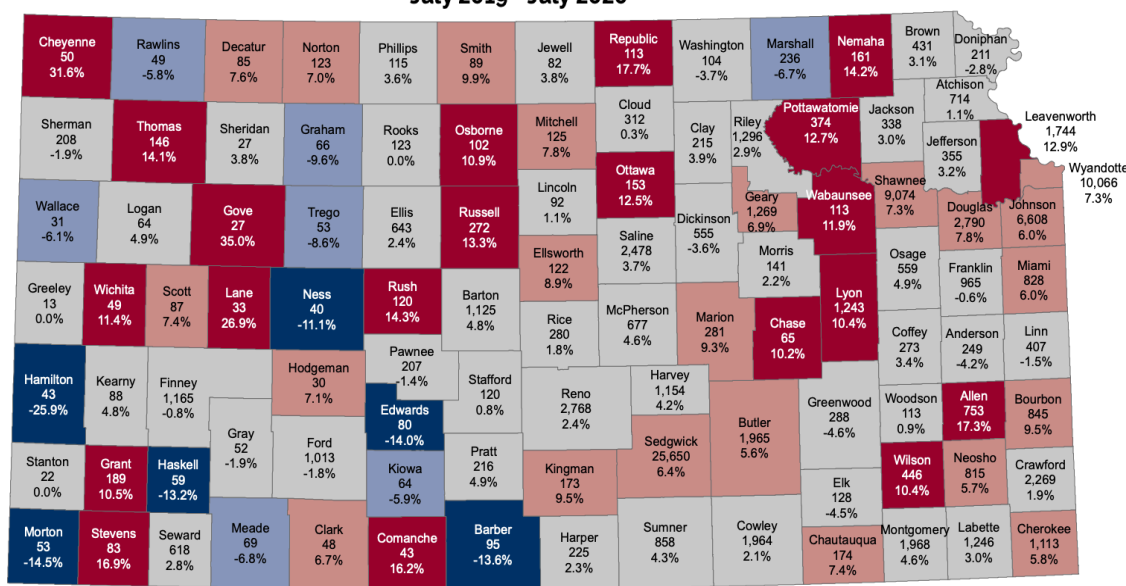
County Name
TANF Households (July 2020)
Percent Change from July 2019



- Percent change in households receiving TANF by county, July 2019 – July 2020
- Dark red counties indicate an increase of 10% or more
 - Caseloads have increased by
 - 21% in Douglas County, 31% in Shawnee County & 12% in Johnson County

Demand for SNAP Benefits have also increased

Percent Change in Households Receiving Supplemental Nutrition Assistance Program (SNAP) in Kansas, by County
July 2019 - July 2020



County Name
SNAP Households (July 2020)
Percent Change from July 2019



Percent change in households receiving SNAP benefits by county, July 2019 – July 2020

Dark red counties indicate an increase of 10% or more

- Douglas County increased 7.8%

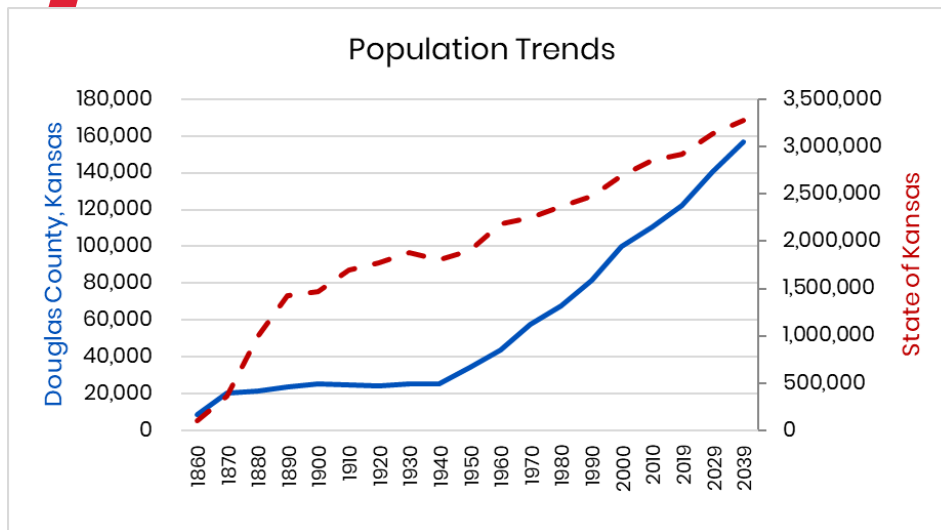
Expect these numbers to increase.



Douglas County

Challenges to a Healthy Recovery

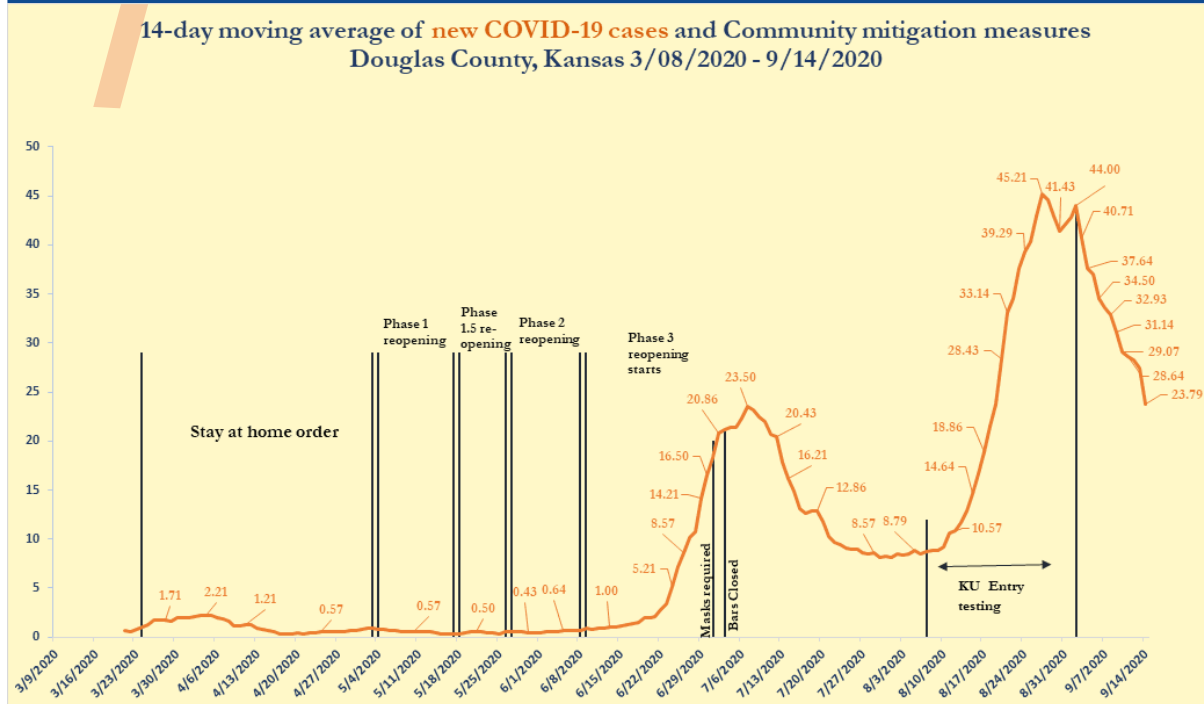
Douglas County Population



Population by Race & Ethnicity	
White	98,478
Black	5,047
American Indian and Alaskan Native	2,935
Asian	6,229
Native Hawaiian and Other Pacific Islander	27
Some Other Race	1,337
Two or More Races	5,266
Hispanic or Latino	7,356
White alone, not Hispanic	93,868
Percent Diversity	213.3%

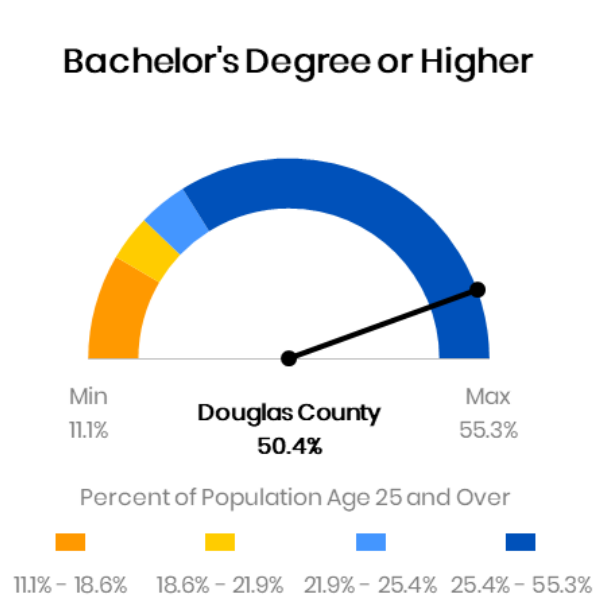
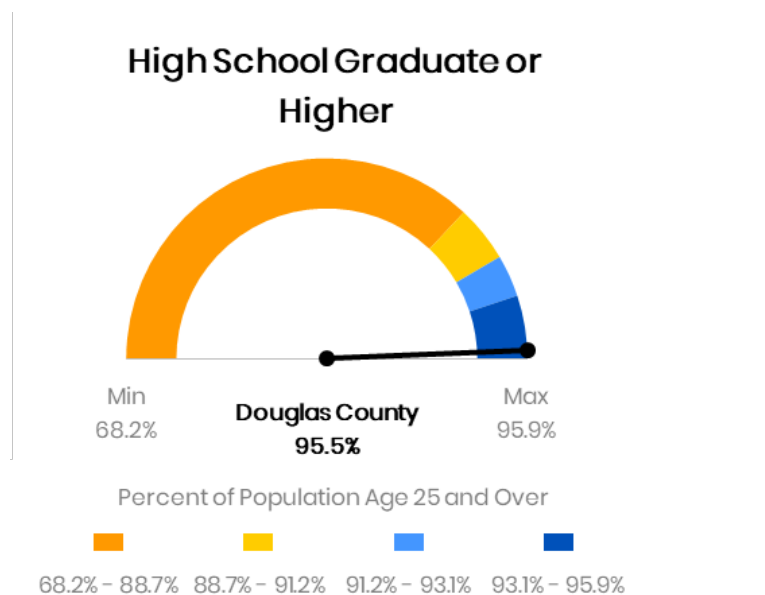
- Douglas County—since 1940 is growing at a faster rate than the State. It has become increasingly diverse.

Douglas County Covid Cases



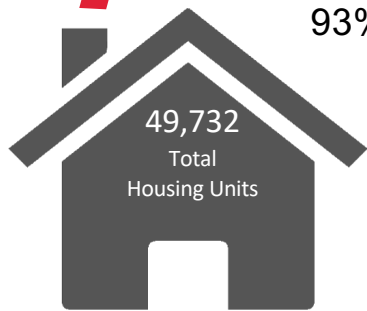
- Douglas County has had 1,895 cases as of September 14th
- Positivity rate is ~9%
- KU has reported 841 cases
 - September 7-12: 39 new cases at Watkins
 - 27% positivity rate

Douglas County Education Compared to All Kansas Counties



- Douglas County—has one of the highest levels of high school graduates and college graduates in the state of Kansas.

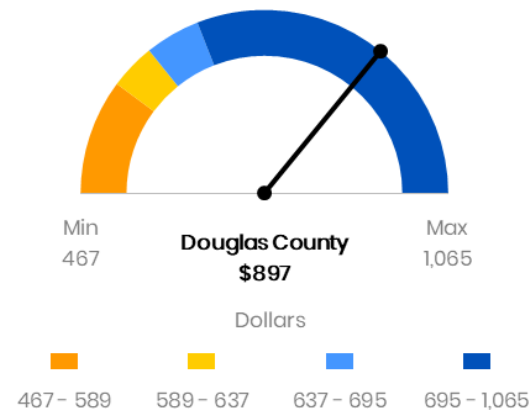
Douglas County Housing



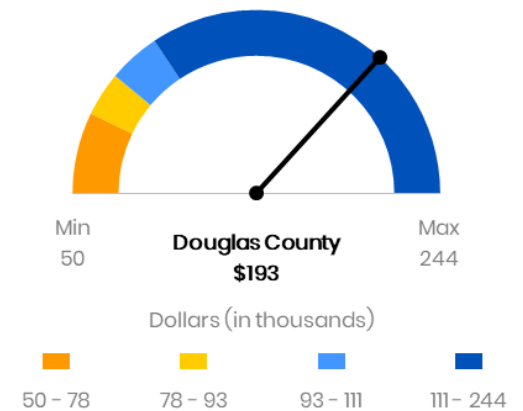
65% Single Family Homes
93% Occupancy

Home Ownership 48.3%
Compared to Kansas 66.3%

Median Gross Rent

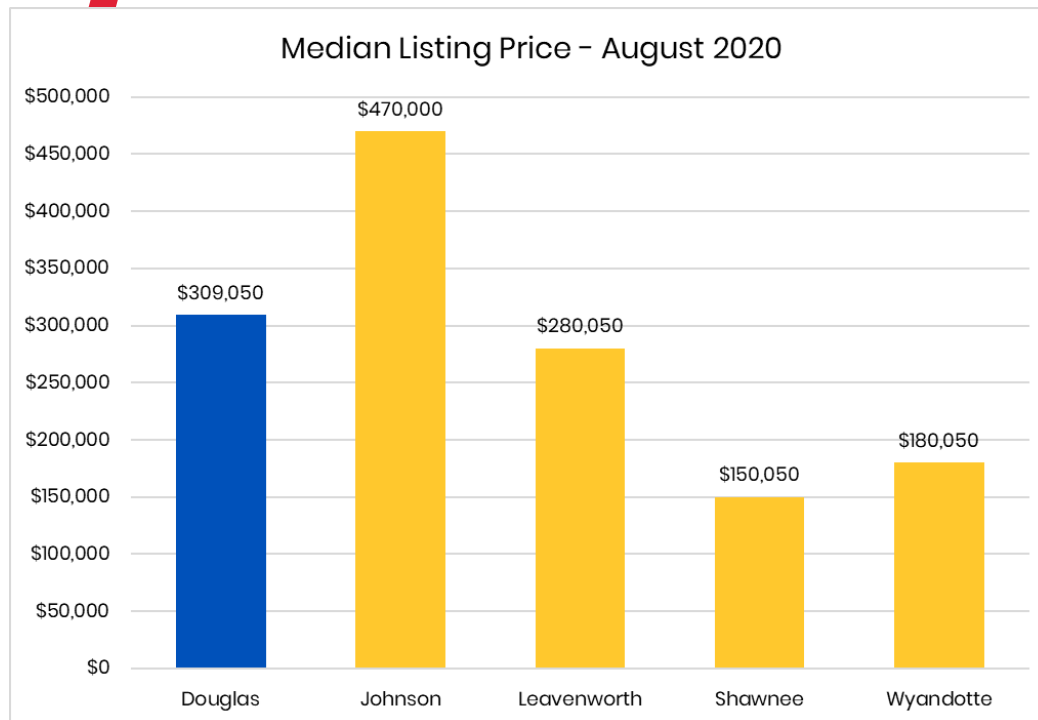


Median Value of Owner-Occupied Housing Units



- Douglas County has some of the highest housing costs in the state. Median rents are \$897.
- Median value of owner occupied housing is \$193,000.

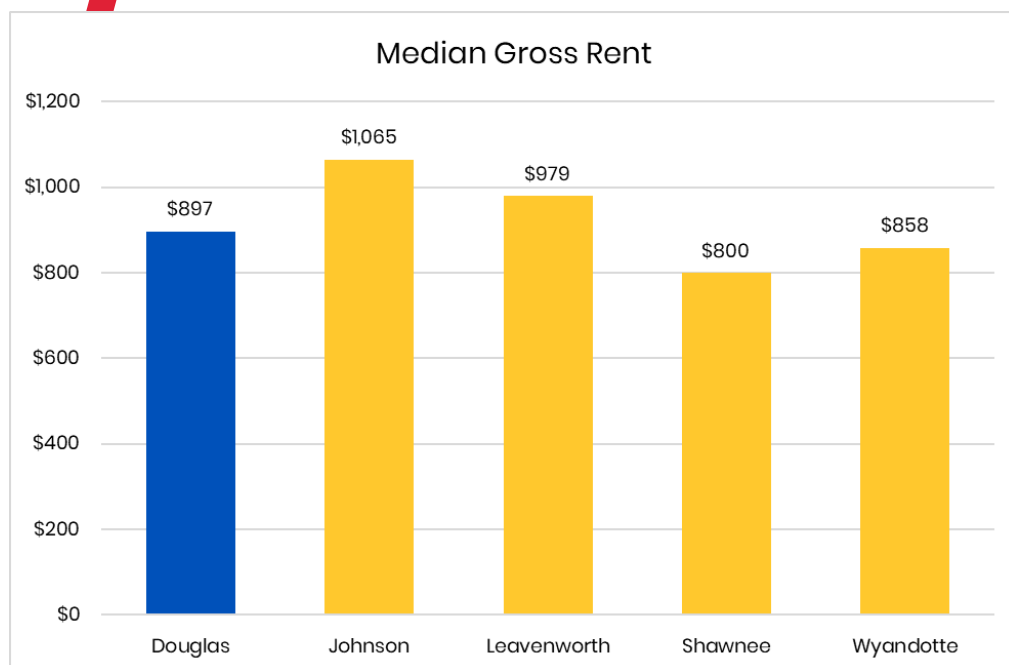
Median House Listing Price in the Region



- Median House Listing Price is \$309,050 in Douglas County
- \$215,050 for State of Kansas

Source: St. Louis Federal Reserve, FRED, <https://fred.stlouisfed.org/series/MEDLISPRI28140>

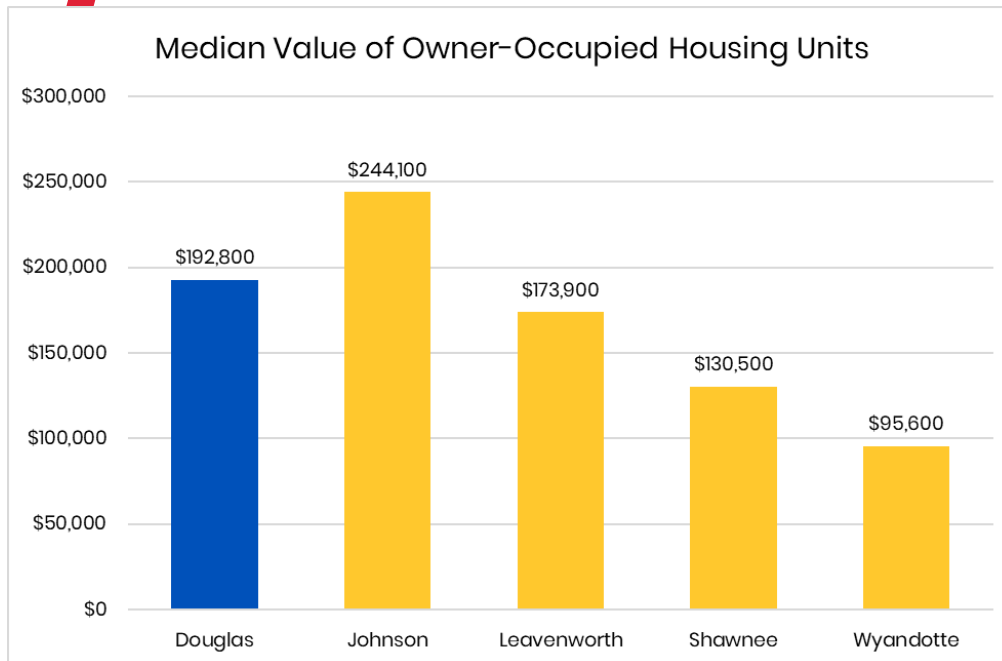
Median Gross Rent



- Median Gross Rent in Douglas County is \$897
- This puts Douglas in the highest quartile in the state.

Source: U.S. Census Bureau, 2014-18 ACS.

Median Value of Owner Occupied Housing Units

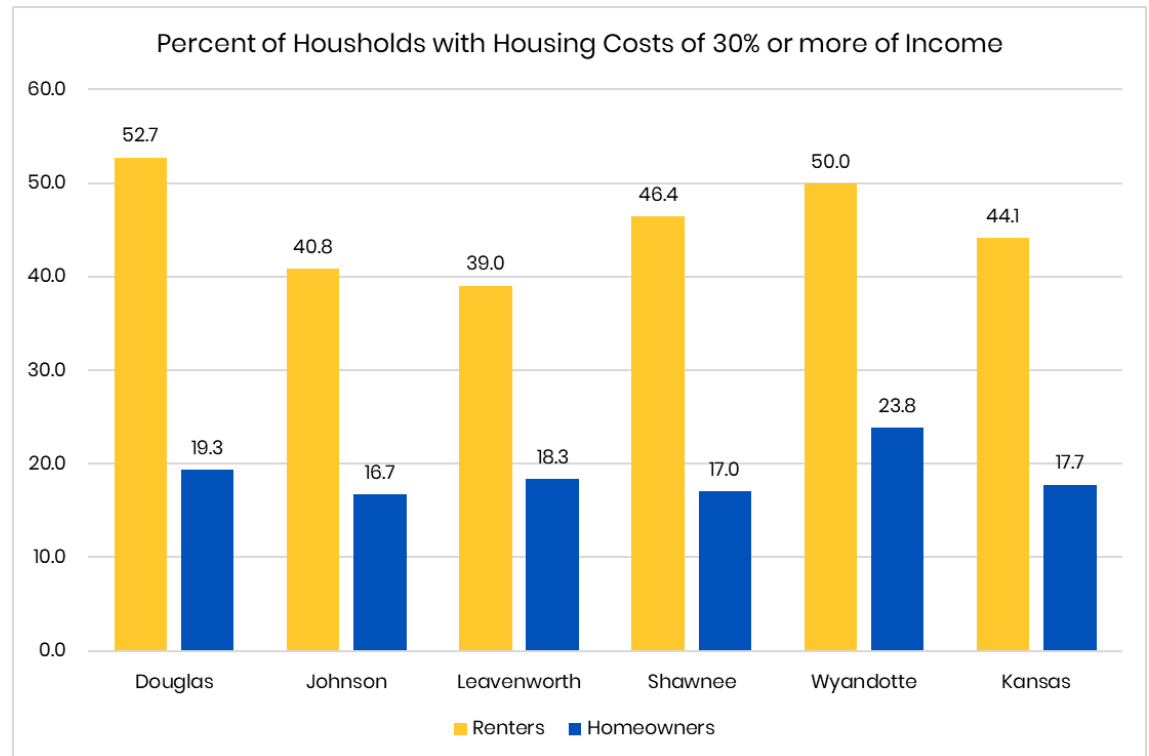


- The median value of owner-occupied housing units in Douglas County is \$192,800

Source: U.S. Census Bureau, 2014-18 ACS.

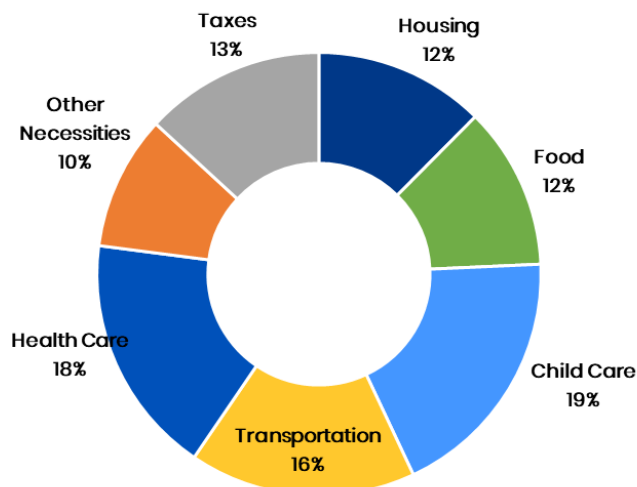
Douglas County Housing Costs as Share of Income

- 53% of renters and 19% of homeowners have housing costs that exceed 30% or more of income.



Douglas County Household Expenses

Expenses for a Family of Four in Douglas County, Kansas



MONTHLY COSTS

2 adults and 2 children
Douglas County, KS

HOUSING	\$843
FOOD	\$804
CHILD CARE	\$1,270
TRANSPORTATION	\$1,119
HEALTH CARE	\$1,190
OTHER NECESSITIES	\$665
TAXES	\$891
Monthly Total	\$6,783
Annual Total	<u>\$81,396</u>

The Economic Policy Institute estimates the cost of a family of four to live in Douglas County is \$81,396

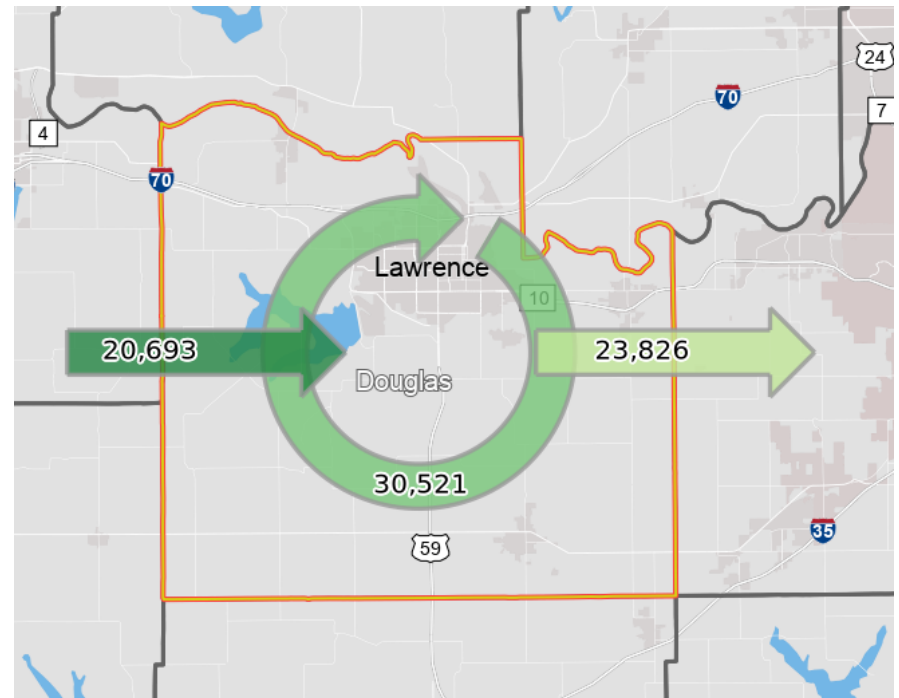
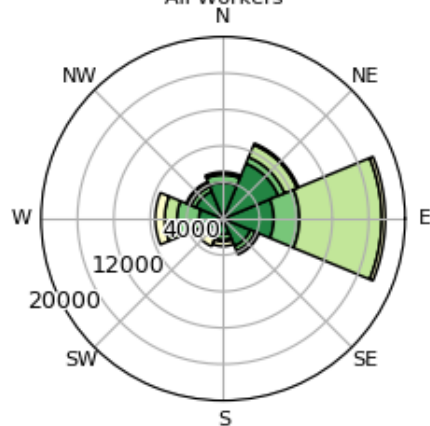
Median household income is \$55,832

Difference leaves a shortfall of \$25,564.

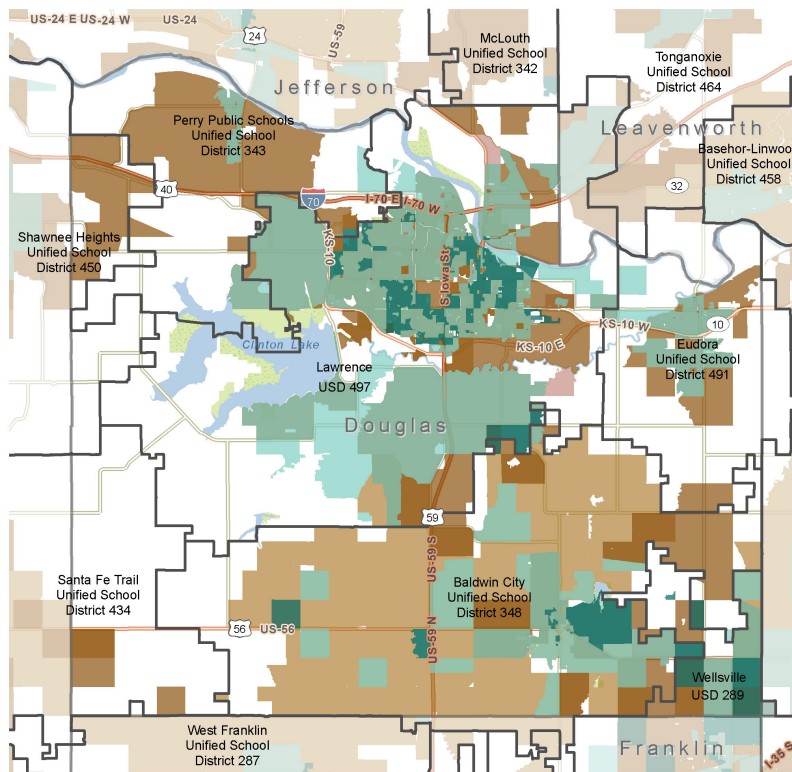
Douglas County Residents Commute for Work

- 56% of Douglas County residents work in the county.
- 44% of residents commute to work. More workers commute to the East with 17% working in Johnson County

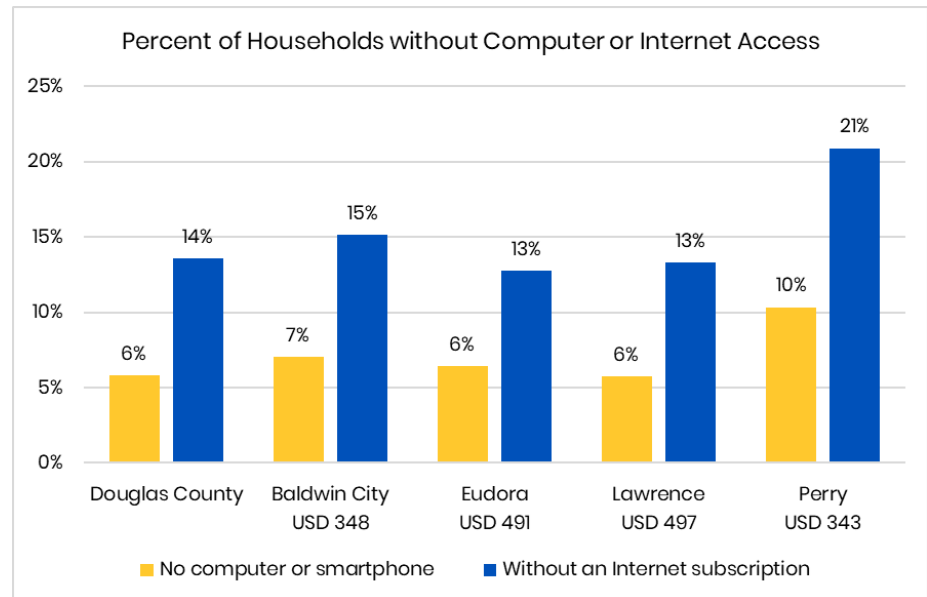
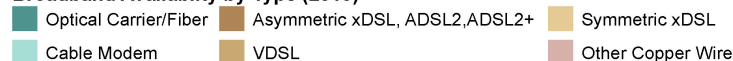
Job Counts by Distance/Direction in 2017
All Workers



Douglas County Residents Lack Broadband Access

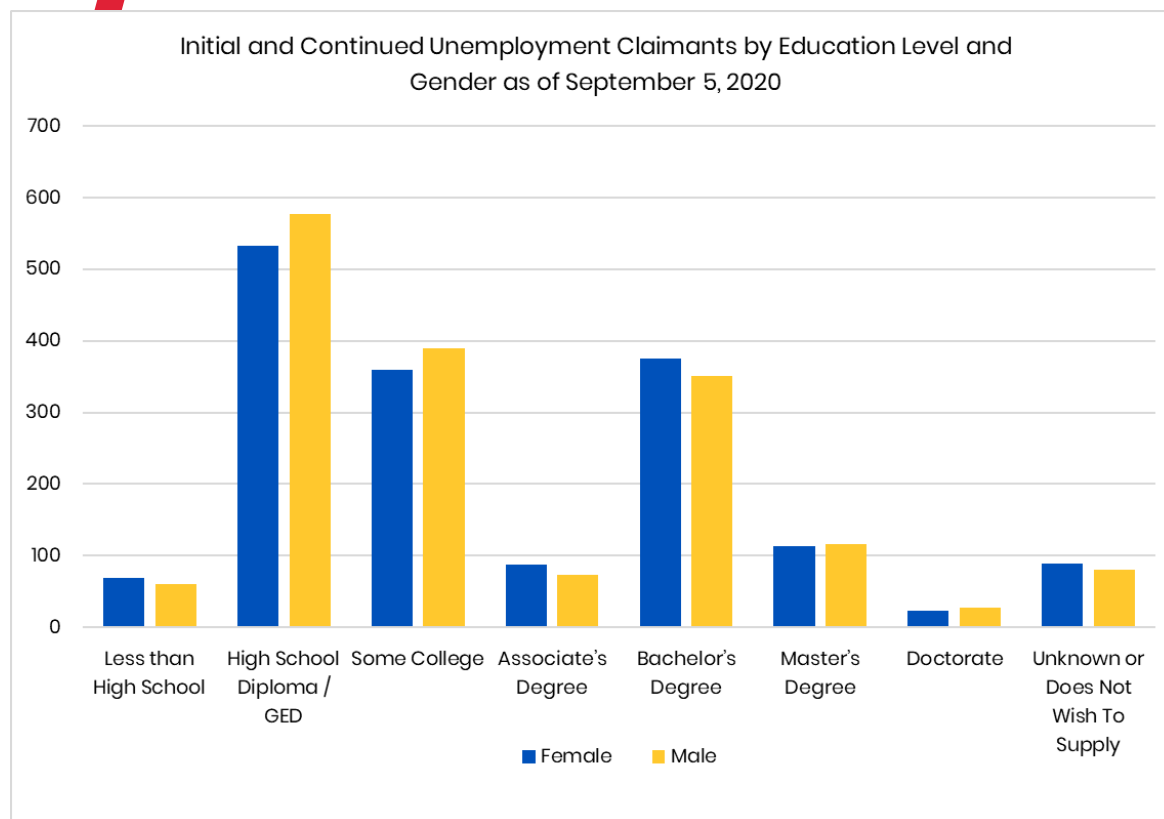


Broadband Availability by Type (2019)



Between 13 – 21% of households within Douglas County School Districts have no Internet Subscription.

Douglas County Unemployment Claims

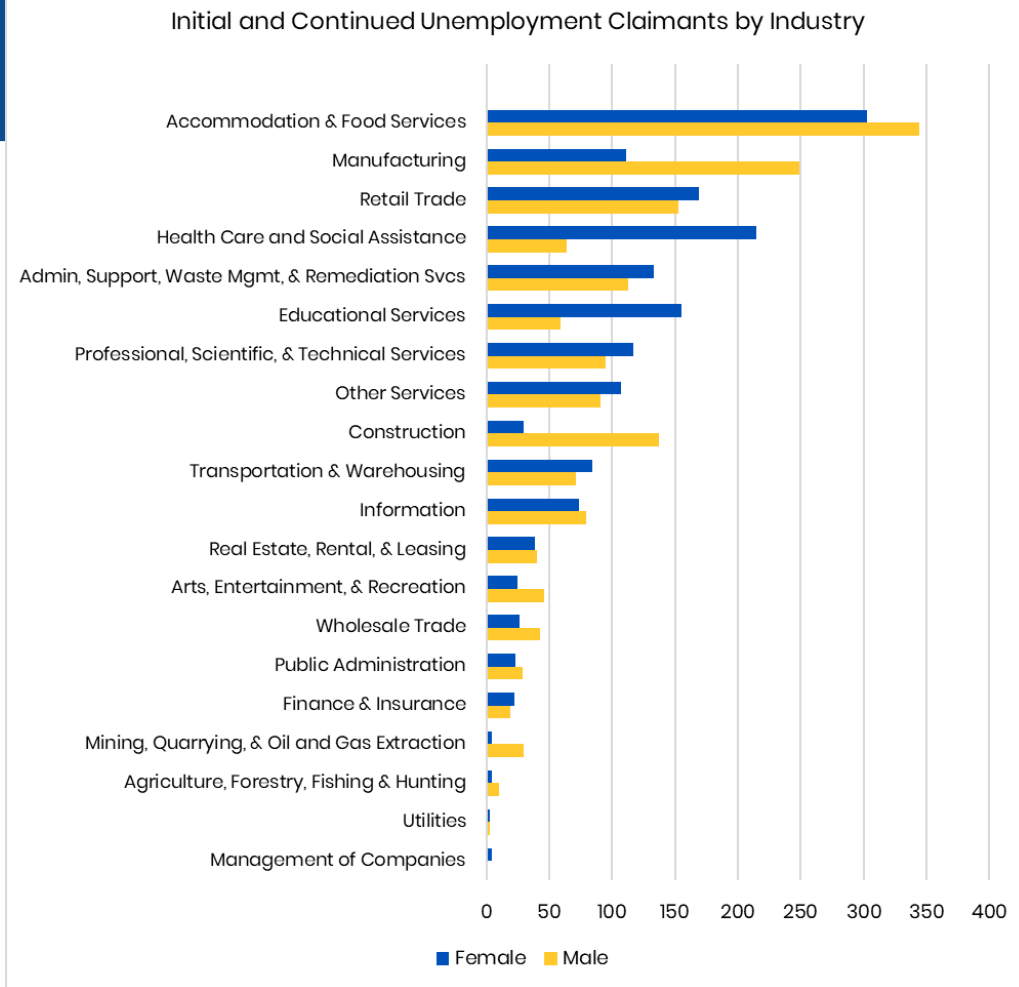


Source: Author's calculations.

- Male high school graduates are most likely to be unemployed.
- Female college graduates are more likely to be unemployed.

Overall, Douglas County unemployment claimants are split 50/50 by gender.

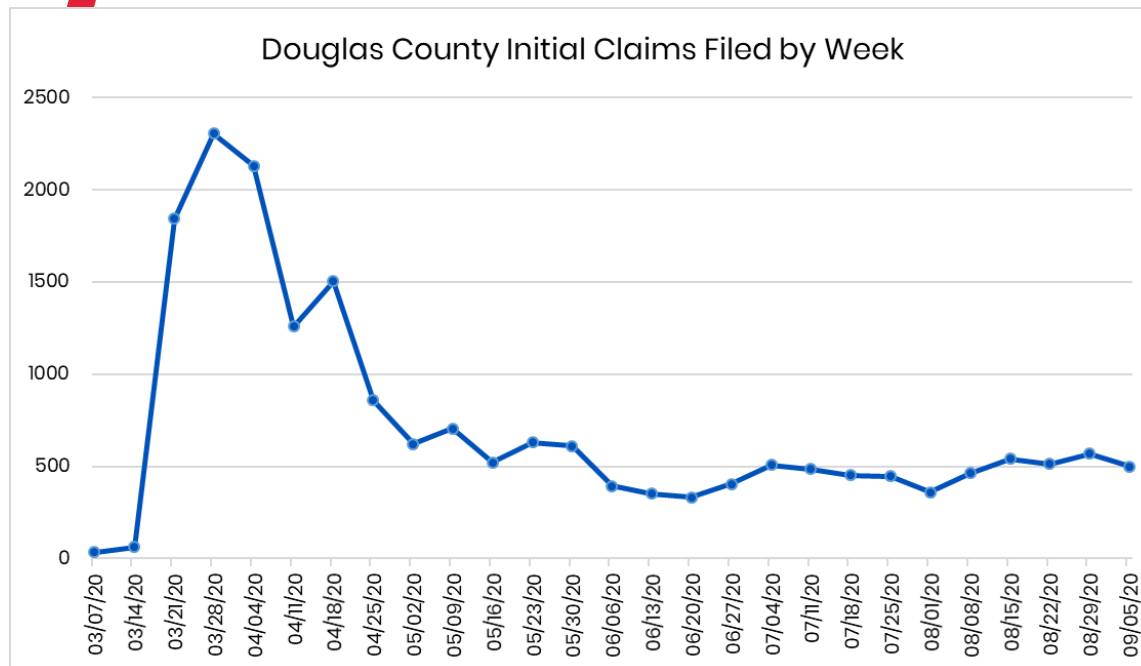
Douglas County Unemployment Claims



Source: Author's calculations.

- Male Unemployment:
 - Accommodation & Food Service
 - Manufacturing
 - Retail Trade
- Female Unemployment:
 - Accommodation & Food Service
 - Health Care
 - Retail Trade

Douglas County Initial Unemployment Claims

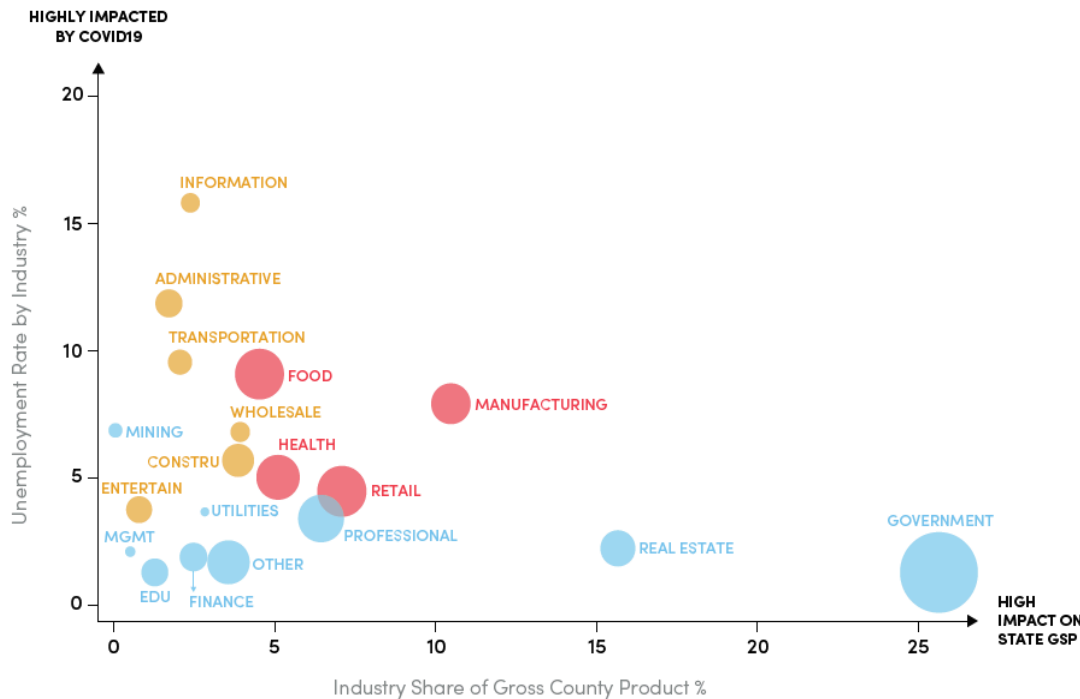


- Douglas County Initial Unemployment claims increase during August though showed slight downward tick at start of September.

Source: Kansas Department of Labor.

Unemployment Claims Relative to Gross Product— Douglas County

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

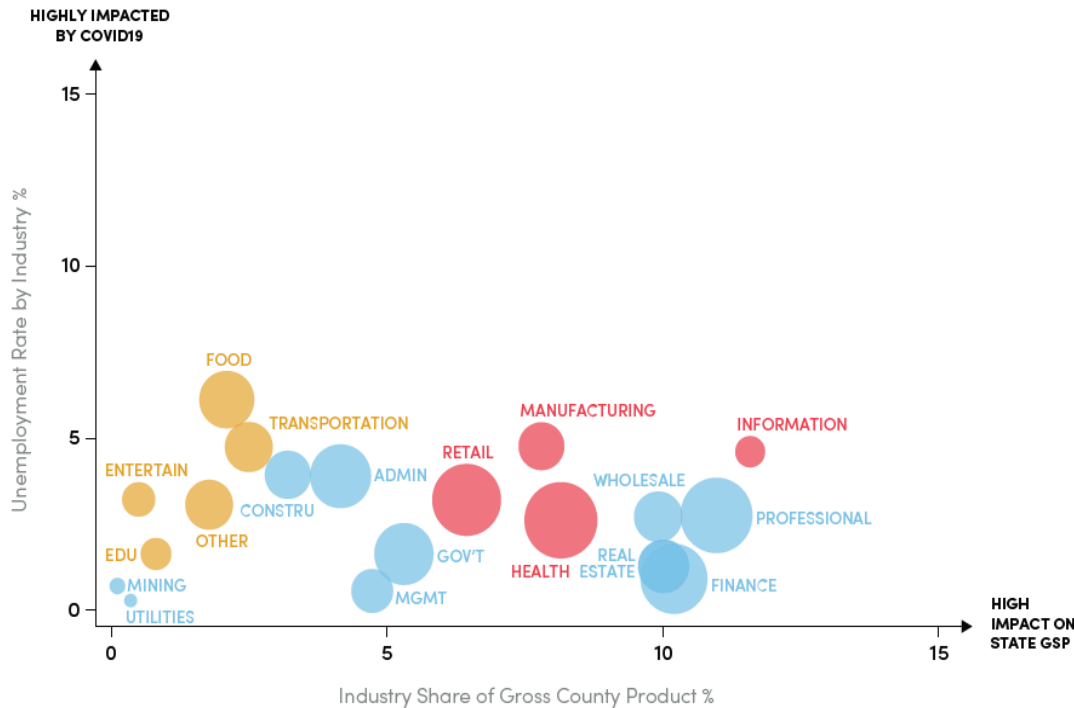


Source: Author's calculations.

- Sectors that contribute most to Douglas County growth:
 - Government 1% UE & 26% of GSP
 - Real Estate 3% UE & 16% of GSP
 - Manufacturing 7% UE & 10% of GSP
 - County UE Rate 8.2%

Unemployment Claims Relative to Gross Product— Johnson County

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



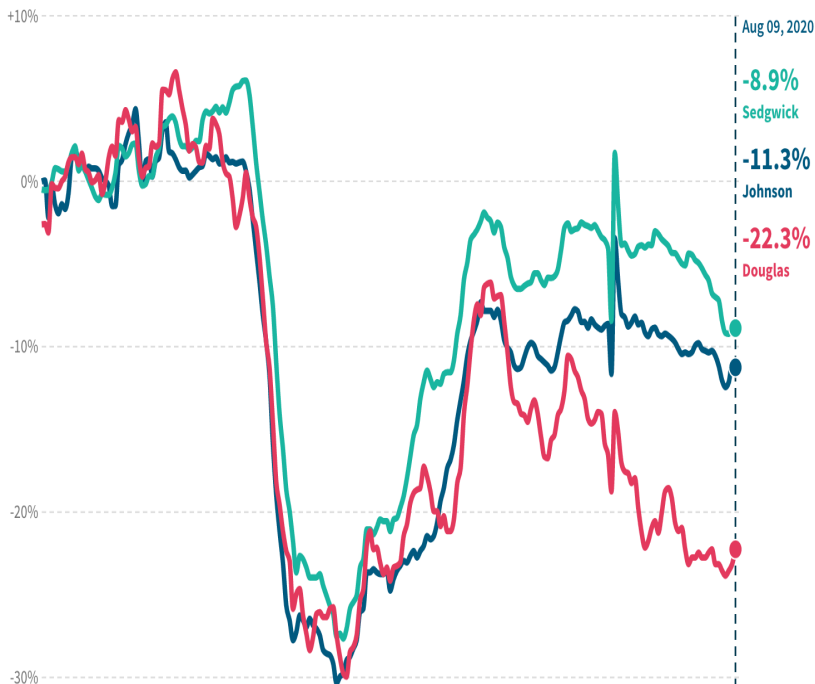
Source: Author's calculations.

- Sectors that contribute most to Johnson County growth :
 - Manufacturing 5.3% UE & 7.8% of GSP
 - Health Services 3% UE & 8.1% of GSP
 - Retail 4% UE & 6.4% of GSP
 - County UE Rate 6.5%

Douglas County Small Businesses are Closing Again

In **Johnson County**, as of August 09, 2020, the number of small businesses open decreased by **11.3%** compared to January 2020.

DOWNLOAD CHART



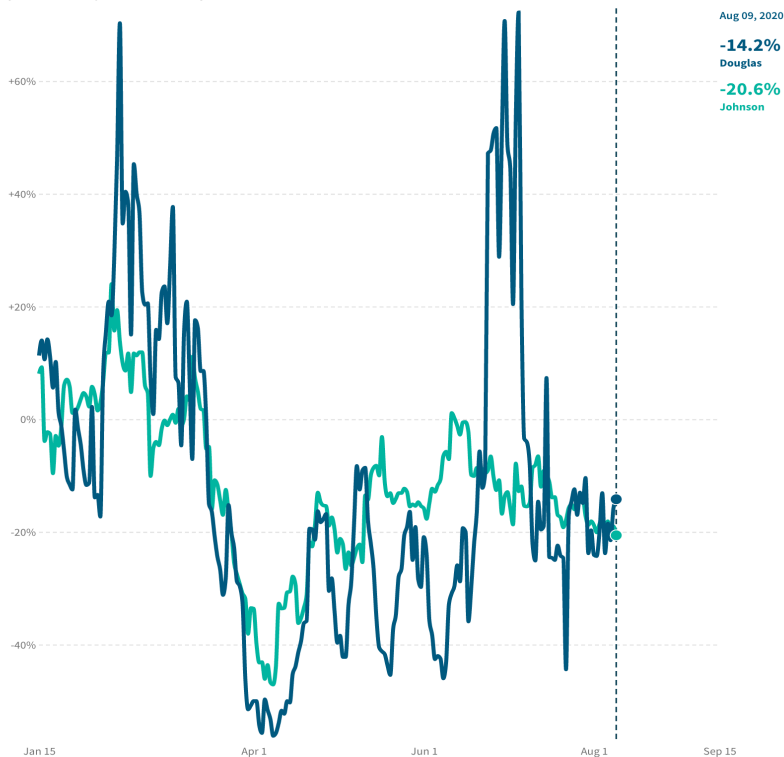
Source: Economic Tracker
<https://tracktherecovery.org/>

- More small businesses have closed in the past week
 - Likely the result of additional COVID restrictions
- The number of small businesses open in Kansas has fallen by 12.2% since January.
 - In Johnson County there's been a drop of
 - -11.3% of small businesses that are open.
 - Sedgwick County is doing relatively better
 - Douglas County is doing significantly worse.

Douglas County Small Businesses Revenue is Down

In **Douglas County**, as of August 09 2020, total small business revenue decreased by **14.2%** compared to January 2020.

DOWNLOAD CHART



Source: Economic Tracker
<https://tracktherecovery.org/>

- Small Business revenue in Douglas County increased in July, but has since dropped. It's now down 14.2% compared to January.
- In Johnson County there's been a drop of
- -20.6% of small businesses revenue
- In Kansas, small business revenue is down -12.5%

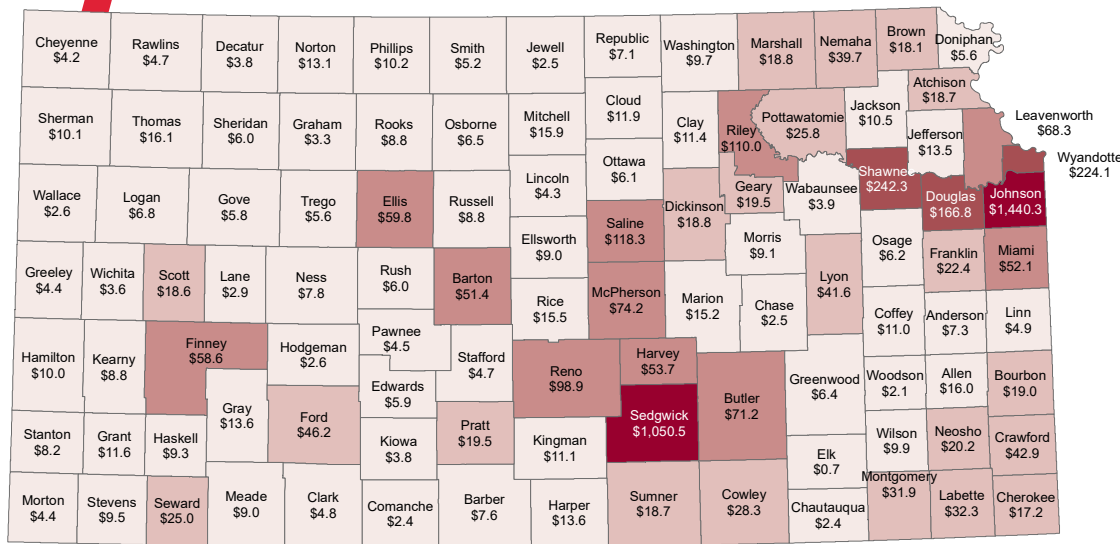
Douglas County Vulnerable Businesses

Industry	Total	Small Businesses		
		Businesses with fewer than 500 Employees	Self-Employed	Total Small Businesses
Manufacturing	188	58	128	186
Retail Trade	1,054	383	671	1,054
Health Care and Social Assistance	898	319	578	621
Accommodation and Food Services	407	318	89	151
Other Services (except Public Admin)	1,177	260	917	1,235

- Douglas County has 3,724 establishments in vulnerable industries
- 1,341 of these have employees
- 3,247 are small businesses

Payroll Protection Program Loans by County

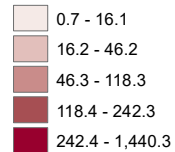
Estimated Amount of PPP Loans in Kansas, by County,
as of June 30, 2020



- Johnson: \$1.4 billion
- Sedgwick: \$1 billion
- Shawnee: \$242 million
- Wyandotte: \$224 million
- Douglas: \$167 million

Source: Institute for Policy & Social Research, The University of Kansas;
data from U.S. Small Business Administration.

Dollars (in millions)

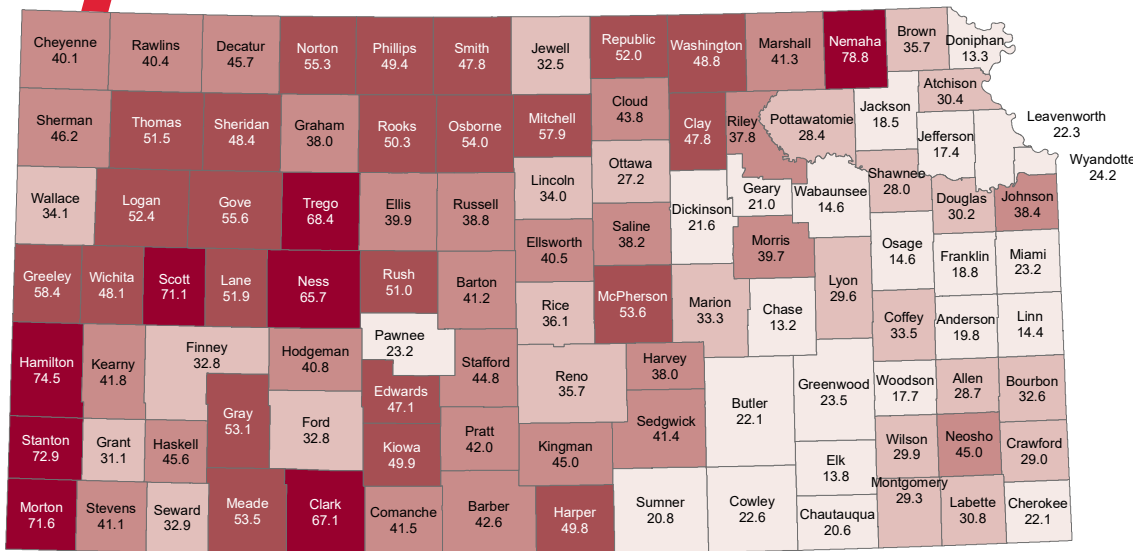


Kansas Total:

\$4,996.1 million
51,872 loans

Jobs Retained with PPP Loans

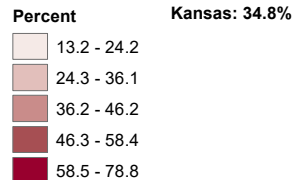
Jobs Retained with PPP Loans as a Percentage of Civilian Labor Force in Kansas, by County, as of June 30, 2020



- Kansas: 34.8% of workforce
- Douglas 30%
- Johnson 38%
- Shawnee 28%
- Morton 71.6%
- Scott 71.1%

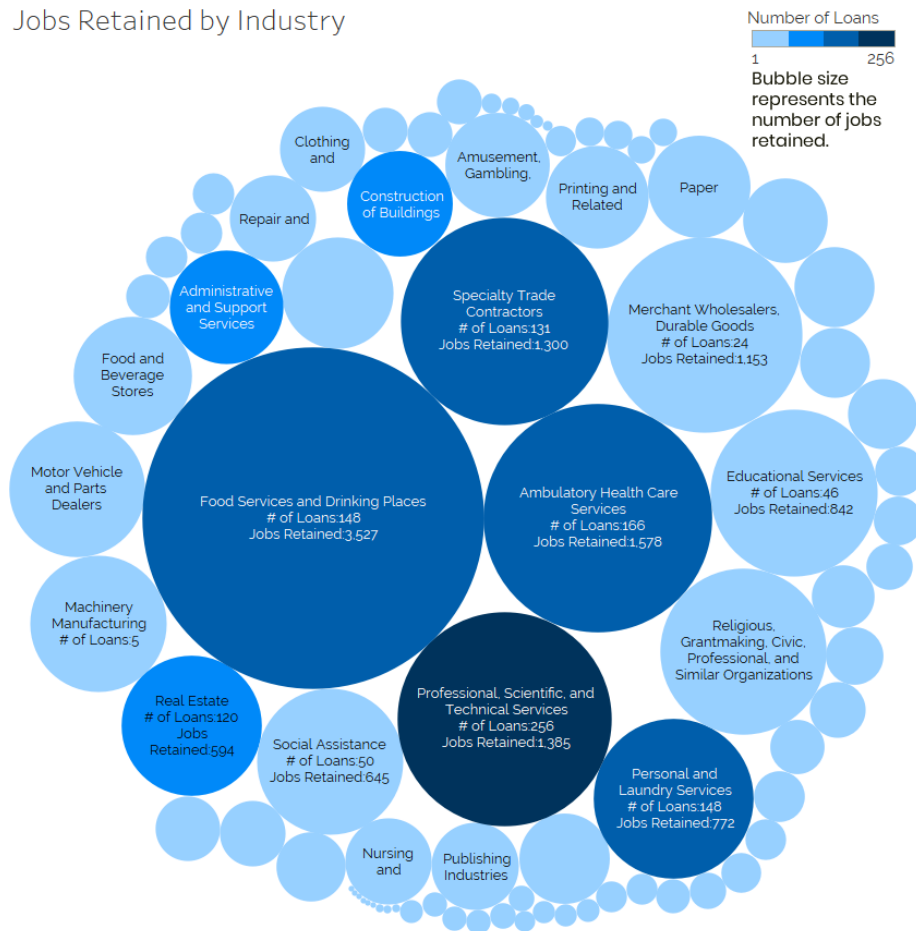
Source: Institute for Policy & Social Research, The University of Kansas;
data from U.S. Small Business Administration and Bureau of Labor Statistics.

Civilian labor force estimates from June 2020.



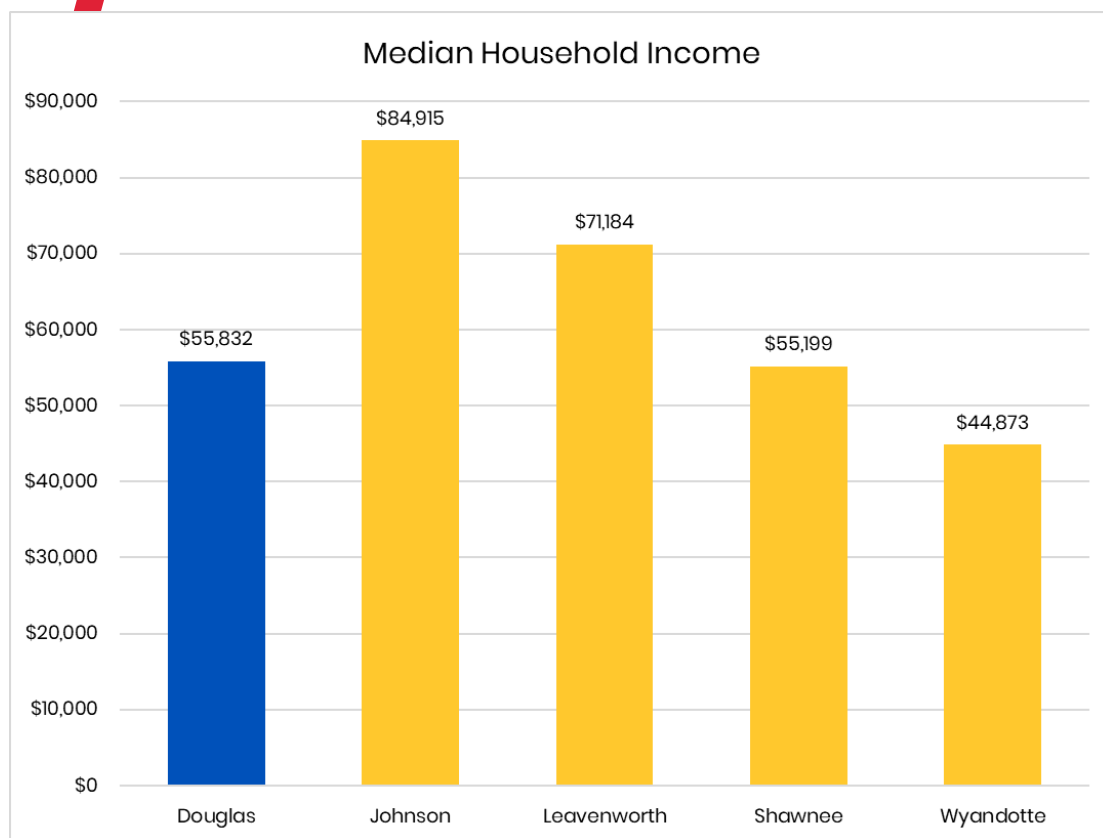
PPP Program in Douglas County as of 6/30/2020

Jobs Retained by Industry



- Douglas County 1,914 businesses received PPP loans for a total amount ~\$167 million. These loans preserved 20,164 jobs
 - Professional, scientific, and technical services 256 loans & 1,385
 - Food services and drinking places 148 loans & 3,527 jobs

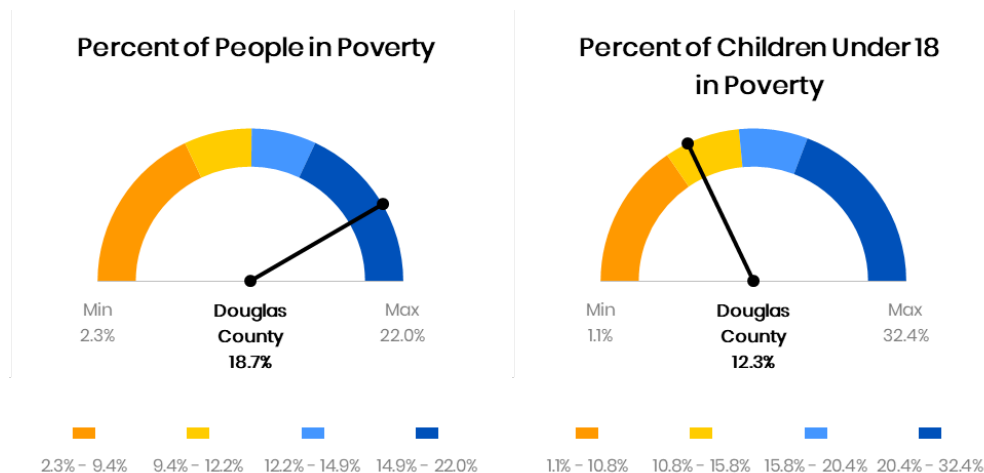
Median Household Income



Source: U.S. Census Bureau, 2014-18 ACS.

- Median Household income in Douglas County is \$55,832
- The statewide median is \$57,422.

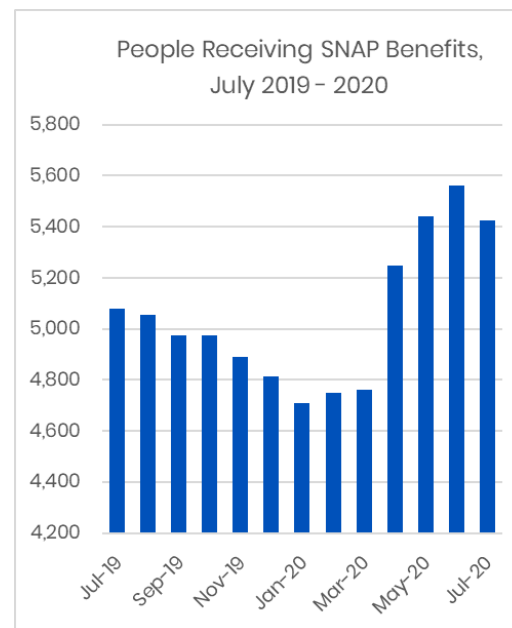
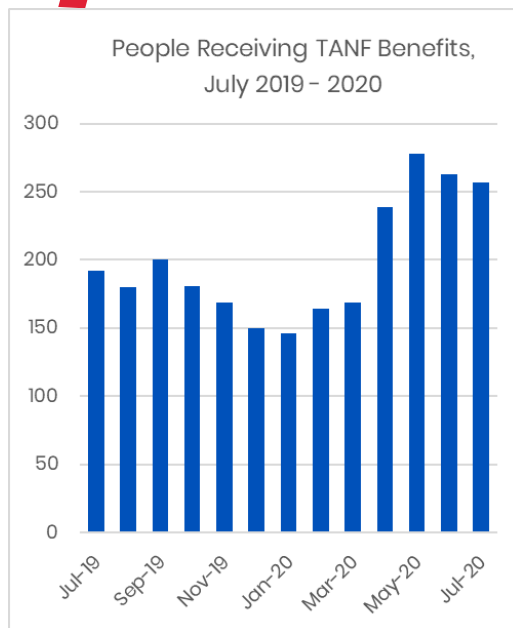
Percent of People in Poverty in Douglas County



- The overall portion of Douglas County residents living in poverty is 18.7%
- 12.3% of children under 18 in Douglas County live in poverty
- Douglas County falls into the upper quartile for Kansas counties for people in poverty

Source: U.S. Census Bureau, 2014-18 ACS.

Douglas County SNAP and TANF Participation



Participation in the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF), have increased.

- 7% increase in SNAP program participants
- 34% increase in people receiving TANF benefits .



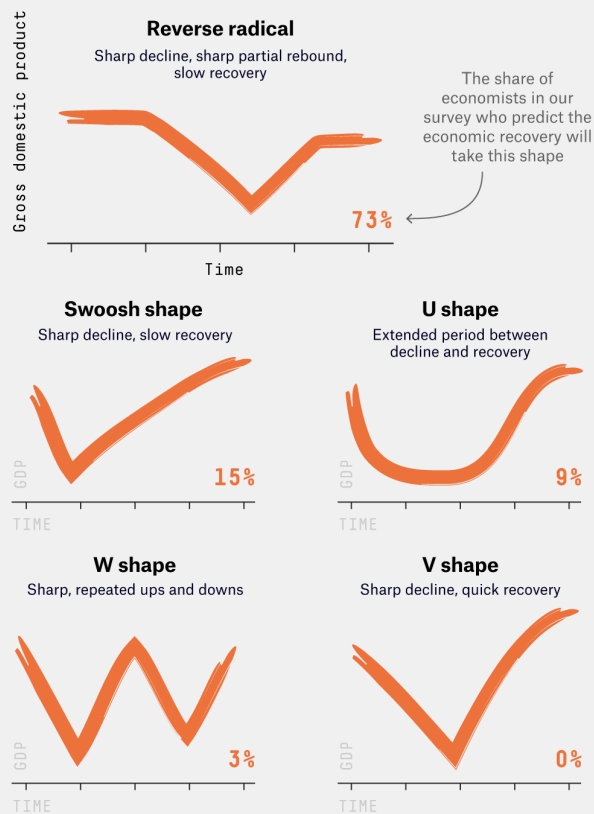
What's the Latest Letter for the Economic Recovery?

K is not OK

Shape of the Recovery—Reverse Radical?

Economists in our survey expect an uneven recovery

Expert predictions for the shape of the U.S. economic recovery



FiveThirtyEight

SOURCE: FIVETHIRTYEIGHT/IGM COVID-19 ECONOMIC OUTLOOK SURVEY

- In June, Fivethirtyeight.com interviewed top macroeconomists about the recovery.
- 73% of economists expect a reverse radical recovery:
 - Sharp-partial recovery with prolonged lower level.
- Now economists are talking about K-shaped recovery

Source: <https://fivethirtyeight.com/features/what-economists-fear-most-during-this-recovery/>

Is this a K-shaped Recovery?

The Washington Post

Economy

The recession is over for the rich, but the working class is far from recovered

The stock market and home values are back at record levels, while jobs remain scarce for those earning less than \$20 an hour

August 13, 2020

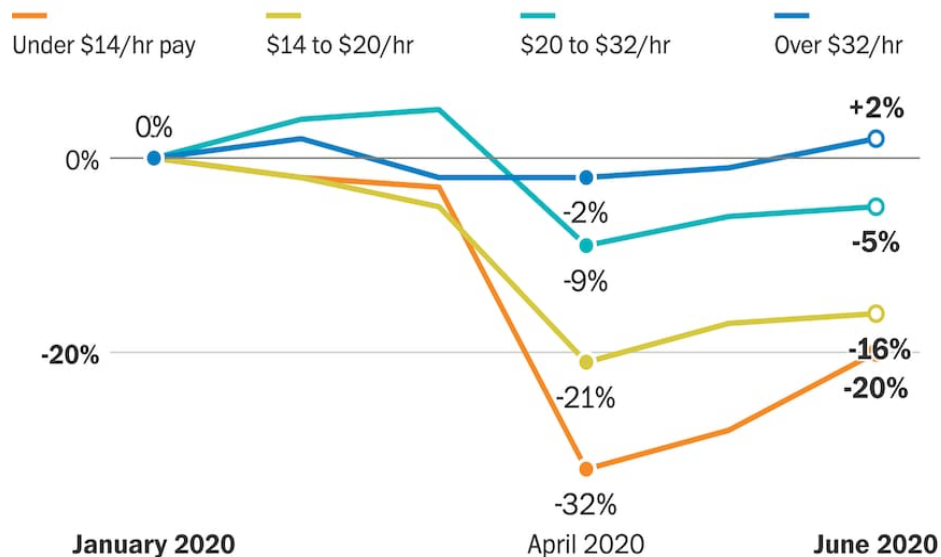
Source: https://www.washingtonpost.com/business/2020/08/13/recession-is-over-rich-working-class-is-far-recovered/?utm_campaign=wp_post_most&utm_medium=email&utm_source=newsletter&wpisrc=nl_most

KU INSTITUTE FOR
POLICY &
SOCIAL RESEARCH
The University of Kansas

Is this a K-shaped Recovery?

Jobs have rebounded for the top, but not for the bottom

(Chart shows percent change in employment since January 2020)



Source: Opportunity Insights analysis of Current Population Survey data

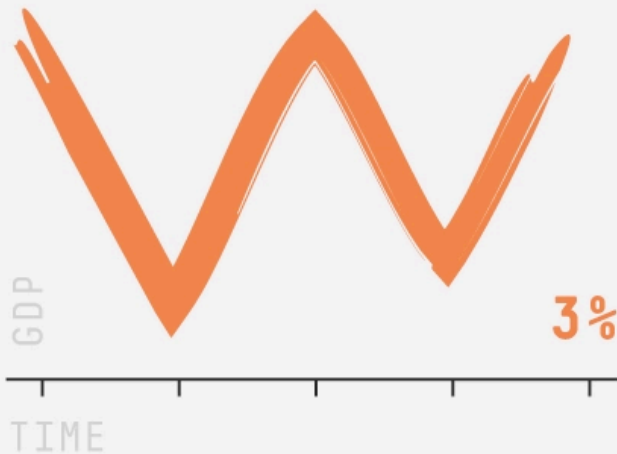
TOM PETERSON/THE WASHINGTON POST

- Jobs for those earning > \$32 per hour have recovered.
 - Jobs for those earning between \$20-\$32 per hour down 5%
 - Jobs for those earning between \$14-\$20 per hour down 16%
 - Jobs for those earning between <\$14 per hour down 20%
- The rich have recovered.
- The rest have not.

Could the K turn into a W?

W shape

Sharp, repeated ups and downs



State and Local Budget Pain Looms Over Economy's Future

Providing more aid to struggling governments has become one of the biggest issues tangling up the debate over another pandemic rescue package.

- The Fed chair, Jerome H. Powell, has repeatedly warned that state job cuts could drag down an economic recovery: “It will hold back the economic recovery if they continue to lay people off and if they continue to cut essential services.”

Source: August 14, 2020 New York Times. <https://www.nytimes.com/2020/08/14/business/economy/state-local-budget-pain.html?searchResultPosition=1>

State Government Budgets are in Trouble



Governor Laura Kelly, testified before the House Committee on Financial Services on September 10th:

“We need a coherent, top-down strategy that will reassure businesses and Americans that our government has a plan to keep our economy stable until we have a vaccine in place.”

“Severe budget cuts do not create small government, they create failed government,”

Source: <https://www.hutchnews.com/news/20200910/kelly-warns-budget-crunch-will-return-to-kansas-without-significantly-more-federal-aid>

Economic Impacts of COVID-19

- We will be posting weekly updates on data.
- We are moving to update these briefings every month.
- 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

Obrigado

Toda

Thanks

Takk

Danke

Gracias

Merci

KU INSTITUTE FOR
POLICY &
SOCIAL RESEARCH
The University of Kansas