



CENTER FOR
ECONOMIC
RESEARCH

REAL

REGIONAL ECONOMIC ANALYSIS OF LOUISIANA

REPORT

WINTER 2022



Dean's Message

Thank you for reading the Winter 2022 edition of the Regional Economic Analysis of Louisiana (REAL) Report. This quarterly publication is an ongoing series designed to provide insight into recent economic developments in Louisiana. This issue features analysis on the state's gaming industry, the impact of hurricanes on the soybean industry, labor force outcomes near the state's prisons, oil and gas prices following Russia's invasion of Ukraine, and parish-level inflation rates. As always, the economic forecasts for the state included in the report provide insight into current and future labor and wage trends.

The REAL Report is produced by the Center for Economic Research, in collaboration with faculty and students in Louisiana Tech University's College of Business, for the state of Louisiana and our region of the South. Providing an invaluable learning experience, this report is compiled by undergraduate business students in partial fulfillment of their Regional Economic Analysis class.

This report and all previous issues can be found at business.latech.edu/realreport. For more information on the Center for Economic Research or the REAL Report, please contact Dr. Patrick Scott at psscott@latech.edu. Inquiries about specific sections of the report should be referred to the author of each section, while media inquiries should be directed to waldroup@latech.edu.

As always, I hope this report is beneficial to your efforts.

Sincerely,



CHRISTOPHER L. MARTIN, PH.D.
Dean and Chase Endowed Professor
College of Business
Louisiana Tech University

Table of Contents

Meet the Team	3
Louisiana Economic Indicator Forecasts	4
The Impact of Hurricanes and Tropical Storms on Soybean Crop Prices in Louisiana	6
Serving Time: Labor Force Outcomes Near Prisons	8
Forecasting Daily Crude Oil and Gasoline Prices After the Russian Invasion of Ukraine	10
Parish Level Inflation Rates are Far More Volatile than the State Average	12
Placing Bets: Louisiana's Gaming Industry	14

Data used in this report, except where noted, extend to what is available as of December 31, 2021.

Meet the Team



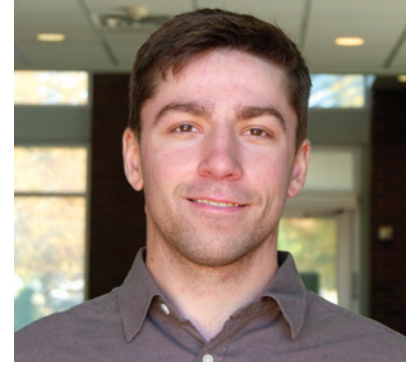
Paycen Brouillette is a senior business economics major from St. Francisville, LA. Paycen is involved in the Louisiana Tech Student Government Association, Pi Kappa Phi Fraternity, Student Recruiters, and the Student Advancement Team. He served as a member of the peer review board of the Economic Scholars Program hosted by the Federal Reserve Bank of Dallas, and also contributed academic research to the program. Upon graduation in May 2022, Paycen plans to obtain a master's degree in economics and pursue further economic research.

Contact Paycen at pmb024@latech.edu.



Patrick Miller is a fourth-year business economics major at Louisiana Tech University from Mandeville, LA. Aside from economic research, Patrick is involved in the Student Government Association as a class senator, and is a member of Pi Kappa Phi Fraternity. He currently serves on the Review Board for the Economic Scholars Program with the Federal Reserve Bank of Dallas and plans to graduate in 2022.

Contact Patrick at ptm012@latech.edu.



Adam Quebedeaux is a fourth-year business economics major at Louisiana Tech University from New Orleans, LA. He is involved on campus with the University's Air Force ROTC program. He plans to graduate in Spring of 2022, and after graduating, will move to Pensacola, FL to begin work in the Air Force.

Contact Adam at amq002@latech.edu.



Colyn Sevario is a fourth-year business economics student involved on campus in Student Government Association, Student Recruiters, and the Baptist Collegiate Ministry. Colyn graduated with his undergraduate degree in the Winter of 2022. He is pursuing his master's degree in business administration, which he will graduate with in the Summer of 2022.

Contact Colyn at cms106@latech.edu.



Amanda Wilder is a fourth-year accounting major with a minor in business economics from Texas. She is involved in the Student Government Association, Pre-Law Society, and is a member of Alpha Chi Omega Sorority and the Association of International Certified Professional Accountants. Amanda plans to graduate in Spring of 2022 and pursue a Masters in Accounting.

Contact Amanda at agw024@latech.edu.



Dr. Patrick Scott is an assistant professor of economics and director of the Center for Economic Research. He teaches macroeconomics, monetary theory, and research methods at Louisiana Tech University. His research interests include optimal monetary policy models, dynamic general equilibrium models, time series forecasting, and Bayesian econometrics.

Contact Patrick at pscott@latech.edu.

Louisiana Economic Indicator Forecasts

BY C. PATRICK SCOTT, PH.D.

Forecasts are provided using a Bayesian model averaging approach from many statistical models. This method is utilized to capture the relative uncertainty that any one individual model is not properly specified and thus accounting for that uncertainty in our analysis. All data used below extend to January 2022.

Figure 1: Forecasted Non-Farm Employment

Total non-farm employment has improved considerably, adding nearly 26,000 in January alone. We are still down approximately 94,000 jobs from pre-COVID levels in the state, which does not account for missed employment growth over that time. Most of the job losses have occurred in the hospitality, leisure and food services industries while business management, legal services and finance industries have largely recovered. Weekly initial jobless claims have returned to their long-run average. Frictional unemployment is up as the Great Resignation is not slowing. New variants of COVID, along with uncertain public safety policy, are still weighing down new job creation.

Punchline: Job recovery is happening, but at a snail's pace.

Figure 1: Forecasted Non-Farm Employment (Thousands)

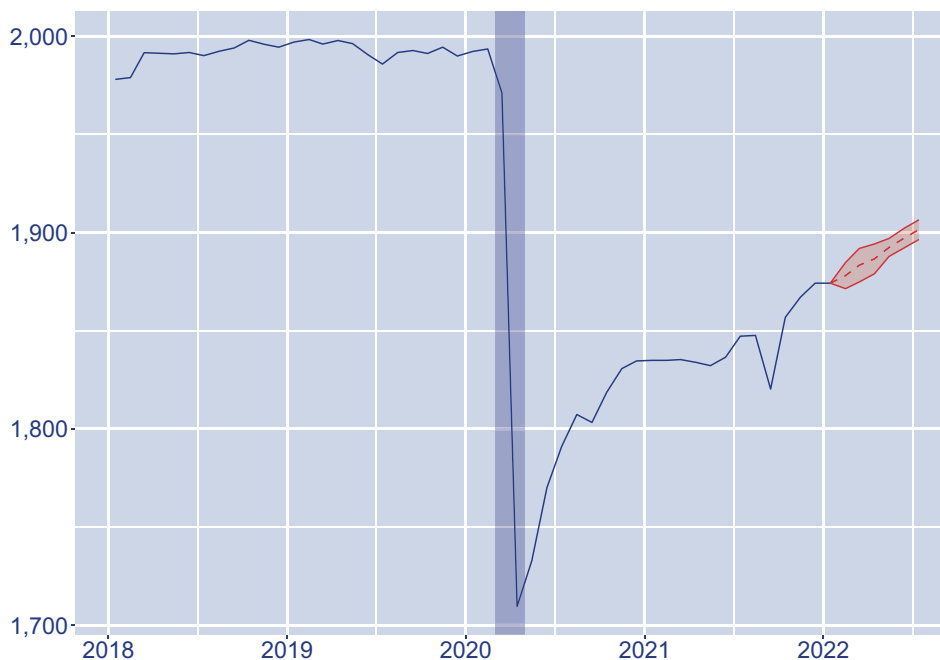


Figure 2: Forecasted Unemployment Rate

The headline unemployment rate has largely recovered from COVID. It has followed a predictable downward trajectory for the past six months that is not expected to continue for the first half of 2022. Since this number does not capture permanently disaffected workers, it is likely to shift as these workers reenter the labor force. Additionally, as firm-level expectations for worker productivity adjust, firms are also less likely on the margin to replace workers due to frictional unemployment.

Punchline: Cautiously, the unemployment picture looks good.

Figure 2: Forecasted Unemployment Rate (Percent)

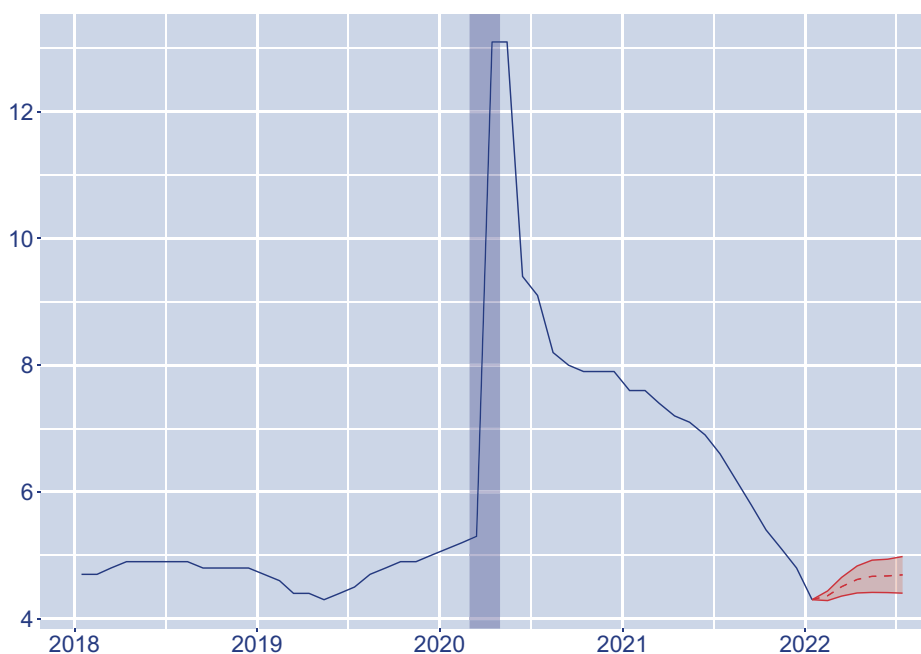


Figure 3: Forecasted Labor Force Participation Rate (Percent)

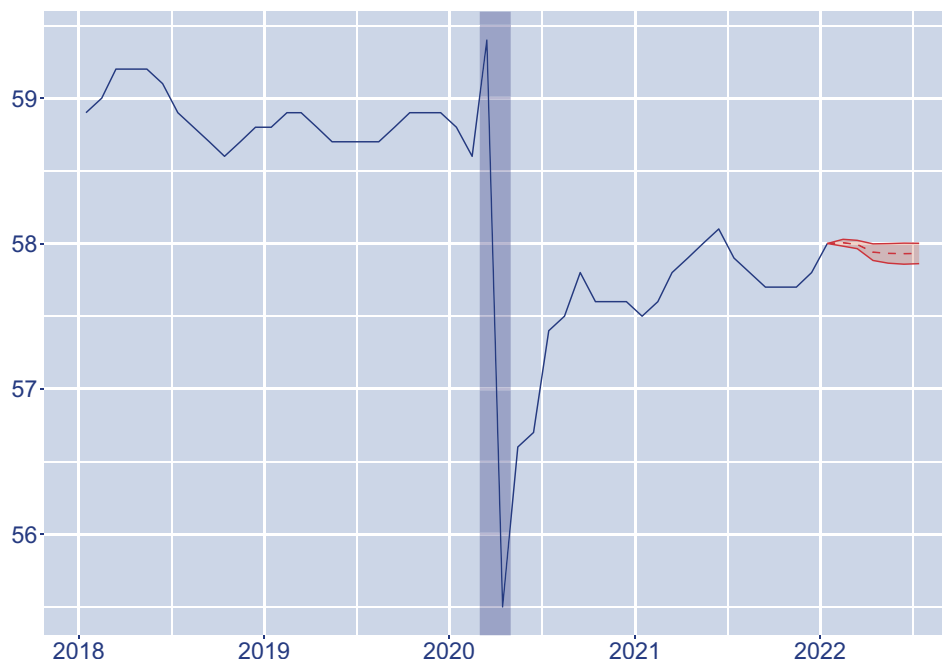


Figure 3: Forecasted Labor Force Participation Rate

The labor force participation rate continues its long-run downward trend in the state. There is an inverse relationship between the number of years of education and labor force engagement both nationally and at the state level. Recent Census estimates place the bachelor's degree or higher rate at 27.7% (one of the lowest in the nation). Smart, decisive policy that alters the incentive structure is needed to increase this in order to ensure long-run growth. COVID-19 temporarily altered this indicator, but the downward trend is a symptom of a larger illness.

Punchline: COVID notwithstanding, labor market engagement is the worst since 1977.

Figure 4: Forecasted Wage Growth (Percent Deviation from Trend)

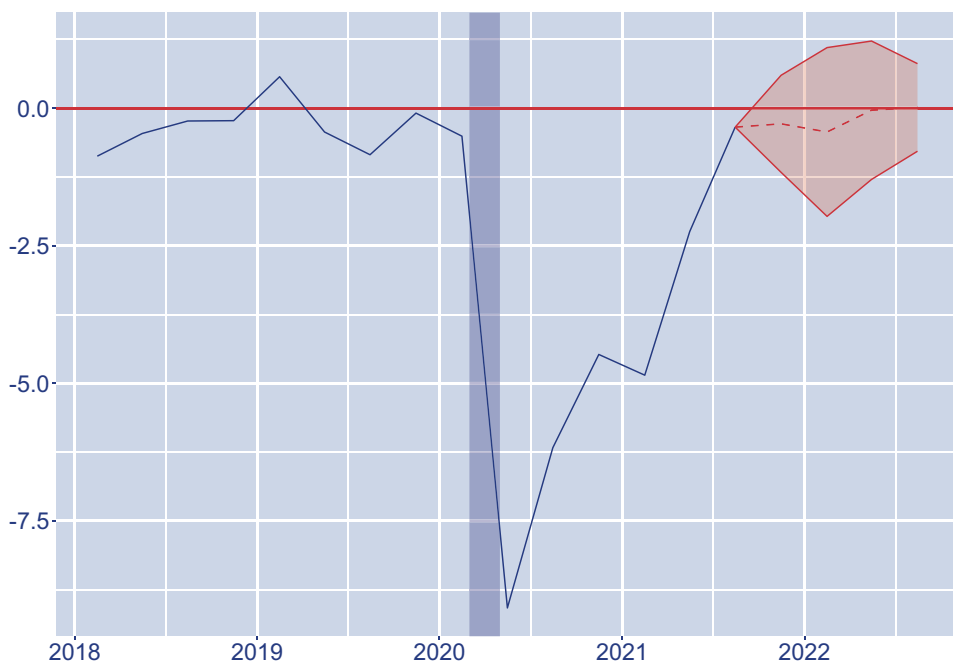


Figure 4: Forecasted Wage Growth

Since wages are generally increasing, the data are presented as a percent above or below the long-run trend. Wages dropped sharply, nearly 8.5% below trend during the height of the pandemic-related shutdowns. Since then, the relatively tight labor market has lifted wages such that the nominal growth rate is now positive, but wages have not grown above their long-run trend. Wages are expected to continue to grow since the underlying conditions for growth-related recover are not expected to change. However, wage growth is expected to just maintain its usual trend trajectory.

Punchline: Wage growth helps to insulate us from higher price inflation, but it's not abnormally high given the trend.

The Impact of Hurricanes and Tropical Storms on Soybean Crop Prices in Louisiana

BY AMANDA WILDER

Agricultural output in Louisiana is comprised of a wide variety of crops. These crops are a vital part of life, and weather can be a major factor separating a good year from a bad year, in terms of output. Soybeans represent an integral part of the Louisiana agricultural industry. Disruptions in price and/or supply can have significant impacts on the state. Louisiana has a long-standing history of soybean crop production dating back more than a hundred years based on the United States Department of Agriculture records alone. Soybeans have the highest output of any crop throughout the state of Louisiana and are ranked in the top 20 for the nation. Additionally, soybeans are produced in 27 out of the 64 parishes in Louisiana. For these reasons, it is important to consider the impact of weather disturbances on the price of soybeans. The analysis below examines the effect of historical hurricane and tropical storm data over the last 60 years on both the price of soybeans and price shocks.

Historically, hurricanes and tropical storms can disrupt transportation, impede the workforce, and destroy infrastructure. These natural disasters bring substantial rainfall on top of high winds and flooding waters. The combination of logistical and weather catastrophes is not ideal for crop growth or distribution, but do these significant weather events create a fluctuation in the crop price for the state?

reduced ability to plant and harvest crops throughout the southern region of the state. The result created an increased variance in price for the remainder of the data set. The events that occurred in 1973 raised the average price of soybeans indefinitely.

Figure 5 depicts the price of soybeans per bushel for Louisiana. The shaded bars of the figure indicate the years that hurricanes made landfall in Louisiana. Around 1973, the variance of soybean crop prices changed drastically, due to disturbances in the economy. These disturbances corresponded with extremely wet weather, bringing about a considerable drop in supply without a simultaneous decrease in demand. This was most likely caused by a

Figure 5: Louisiana Soybean Spot Price (Dollars per Bushel)

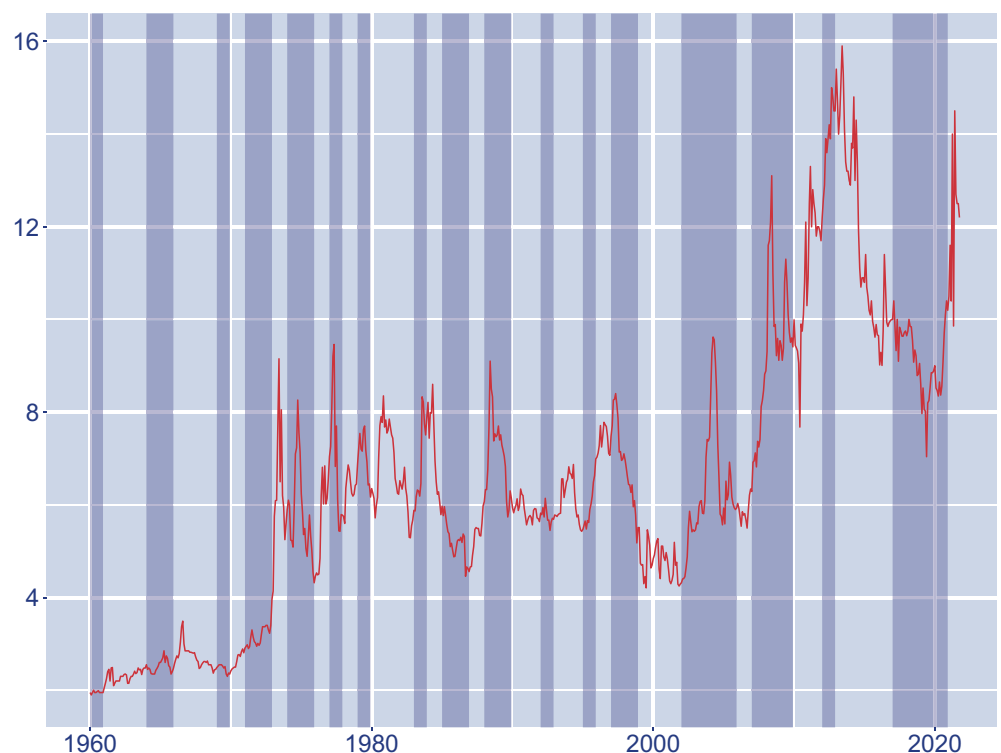
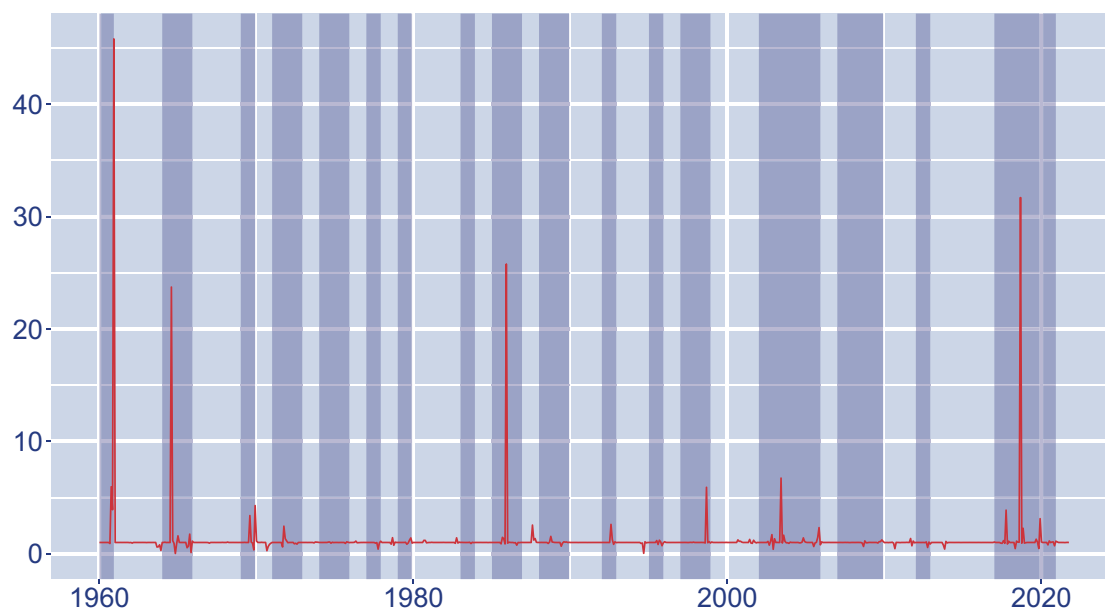


Figure 6: Percent of LA Soybean Price Shocks Due to Hurricanes



More recently, the price of soybeans in Louisiana per bushel ranges from around \$4 to almost \$16 between 2000 and 2021.

The empirical analysis centers around the statistical estimation of two time series models for soybean prices. A baseline model is chosen based the characteristics of the data. This model is then compared to the same model that also includes the indicator variables for hurricanes, tropical storms, and one for hurricane strength. Results indicate that crop prices are not affected by the occurrence of a hurricane or tropical storm, or the absence of both, but rather the strength of the storm. There is, in fact, a weak relationship observed between the strength of the hurricane and the price of the soybean crop. The estimation strategy allows for the one-way identification of supply side price shocks since a storm is an unlikely cause of an increase in the supply of soybeans but could be the cause of a decrease in supply. By modeling the effect of named storms in this way, we can calculate the percent of soybean price shocks that are accounted for by hurricanes and tropical storms.

Figure 6 represents these percentages. As before, the shaded regions indicate hurricane activity in Louisiana in that year. The red line depicts the percent of soybean price shocks over time identifiable from storm-related disturbances. On average, 14.5% of total soybean prices shocks from 1960-2021 are due to hurricanes and tropical storms.

In conclusion, the significance of hurricane strength in forecasting prices is roughly 1/10 of a percent. This means that hurricanes are not of consequence in determining the future price of soybeans, though the strength of hurricane activity is helpful in explaining events which happened in the past. This information is useful in determining what to potentially expect when a major hurricane inevitably makes landfall in Louisiana again. While hurricanes and tropical storms may not be a reliable forecasting tool, they are helpful in a explaining the overall volatility of soybean prices via supply side price shocks.

Although hurricane and tropical storm data were considered for this analysis, other potential factors should be considered for future research. Areas of interest may include distinguishing if the soybean market is competitive, as well as if it is producer- or demand-side driven. These factors could provide additional insight into price shocks and future prices of the soybean crop in the state of Louisiana. Soybeans not only have the highest output for the state, this crop is also produced throughout the entire state, resulting in a potentially broader economic impact. This crop helps to create economic stability for the state, from the farmers who grow them to the consumers who buy soybean products.

Serving Time: Labor Force Outcomes Near Prisons

BY COLYN SEVARIO

With a 2021 incarceration rate of 1,074 individuals per 100,000 residents, Louisiana is known as the prison capital of the United States. Since the United States has the highest incarceration rate in the world (both in raw number of incarcerated individuals and per 100,000 residents), the state of Louisiana is ground zero for prison policy debate and possible reform. Such a large industry impacts Louisiana politically, socially, and even financially with a state budget of \$764.7 million. The analysis below explains that Louisiana's prison system also includes statistically significant impacts on employment in Louisiana.

Figure 7: Parish Level Unemployment Rates 2000 (Percent)

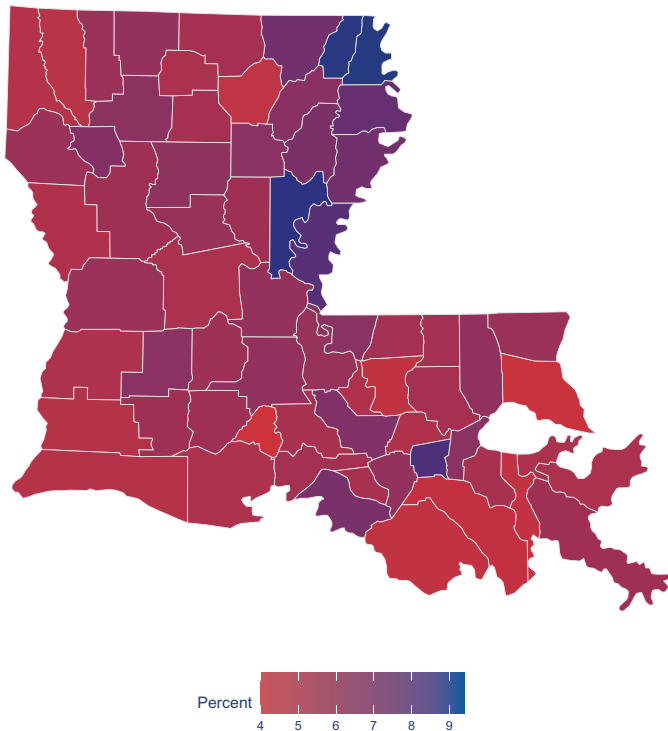
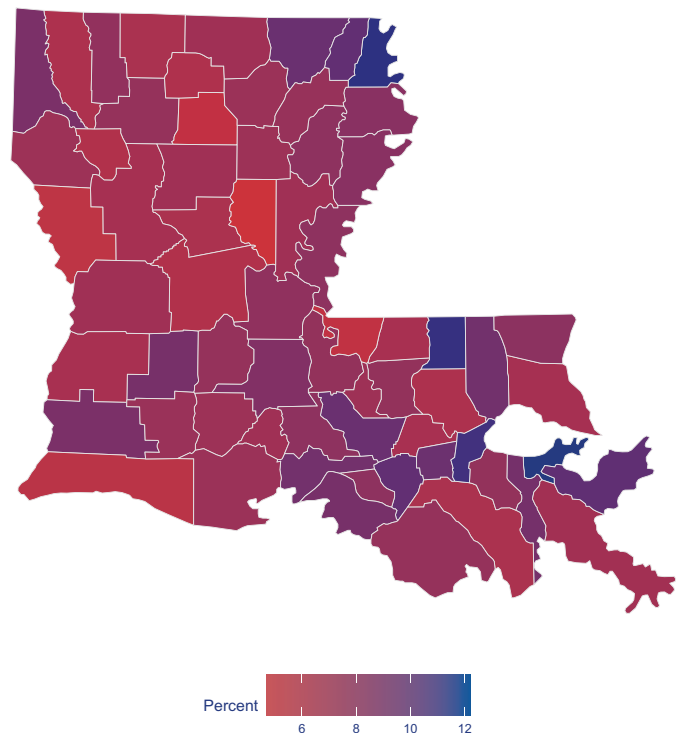


Figure 8: Parish Level Unemployment Rates 2020 (Percent)



Figures 7 and 8 display heat maps of Louisiana's unemployment rates in years 2000 and 2020 at the parish level. From these plots it is relatively easier to see the degree of dispersion in unemployment rates throughout the state.

Further complicating matters, there are different names for prisons, such as penitentiaries as well as minimum, medium or maximum level correctional facilities. Jails (or detention centers), however, are not prisons, as they refer to a shorter-term punishment or a holding place before individuals provide bail or attend their court hearings. Furthermore, minimum level correctional centers favor more closely with jails than with prisons. Prisons discussed in this report refer to both private and public (non-federal) prisons.

At the heart of this analysis is the notion that prisons may impact the economic surroundings of the geographic area

where they are located. This hypothesis could go both ways, though probably more intuitive is the idea that prisons reduce employment in the parishes that have them compared to those that don't. To test this hypothesis, a series of difference in means tests are calculated where the two groups analyzed are parishes with and without prisons. Results of these tests are shown in Table 1. The average level of employment and unemployment rates for these two groups every five years from 2000 to 2020 are displayed. The numbers in red indicate that the means of the two groups are statistically different given the amount of variation within each group.

Table 1: Difference in Means of Total Employment and Unemployment Rate at the Parish Level

Year	Employment (Prison)	Employment (Non-Prison)	Unemployment Rate (Prison)	Unemployment Rate (Non-Prison)
2000	42,629	27,999	5.8%	6.1%
2005	43,339	20,527	7.5%	7.7%
2010	43,780	27,872	7.9%	8.7%
2015	39,400	30,821	6.9%	7.3%
2020	37,503	29,109	7.5%	7.9%

In each of these years, employment in parishes with prisons was significantly more than that of its counterparts. In 2015 and 2020, though, the differences in employment were not significant with p-values of 0.129 and 0.115 respectively. This fact is inversely related to that of the significance in disparity with unemployment rates of parishes with and without prisons as unemployment rates were greater in years 2010 to 2020 than in years 2000 and 2005. Unemployment rates in parishes with prisons were significantly lower than parishes without prisons for 2010 to 2020. Although the differences in means display statistical significance, this does not imply that parishes with prisons will always have higher employment levels and lower unemployment rate levels.

The changes in statistical significance in employment and the unemployment rates, though, could have been majorly impacted by local and country-wide economic events. First, Louisiana's prison system faced budget cuts in 2012, which led to three of the previous 12 prisons closing permanently. These prison closures fall perfectly with the change of significance in employment as 2015 is the first year of the data set that did not display statistical significance in the difference of parishes with and without prisons. Unemployment rates must be further examined to have a full understanding of what changes occurred. Louisiana and most

of the United States experienced variability and uncertainty in employment following the 2008 Great Recession. This economic downturn could be a clear explanation for the statistical significance in unemployment rates in 2010. Years 2015 and 2020's statistical significance change could be explained by the closure of the three prisons in 2012. With less prisons in Louisiana, the data set of parishes with and without prisons changes. Unemployment rates can also be impacted by other factors such as labor force participation. Labor force participation is directly related to unemployment rates as the unemployment rates are derived from dividing the number of unemployed individuals who are working age by the labor force participation number. Labor force participation is the number of individuals who are of working age who are actively seeking work. The labor force participation is declining in the state throughout the sample period and most notably in years 2010 to 2020.

To conclude, Louisiana's infamous prison system affects Louisiana economically through statistically different means in both unemployment rates and employment. Prison closures could have a relatively large impact on these variables as seen with Louisiana's budget cuts to prisons in the year 2012.

Forecasting Daily Crude Oil and Gasoline Prices After the Russian Invasion of Ukraine

BY ADAM QUEBEDEAUX

All price data used for this analysis extend through March 11, 2022.

Louisiana's economy is relatively more exposed to production and price dynamics in the oil industry. Louisiana oil and natural gas extraction as well as refining make up about 25% of the state's GDP. This raises some important questions about not only the effects that this market has on state incomes and tax revenues, but also what will likely happen if U.S. consumers start declining their overall demand for oil (the notion that we may have hit "peak" oil consumption)?

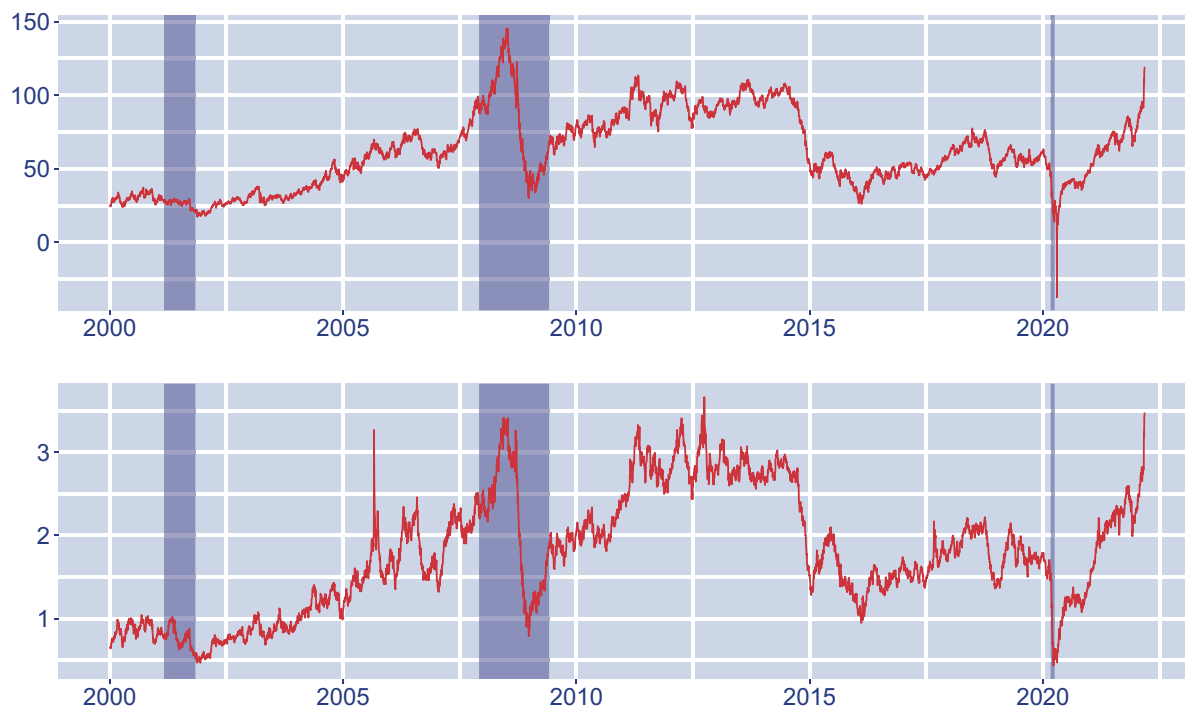
The recent armed conflict between Russia and Ukraine has disrupted not only supply lines (decreasing supply), but also impacted demand for non-Russian produced oil (increasing demand). Both of these effects put upward pressure on the price of crude oil as well as refined gasoline. Since the start of the Ukrainian invasion, crude oil prices have increased 25.8%, from \$92.14 per barrel to \$119.26 per barrel, and gasoline prices have increased 22.5%, from \$2.78 per gallon to \$3.48 per gallon.

Figure 9 shows both daily crude oil (top panel) and gasoline spot prices (bottom panel) since January 2000. Aside from the dynamics observed during the Great Recession, the largest movements in crude oil prices (dollars per barrel) followed the economic

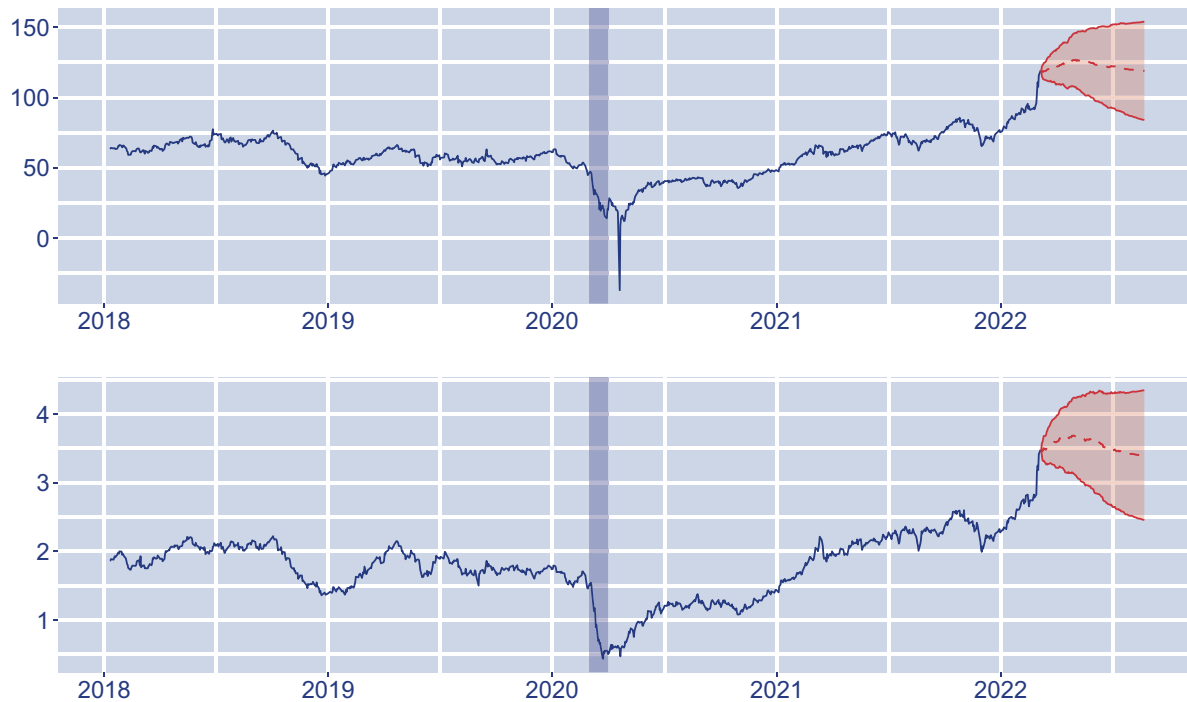
disruption brought on by COVID-19 in early 2020. Most notably for crude oil prices, demand for oil dropped sharply on April 20, 2020 where it temporarily traded at a negative price of -\$36.98 per barrel. While gasoline (denoted in dollars per gallon) follows much of the same dynamics, they also are subject to idiosyncratic market shocks that are not present in crude oil dynamics.

Using the U.S. Energy Information Administration (EIA) data, forecasts have been generated for crude oil and gasoline prices for the next six months. Forecasts are calculated based on the estimation of a reduced form bivariate vector error correction model (VECM). VEC models utilize not only past data points to explain current data, but also incorporate long-run dynamics when data tend to move together, as does both crude

**Figure 9: Crude Oil Prices (Dollars per Barrel - top)
Gasoline Prices (Dollars per Gallon - bottom)**



**Figure 10: Forecasted Crude Oil Prices (Dollars per Barrel - top)
Gasoline Prices (Dollars per Gallon - bottom)**



oil and gasoline price data. VECMs explicitly use multiple past lags so that recent variation of these variables can be used simultaneously to explain the underlying data generating process. VECMs are frequently used for model forecasting. The results of this model are depicted in Figure 10 (which is organized similarly to Figure 9). The red shaded regions extending beyond the observed data (in blue) represent in this context optimistic, realistic, and pessimistic forecasts for crude oil and gasoline price data. (It is assumed that for the sake of interpretation that lower prices are valued over higher prices. Thus, the lower bound of the price shaded region is optimistic, while the upper bound is pessimistic.)

Table 2 quantifies the forecasts from Figure 10 but aggregated at the monthly frequency for the sake of brevity. In the absence of any large scale or persistent shocks that

are not included in this model, the price of crude oil per barrel is expected to slowly (albeit moderately) decline into 2022. Gasoline prices are expected to follow a similar pattern since this price inherits much of its long-run dynamics from crude oil markets.

Given that the Federal Reserve has signaled that multiple interest rate adjustments are being considered this year in order to combat inflation, the expected time paths are intuitive. There is a relatively large degree of uncertainty surrounding the forecasted price of oil, so caution is urged on the part of the reader. The time path of forecasted oil prices are not expected to substantively alter the long-run decline of oil production into 2022. This is likely to pose considerable challenges for state law makers who have come to be dependent on oil profits as a source for tax revenues.

Table 2: Forecasted Crude Oil and Gasoline Prices

Date	Crude Oil Price (per barrel)			Gasoline Price (per gallon)		
	Pessimistic	Realistic	Optimistic	Pessimistic	Realistic	Optimistic
Mar. 2022	\$127.86	\$120.15	\$112.43	\$3.77	\$3.53	\$3.29
Apr. 2022	\$139.53	\$123.92	\$108.31	\$4.11	\$3.64	\$3.18
May 2022	\$147.54	\$125.37	\$103.20	\$4.27	\$3.63	\$2.99
Jun. 2022	\$150.28	\$122.94	\$95.57	\$4.31	\$3.54	\$2.77
Jul. 2022	\$152.43	\$121.12	\$89.81	\$4.31	\$3.45	\$2.59
Aug. 2022	\$153.38	\$119.39	\$85.40	\$4.33	\$3.40	\$2.49

Parish Level Inflation Rates are Far More Volatile than the State Average

BY PAYCEN BROUILLETTE

In 2019, the change in inflation was negligible at the statewide level. Individual parishes experienced relatively large swings in inflation compared to the state average, but these were localized instances. 2019 was an economically stable year for the state of Louisiana, including 12,000 new jobs added, 15,500 retained jobs that we expected to lose, and \$8 billion in new capital investments according to the Louisiana Economic Development (LED)¹.

While the state experienced a relatively stable economic year, the same cannot be said for every parish. In 2019, 13 of Louisiana's 64 parishes experienced a swing in inflation greater than 5%. These parishes are Cameron, Catahoula, De Soto, East Baton Rouge, LaSalle, Richland, St. Bernard, St. Charles, St. James, Tensas, West Baton Rouge, West Carroll, and West Feliciana. Of these 13, the three parishes with the largest movements were Cameron Parish (-19.40%), West Carroll Parish (-19.53%), and St. Bernard Parish (-31.26%). Figure 11 shows the inflation rate in each parish compared to the inflation level of the state in 2019. The outliers of Cameron, St. Bernard, and West Carroll parishes can be seen in red on the map.

Cameron Parish experienced a nearly 50% decrease in employment from 2017 to 2020. The parish reached a 21st century peak in job numbers in 2017 with 15,254, but this number has fallen to 8,609 jobs in 2020. The parish has a high proportion of jobs in the oil and gas industry and are relatively exposed to shifts in demand for oil. The decrease in jobs could very well be tied to offshore drilling activity which has slowed in the past few years. As demand for goods and services falls due to lost employment income, this translates into a deflationary spiral for Cameron Parish.

Per the St. Bernard Parish 2019 Annual Report, the parish has not fully recovered from its decrease in drilling and leasing in the Gulf of Mexico. Road royalties decreased 24.15%, severance tax decreased 39.40%,

and sales tax revenue decreased 3.69%. This large decrease in revenues for the parish is a potential explanation for the high level of deflation.

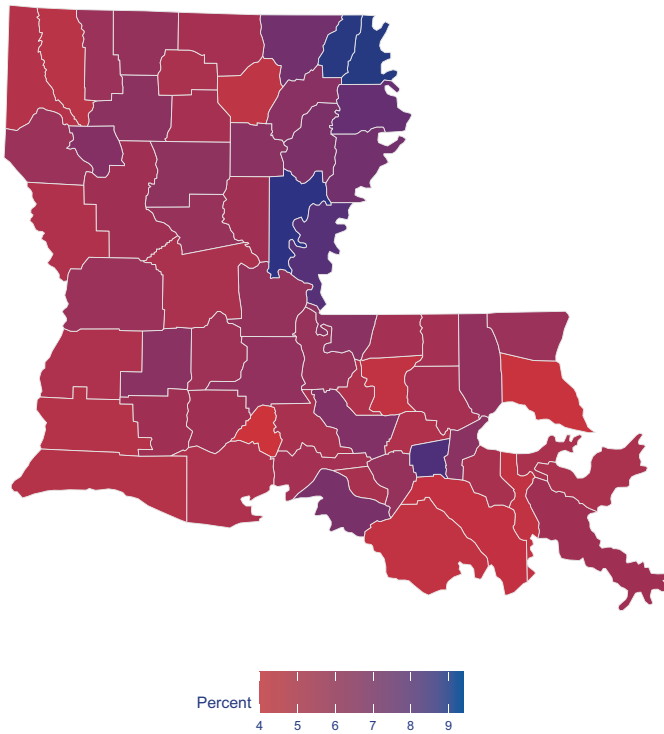
West Carroll Parish ranks 58th in population with 9,751 residents. The annual report does not detail any major changes in economic activity. However, the change in inflation rates over the past 20 years have been extremely volatile, so the 19% deflation in 2019 is not historically abnormal. Deflation peaked at 28.71% in 2007, while inflation peaked at 18.14% in 2009.

In 2020, a 5% deflation was experienced at the statewide level. This comes as no surprise, as the COVID-19 pandemic ravaged economies across the country. Upon analyzing actual inflation levels in each parish during the 2020 calendar year, a large portion experienced deflation levels greater than 5%. Figure 12 shows the inflation rate in each parish compared to the inflation level of the state in 2020 (thus both figures are directly comparable to one another). While there are outliers, a more uniform trend of deflation can be seen throughout the state.

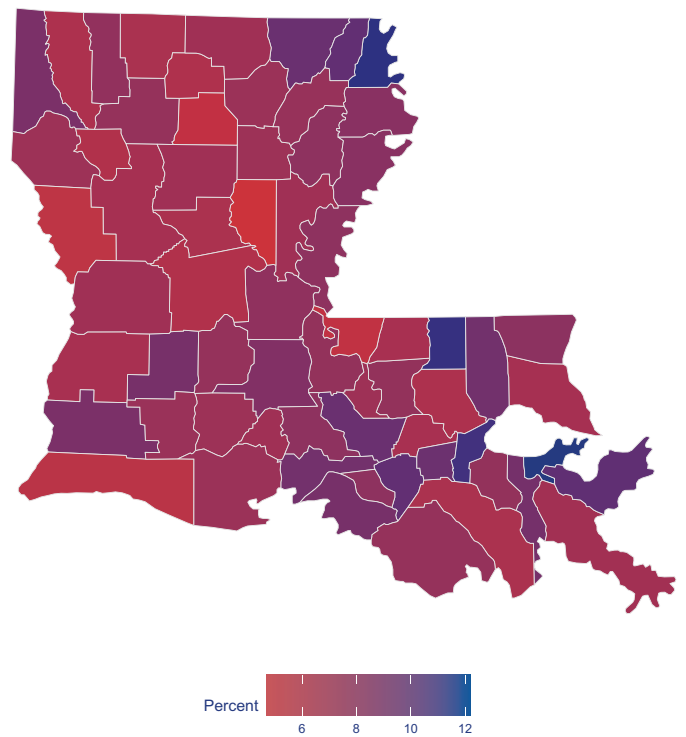
Three parishes stand out in particular: East Carroll (+4.64%), West Carroll (4.77%), and West Feliciana (4.34%). Each of these economies experienced inflation, contrary to the state economy. There were also major outliers in deflation rates. Cameron (-17.35%), DeSoto (-17.92%), Red River (-20.34%), and Tensas (-15.34%) parishes each recorded deflation levels below 15%. One potential explanation for

¹ [https://la.la.gov/publicreports.nsf/0/dca14680933ef9b68625865c0067bdc8/\\$file/000224cd.pdf](https://la.la.gov/publicreports.nsf/0/dca14680933ef9b68625865c0067bdc8/$file/000224cd.pdf)

**Figure 11: Parish Level GDP Deflator
Inflation Rates 2019 (Percent)**



**Figure 12: Parish Level GDP Deflator
Inflation Rates 2020 (Percent)**



these unnaturally high deflation rates, especially for the southwest part of the state, would be the impact of Hurricane Laura in August of 2020. Cameron Parish, home to Lake Charles, was devastated by the Category 4 hurricane. Many residents of the parish evacuated prior to the storm destroying businesses and homes across the region. Many have still not returned, leading to a decrease in overall consumer demand and an increase in deflation.

Although the state experienced a relatively large deflationary period in 2020 relative to 2019, it is not a historically drastic level, despite the impact of COVID-19. In 2007, Louisiana experienced an average deflation level of 6.16%, but rebounded to 0.77% the following year. This, along with increases in economic activity at the state level, will hopefully drive deflation toward 0%, but it will not be known for sure until the data is released at the end of 2022.



Placing Bets: Louisiana's Gaming Industry

BY PATRICK MILLER

The casino and gaming industry earned record breaking revenue in 2021 with more Americans than ever feeling lucky enough to place bets in our nation's casinos. Louisiana ranked the sixth largest market in the nation for casino revenue with a total of \$1.7 billion in 2020. Alongside record revenue, the age of the average casino goer fell from 49 years of age to 44 years of age since the start of the COVID-19 pandemic. The implementation of online sports betting is popular among young consumers. As of now, Louisiana is the only state in the Southeast to fully legalize online sports wagering. Casinos are attracting relatively younger consumers and seeing more Americans participating in gaming, incentivizing companies like Reno-based Caesars Entertainment Group to expand.

Caesars is betting big by heavily investing in the New Orleans market. Caesars announced the re-branding of the current Harrah's New Orleans Casino to their flagship Caesars brand. The rebranding represents an estimated \$325 million renovation, along with a proposed new 340-room hotel tower by the year 2024. Caesars also entered a 20-year deal with the New Orleans Saints for the naming rights to the world-famous Super Dome. The deal is valued at \$138 million with Caesars promising to attract new sport events like boxing matches to the New Orleans market. While the gaming industry in New Orleans is "hot" with investment, the Shreveport-Bossier City area is struggling to attract once regular patrons from the Dallas-Fort Worth metroplex to Northwest Louisiana. The building of the nation's largest casino, the Chickasaw Nation-owned WinStar World Casino and Resort in Oklahoma is expected to be stiff competition for Shreveport-Bossier City casinos. Located only one hour away from the DFW metroplex, the WinStar and other Oklahoma casinos now attract Dallas locals who once used to regularly visit the casinos in Shreveport-Bossier City.

The closure of Bossier City's Diamond Jacks Casino resulted in the casino's gaming license moving from the Shreveport-Bossier market to Slidell, LA, located just minutes away from New Orleans. Peninsula Pacific Entertainment group proposed the construction of Camellia Bay Casino and Resort with an evaluated cost of \$325 million. In December of 2021, St. Tammany Parish voters rejected the proposal in a contentious election, voting down the Camellia Bay expansion by 63% of the vote. St. Tammany voters' rejection resulted in a direct loss of \$254 million to the St. Tammany Parish economy. Indirect loss in supporting industries resulted in \$89 million lost, with an induced loss of \$47 million USD, totaling \$390 million in lost economic opportunity for St. Tammany Parish.

St. Tammany Parish is the fourth most populous parish in Louisiana with over 264,000 residents as of 2020. With the absence of Camellia Bay, St. Tammany Parish lost the potential for an estimated 2,687 jobs directly supported by

the casino along with 686 indirect jobs and 345 induced jobs, totaling 3,718 jobs that are lost for the St. Tammany Parish economy. Direct potential wages lost as a direct result of Camellia Bay's cancellation amount to \$56 million. Total potential lost wages for the 3,718 lost jobs equal approximately \$89 million. While most of the jobs represent leisure and hospitality sector losses, potential lost jobs span across multiple sectors from hospitals to accounting and tax preparation firms.

Additional industries most hurt by the loss of Camellia Bay include the food and beverage industry with an estimated economic loss of \$12 million, the real estate industry with a loss of \$11 million, and corporate advising firms with a loss of \$10.5 million. While these companies are not directly associated with the gaming industry, the gaming industry had the potential to create new opportunities outside the direct reach of the casino itself. Casinos also generate relatively large tax revenue bases for local economies that in turn help fund public school systems, police departments, and various other government agencies.

St. Tammany Parish lost the potential of \$10.4 million in tax revenue when Camellia Bay was rejected by voters despite strong opposition from some elected officials. The city of Slidell lost an estimated \$11 million in tax revenue, while the State of Louisiana lost roughly approximately \$24.2 million. Federal tax losses are estimated to be \$24.5 million. The amount of potential taxes lost across all government levels amounts to \$71.9 million.

While the casino itself would have used public resources like parish deputies more than other firms, the loss of tax revenue caused by the cancellation of the Camellia Bay Casino is harmful to both St. Tammany Parish and the State of Louisiana. While the gaming and casino industry remains a topic of contention for some individuals, it is important to view the impact on local economics when citizens reject such projects. The outlook for the gaming industry is bright as younger consumers enter the market and Louisiana has the potential to become a leading force in the gaming industry.



CENTER FOR
ECONOMIC
RESEARCH



Louisiana Tech University
College of Business
Center for Economic Research
502 W. Texas Ave.
P.O. Box 10318
Ruston, LA 71272

(318) 257-4527

business.latech.edu/cer

MISSION STATEMENT

Through market-responsive academic programs, impactful scholarship, and a student-focused culture, Louisiana Tech University's College of Business graduates business and academic leaders who are innovative, entrepreneurially minded, and analytically and technologically skilled for a globally competitive marketplace. Building on a vibrant community of life-long learners, our graduates are prepared to positively impact business and society.