



CENTER FOR
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COLLEGE OF BUSINESS

REAL

REGIONAL ECONOMIC ANALYSIS OF LOUISIANA

REPORT

FALL 2023

UNDERWRITTEN BY



Origin Bank.

Dean's Message

The Center for Economic Research is pleased to present the Fall 2023 issue of the Regional Economic Analysis of Louisiana (REAL) Report, an ongoing series of publications designed to provide insight into recent economic developments in Louisiana. The report is published thanks to the generous support of Origin Bank.

This issue includes eight analyses written by undergraduate students and faculty in Louisiana Tech University's College of Business, including reports exploring Louisiana's banking workforce, the lumber industry, and the impact of a looming childcare cliff. As always, we open the publication with economic forecasts for the state that detail current and future labor and inflation trends.

The REAL Report is produced for stakeholders across the state of Louisiana and our region of the South. Providing an invaluable learning experience, the report is compiled by undergraduate economics majors who work with faculty in the Center for Economic Research. Their work serves as partial fulfillment of the Regional Economic Analysis (ECON 425) course.

This report and all subsequent issues can be found online at Business.LATech.edu/RealReport. For more information on the report or the Center for Economic Research, please contact Dr. Patrick Scott at PScott@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.

I hope the information included in this report serves as a valuable resource.

Sincerely,



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

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Meet the Team



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National and Louisiana Economic Indicator Forecasts

BY C. PATRICK SCOTT, PH.D.

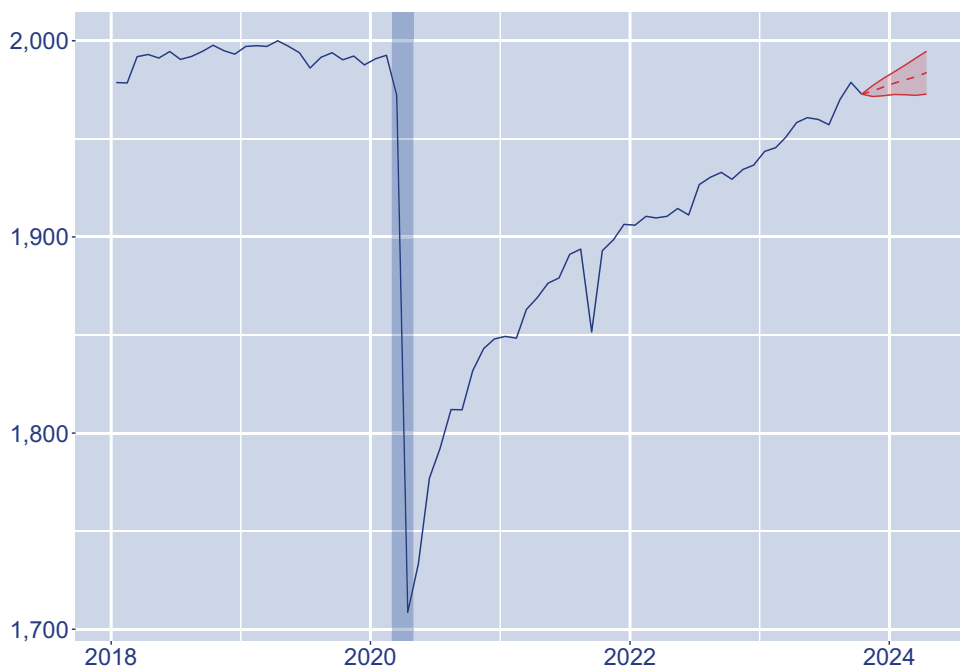
Forecasts are provided using a Bayesian model averaging approach from hundreds of statistical models. This method is utilized to capture the relative uncertainty that any one individual model is not properly specified and thus accounting for that uncertainty in our analysis.

Louisiana Non-Farm Employment

Total non-farm employment has grown by 29,000 payroll positions in 2023. As a state, we are still down about 20,000 jobs from pre-COVID levels nearly three years ago. Gaining these last 20,000 jobs will require reengaging those previously disenfranchised among the work force or growing the population. Most models predict steady growth of about 11,000 jobs over the next six months, consistent with average growth over the past year.

Punchline: Pre-pandemic employment levels are within sight, provided no more shocks occur.

Figure 1: Forecasted Non-Farm Employment (Thousands)



Louisiana Unemployment Rate

The unemployment rate for Louisiana is still in historically low territory. Most models show only a modest appreciation upwards. Labor markets are showing some signs of weakening nationally, but Louisiana is still straining to reach pre-pandemic employment norms. Wage growth is slowing which indicates stabilizing payrolls. Even if a recession nationally does come, the shock will be much smaller than what we have seen in the past four years.

Punchline: The unemployment rate is historically low and likely to stay there for awhile.

Figure 2: Forecasted Unemployment Rate (Percent)

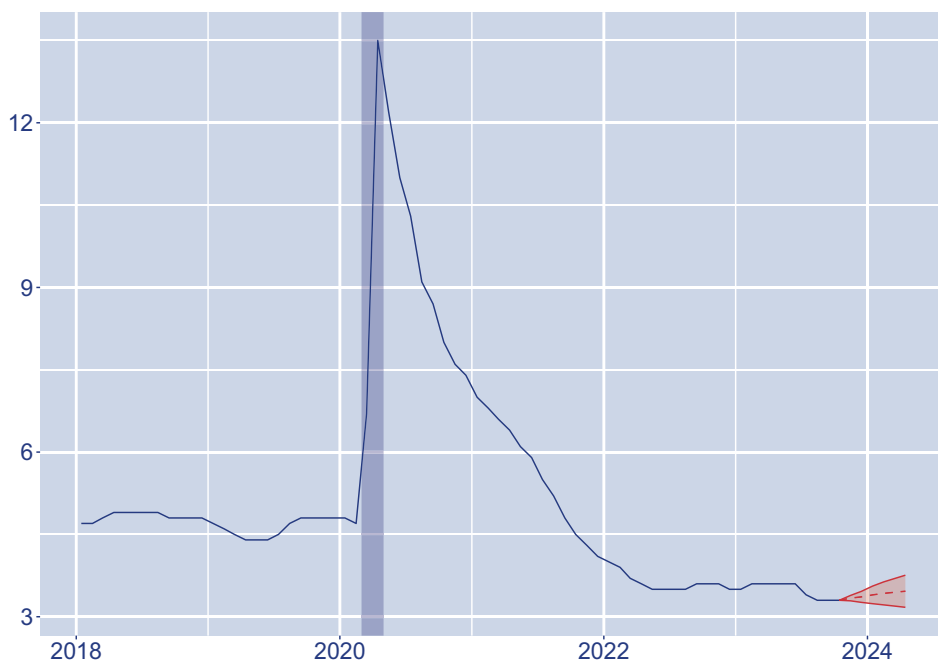
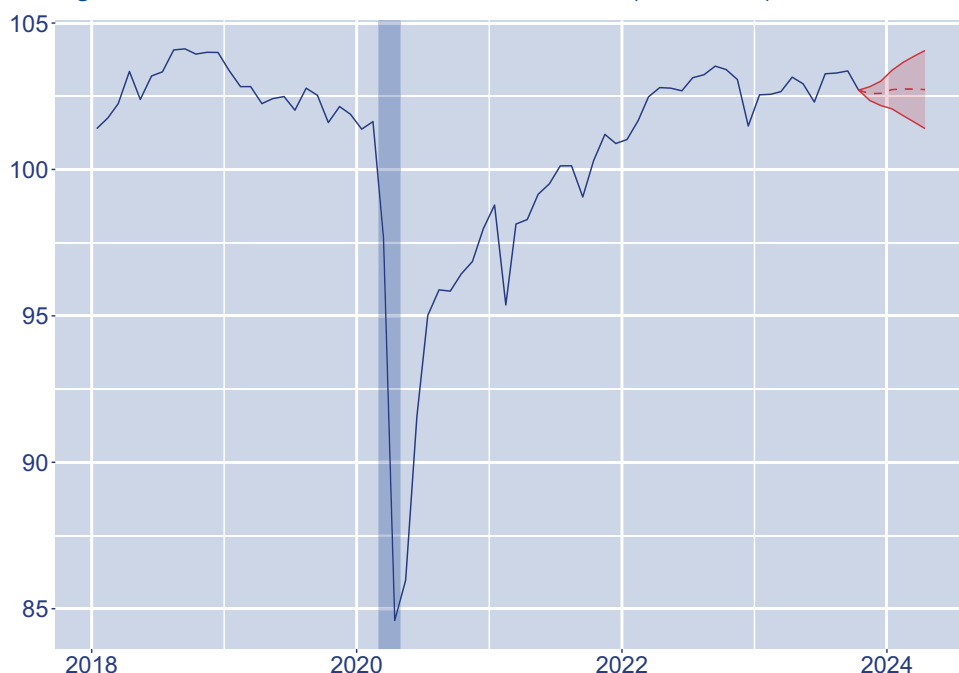


Figure 3: Forecasted Industrial Production Index (2017 = 100)

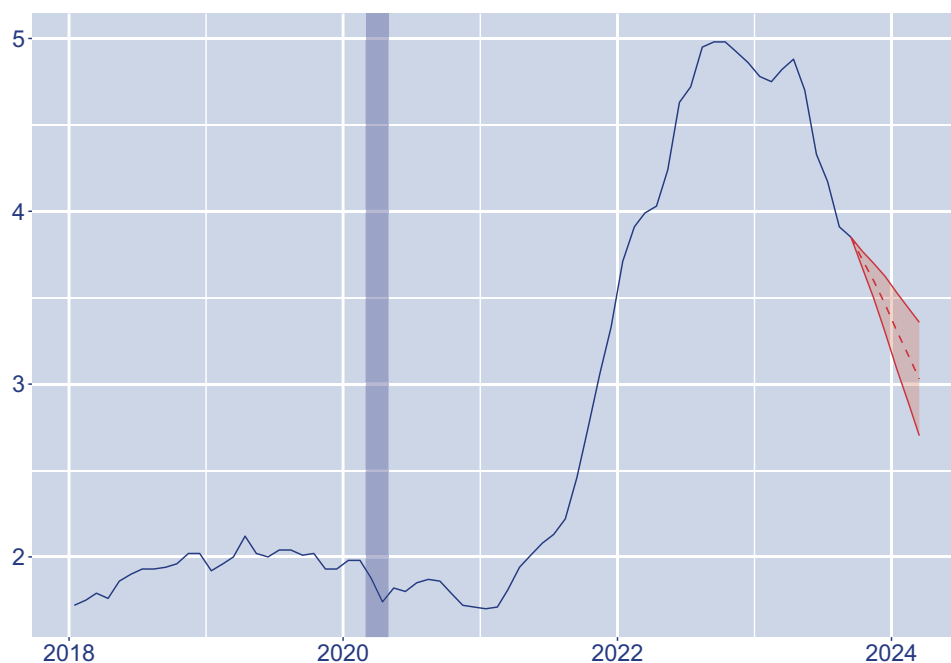


National Industrial Production Index

The national industrial production index is a measure of firm-level production that tends to co-move with national output. It is a monthly indicator, so it updates more frequently than real GDP. This indicator of the real economy fully recovered in the first few months of 2022. Nearly all models forecast it holding steady into 2024. The headwinds of tightening monetary policy may impact business investment trends in the coming months.

Punchline: Firm level activity is strong, but not likely to grow substantively in the next two quarters.

Figure 4: Forecasted Trimmed Mean Personal Consumption Expenditure Inflation (Percent)



National Trimmed Mean PCE Inflation

The Fed has been behind the curve in the fight against inflation, but its tightening efforts have produced results. Rising interest rate policy has countered income growth from fiscal policy in a way that has tamed inflation without throwing too much cold water on labor markets. Over the next six months, inflation is expected to continue its long march to the Fed's 2% target range.

Punchline: Inflation is still higher than we want, but looking more manageable every month that it continues to drop.

Monthly employment, unemployment rate, industrial production, and inflation rate data for this section extend to October 2023 and include the most current releases at the time of publication.

Raising Louisiana HVAC Mechanics and Installer Wages to the Union Wage Premium

BY MADISON REMREY

The heating, ventilation, cooling, and refrigeration (HVAC) industry is an essential service to the upholding of infrastructure across the United States and especially in deep southern states such as Louisiana. According to the U.S. Bureau of Labor Statistics, there is a projected employment growth of 6% from 2022-2032 for HVAC mechanics and installers, with 38,000 openings each year over the decade resulting from the need to replace those who leave the workforce. There will also be a growing demand for highly trained mechanics and installers who have the skills necessary to work with complex climate-control systems.

According to a January 2023 report from the U.S. Bureau of Labor Statistics, the middle-class in America is shrinking partly due to a decrease in wages as they compare to the cost of living. Historically, unions have provided a solution to things such as income volatility (Feiveson et al., 2023). The Economic Policy Institute estimated that the average union wage premium in 2012 was 13.6% growth in wages. If Louisiana’s HVAC workers were to unionize, what would this look like for Louisiana’s economic well-being? This study analyzes the shock that would come as a result of HVAC employees taking on the entire costs of a 13.6% wage premium rather than the cost being distributed among employers, employees, and consumers. When employment costs are maintained for business owners

and the wage premium paid for via reduced employment workers, the HVAC industry would need to improve the quality of their work in order to compete in the shrinking job market.

HVAC workers in Louisiana make an average pay of \$80,454.28 and the total employment for the industry is approximately 13,098 workers. This makes for a total labor income of \$1.1 billion, before unionization. After a 13.6% increase due to unionization, the average pay becomes \$91,396.06 with employment dropping by approximately 4.6% down to 12,511 workers. This leaves total labor income the exact same at \$1.1 billion, resulting in an economic shock that would pay entirely for itself plus some.

Table 1: Tax Effects of HVAC Unionization

Economic Effect	Federal	State	Parish
Direct Effect	\$18,378,008	\$11,378,462	\$2,935,312
Indirect Effect	\$10,832,120	\$2,432,037	\$416,384
Induced Effect	\$6,434,785	\$3,534,336	\$887,668
Total	\$35,644,913	\$17,344,835	\$4,239,364

The 13.6% increase in salary from \$80,454.28 to \$91,396.06 would over the long-run attract workers, especially considering the southern region of the U.S. has the lowest wages of all regions, according to Forbes (Wong et al., 2023). Further, the additional rounds of consumer income spent as a result of the wage premium increase more than makes up for the initial 4.6% decrease in employment of Louisiana HVAC workers. Statewide gross domestic product (GDP) increases by just over \$355 million. Additionally, \$69 million in local, state and federal tax revenue would be added to Louisiana’s economy (see Table 1). The benefits from this would be not only for those in the HVAC industry but also Louisiana as a whole. An increase in tax revenue could be used for the improvement of many things such as infrastructure, education, and healthcare.

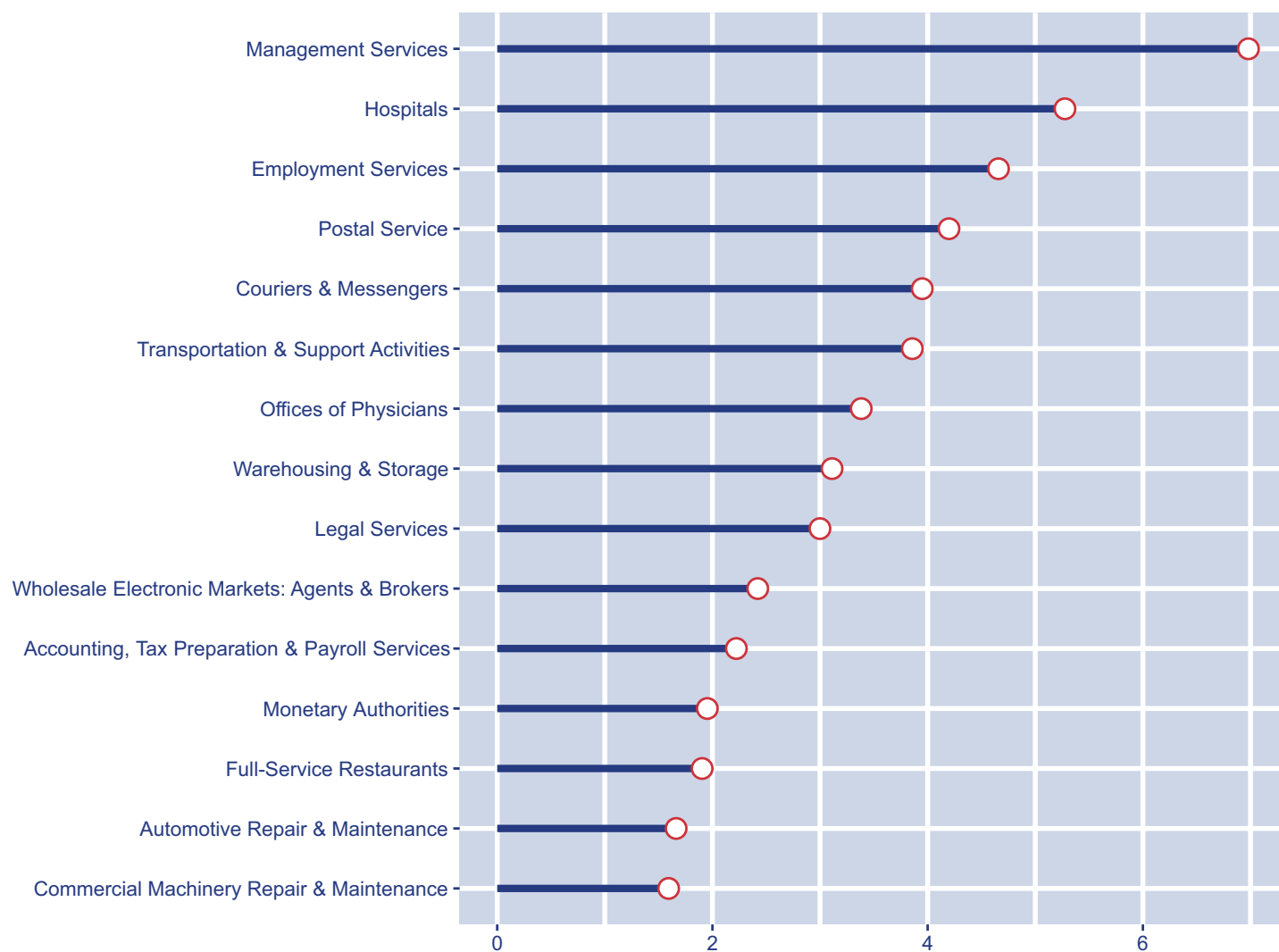
An increase in HVAC employee salaries would have a direct impact on the state’s economy as this would allow those same employees to have more income to spend on necessities as well as discretionary spending. Further, the aforementioned 4.6% decrease in HVAC employment would result in more competition among technicians and installers seeking work in the field. In order to compete with other workers, HVAC installers and technicians would make themselves more marketable via more jobs completed at a comparable to, if not better than, quality to before. An increase in jobs completed on behalf of HVAC employers would lead to the need for them to purchase more products from HVAC wholesale suppliers. A direct impact of approximately \$32.7 million would be seen on parish, state, and federal tax revenue. Other industries in Louisiana would

be positively impacted as they would be able to offer higher wages (as a result of HVAC employees spending more money on products and services offered by said industries) as well as more employment in order to meet the demands of increased business from HVAC workers and employers. Some of the impacted industries would be management services, hospitals, employment services, and postal services (just to name a few, see Figure 5 for more). Per Table 1, the total indirect impact on local, state, and federal tax revenue would be roughly \$13.7 million.

The increase in wages along with everything else would

allow for a higher household spending threshold. Those directly and indirectly impacted by a 13.6% increase in HVAC employee wages would be able to increase their household spending on many things within their area. This could be on leisure activities such as restaurants, movie theaters, museums, and golf courses, or on necessities such as groceries, medical care, and transportation. The increase in spending on such things would benefit the owners and workers of each of those industries. See Figure 5 for the top 15 impacted industries by an increase in wages for HVAC employees. The total induced impact on local, state, and federal tax revenue would be approximately \$10.8 million.

Figure 5: Top 15 Impacted Industries Beyond HVAC Services (Percent of Economic Impact)



Bureau of Labor Statistics, U.S. Department of Labor. (2023, September 6). Occupational Outlook Handbook, Heating, Air Conditioning, and Refrigeration Mechanics and Installers. Retrieved October 30, 2023, from <https://www.bls.gov/ooh/installation-maintenance-and-repair/heating-air-conditioning-and-refrigeration-mechanics-and-installers.htm#tab-6>

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Mishel, L. (2012, August 29). Unions, inequality, and faltering middle-class wages. Retrieved October 28, 2023, from <https://www.epi.org/publication/ib342-unions-inequality-faltering-middle-class/>

Wong, B., & Bottorff, C. (2023, August 23). Average Salary By State In 2023. Retrieved October 28, 2023, from <https://www.forbes.com/advisor/business/average-salary-by-state/>

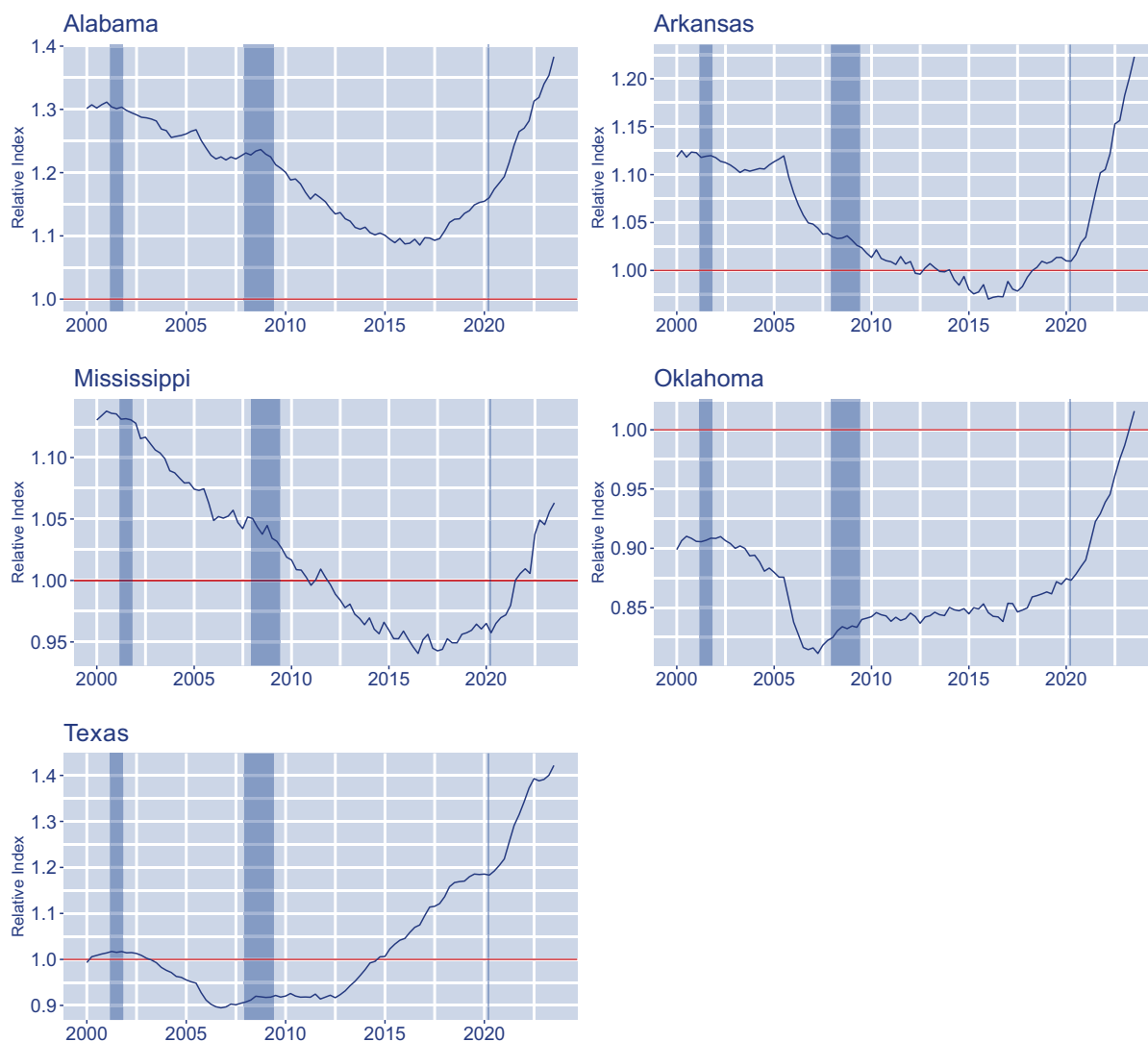
Data for this report are provided by the Bureau of Economic Analysis. Parish level data are produced with a year-long lag. Current annual data extend to 2021. 2022 estimates are expected in December 2023.

Housing Affordability Across the South

BY JORDAN HATTER

The median listing price of a house in Louisiana as of October 2023 was \$279,000. This is \$146,000 less than the national median, which has risen by \$22,000 since January of this year. The 2023 peak was in June with a price of \$445,000. With high national median house listing prices, many adults are trying to relocate to states where housing is more affordable. For information about house price dynamics at the MSA in Louisiana,, see the work of Travis Corum and Lauren Lasiter in the Fall 2022 issue. The purpose of this study is to analyze the trends of housing price indices among our nearby states. What state has the most affordable homes relative to Louisiana?

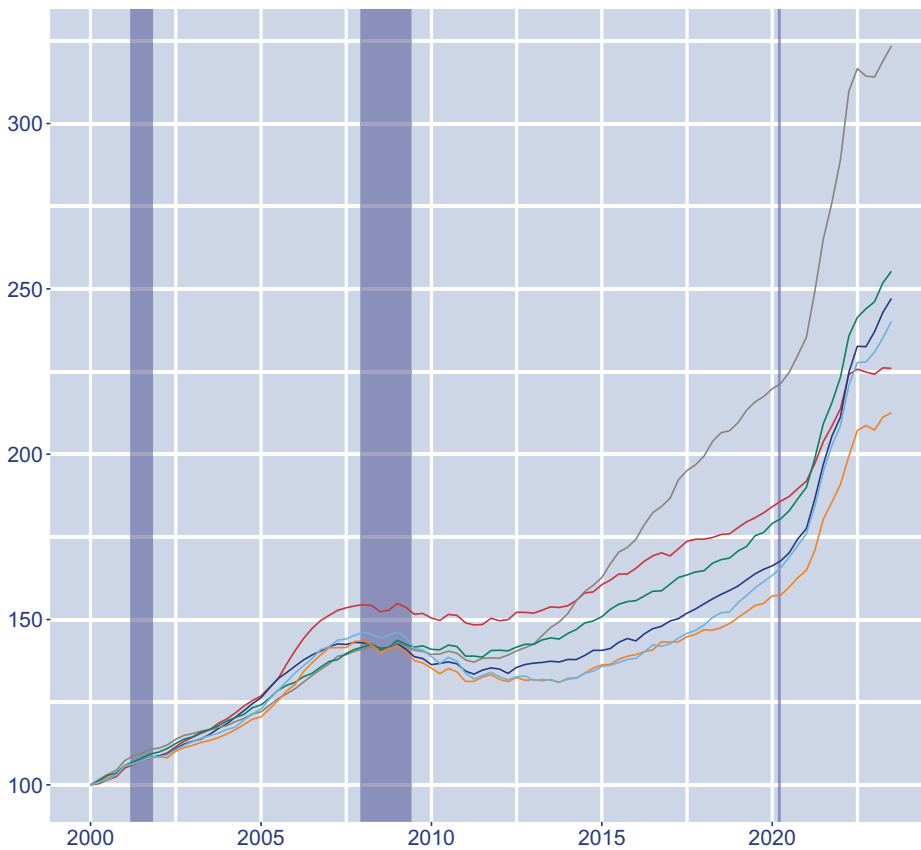
Figure 6: State House Prices Indices Relative to Louisiana (Index Value = 100 is Parity)



Nationally, the housing price index (HPI) is over six times higher than in January 1980. Louisiana's HPI has grown more than 3.5 times higher than in January 1980. This is the lowest HPI growth among our neighboring states of Alabama, Arkansas, Mississippi, Oklahoma, and Texas. These states still have lower HPIs than the nation; however, they compare to Louisiana differently. Figure 6 shows the ratio of each state's quality controlled HPI compared to that of Louisiana. All the

states examined experienced a rapid decline in relative HPI following the third quarter of 2005. For example, Mississippi experienced a decline in relative HPI of 2% in the period of July 2005 to October 2005. A typical change of relative HPI from quarter to quarter is less than 0.8%. This large drop in relative value is the result of Hurricane Katrina along the Gulf Coast. House prices in Louisiana increased as the migration from New Orleans increased demand for housing around the

Figure 7: Nominal State House Price Indices (2000 = 100)



State

Louisiana	Oklahoma
Arkansas	Mississippi
Texas	Alabama

placement respectively in the list of affordability order.

Oklahoma differs the most in relative HPI from the other states. As seen in Figure 6, Oklahoma only has an HPI greater than 100 in Quarter 3 of 2023. The relative HPI of that quarter is 100.09. Both states' individual HPI are increasing, but the HPI of Oklahoma is growing faster than Louisiana's. Oklahoma has long been a good option for those who insist on leaving Louisiana. Following the recent change, Oklahoma follows Louisiana as the second-best option for affordable housing.

Figure 7 shows each state's nominal HPI over time. The indices for all states are centered around a value of 100 for

state while simultaneously the supply of housing decreased due to damage.

Figure 6 also shows that since 2000, Alabama is the only state whose relative HPI never fell below 100. This means that quality-controlled house prices are relatively more expensive in Alabama than Louisiana. The median listing price increase for Louisiana from July 2016 to October 2023 is about \$73,000. Alabama exceeds this, as their increase for the same period is \$143,000. Figures 6 and 7 show that surrounding the COVID years, Texas house prices are higher than the average of neighboring states. The high HPI reflects an increase of \$19,900 in median listing price from January 2023 to April 2023.

Arkansas and Mississippi have similar trends in relative housing price index. Figure 6 shows that Arkansas had higher HPI than Louisiana in most quarters since January 2000. The relative HPI of Mississippi was lower than Louisiana's for over nine years. In the first quarter of 2011, Mississippi's relative HPI was 0.9962 times Louisiana's. The relative HPI was less than 100 again from Quarter 1 of 2012 through Quarter 3 of 2021. Arkansas and Mississippi's prolonged periods of low HPI warrant their third and fourth

placement respectively in the list of affordability order. Most states took decades to double their HPI values from 100 to 200. This same relative change, from 200 to 300, took less than 15 years for most states in the South. Oklahoma has an average listing price of \$399,055. The listing price difference between Louisiana and Oklahoma is roughly \$23,000 which is less than 7% of Louisiana's average listing price. Arkansas and Mississippi are more affordable than both Alabama and Texas. The average listing price in Alabama in September 2023 was \$441,190 and consistently has had a larger HPI than Louisiana since January 2000. Because of this, historically, Alabama has been the least affordable of our neighboring states. Since Quarter 2 of 2017, Texas has had the highest relative HPI of the states discussed. The September 2023 average listing price of housing was \$543,321. As Texas recently has the highest relative and actual HPI, in addition to the highest overall listing price of a house, Texas is proven to be the least affordable states discussed. This conflicts with the notion of moving where the housing is more affordable because many adults are moving from more affordable states to Texas. While housing affordability does impact where people choose to live, it is not the only factor in the decision.

Data for this report are provided by the U.S. Federal Housing Finance Agency. FHFA data extend to the third quarter of 2023, the most current released as of the time of this publication.

From Parish to Parish: Louisiana's Banking Workforce

BY ABHI CHADHA

Louisiana's economic landscape is a complex tapestry of industries, with the banking sector playing a vital role in shaping the state's financial well-being. To fully comprehend the banking industry's significance, it is essential to explore its employment statistics, the scale of full-time positions, and the varying job numbers and wages across different parishes.

As of 2022, the banking sector employs about 2.7% of Louisiana's total workforce, showcasing its significant role despite its relative size. The state hosts over 69,000 full-time jobs within the banking industry. While not enormous, Louisiana's banking sector acts as a driving force, fostering growth across various industries. It supports real estate, small businesses, and financial investments. By providing loans and facilitating transactions, banks stimulate growth across many sectors, contributing to a robust economy.

Parishes exhibit varying banking industry employment and wage dynamics. Some feature a high concentration of banking jobs, signifying a thriving sector, while others boast competitive wages within the industry. These disparities significantly impact local communities and economic opportunities, necessitating tailored strategies for economic development and addressing the unique needs across all parishes in Louisiana. This diverse interplay offers invaluable insights for policymakers and industry stakeholders, aiding in informed decisions to enhance Louisiana's economic landscape.

Utilizing a location quotient (LQ) metric, we evaluate the concentration of employment in the banking industry within specific parishes compared to the state. The employment LQ is calculated using the following formula:

$$\text{Employment LQ} = \frac{\text{Parish Banking Employment} / \text{Total Parish Employment}}{\text{State Banking Employment} / \text{Total State Employment}}$$

When the LQ value exceeds 1.00, it signifies a higher concentration of banking industry employment in the parish than in the state, suggesting its role as a significant employment center in this sector. An LQ of 1.00 indicates that the parish has a proportional share of banking employment compared to the state. Conversely, an LQ value of less than 1.00 implies a lower concentration of banking employment in the parish compared to the state, revealing areas where the industry is less prominent.

Figure 8: Banking Employment Location Quotients (Parity = 1)

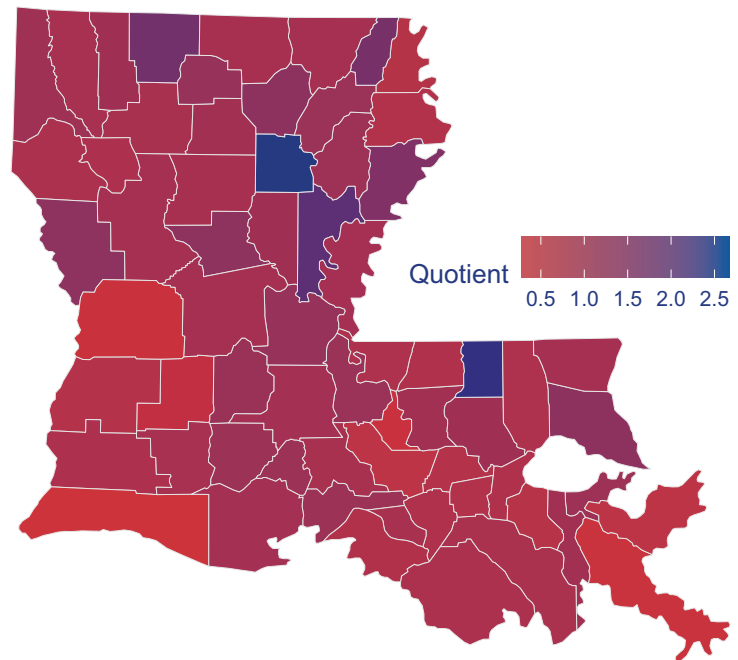


Figure 8, a heat map of Louisiana, visually represents employment quotients from 0 to 2.5 using a spectrum of colors ranging from red to blue. This visual depiction effectively illustrates the disparity across parishes, with shades of red indicating lower employment LQ values and thus areas of growth opportunities for the industry. Understanding these visual cues aids in pinpointing regions necessitating targeted initiatives to fortify industry engagement and economic development.

In addition to the employment LQ, a wage LQ can also be used to assess the banking industry compensation at the parish level. While the employment LQ focuses on employment concentration, the wage LQ delves into the wage dynamics within the industry. This calculation is as follows:

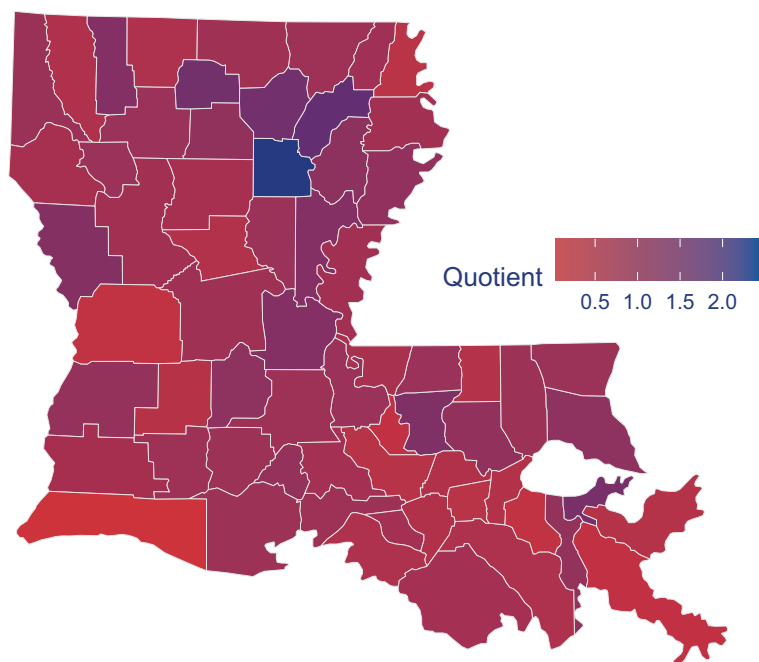
$$\text{Wage LQ} = \frac{\text{Parish Banking Wages} / \text{Total Parish Wages}}{\text{State Banking Wages} / \text{Total State Wages}}$$

Both LQs together provide a holistic view of the banking industry's presence and impact in the parish. The wage LQ offers insights into wage dynamics, helping to discern whether these jobs offer higher or lower wages compared to the state averages. This distinction is visually represented in Figure 9. Like Figure 8, this figure presents a heat map of Louisiana, utilizing colors to denote wage LQ values across parishes. This visual representation effectively showcases the areas where banking jobs come with differing wage levels, aiding in identifying regions requiring focused attention for wage enhancement or adjustment strategies. The banking industry's dynamics across various parishes in Louisiana unveil an intriguing paradox. Among the top five parishes with the highest employment in the banking sector—Caldwell, St. Helena, Catahoula, Claiborne, and West Carroll—not all exhibit high wages. This observation highlights an interesting regional contrast within the banking landscape. While these parishes generate a higher proportion of employment opportunities, they don't uniformly offer the highest wages. This discrepancy implies that certain areas prioritize job creation and fostering a robust workforce, potentially contributing significantly to the state's overall economic health. Conversely, parishes like Caldwell, Richland, Ouachita, Lincoln, and Orleans, which rank among the top five parishes with the highest

wages in the banking industry, might attract talent with specialized skills or positions demanding premium compensation. However, this focus on higher wages may come with a trade-off, often with a smaller employment base. This diversity in regional strategies demonstrates the multifaceted nature of Louisiana's banking industry and underscores the need for a nuanced approach to address both employment and wage dynamics.

Caldwell Parish deserves special mention as the banking industry's local champion. In addition to its position among the top five parishes for industry employment, it also secures a distinguished place among the top parishes for industry wages. This dual accomplishment showcases Caldwell Parish's remarkable success in both fostering employment opportunities within the banking sector and ensuring that these jobs come with competitive wages. One unique feature about Caldwell Parish is its lack of national banking presence (here the term national bank is being used to denote national brand recognition and not bank structure per se.) When regional banks must compete with large national banks, employee compensation may be impacted. This case prompts questions about similar phenomenon across the state.

Figure 9: Banking Wage Location Quotients (Parity = 1)



Data for this report are provided by the Bureau of Economic Analysis. Parish level data are produced with a year-long lag. Current annual data extend to 2021. 2022 estimates are expected in December 2023.

Lumber Industry Contribution Analysis: Assessing Economic Impact

BY KODY HERRICK

The timber industry significantly shapes the economic landscape of Louisiana, making substantial contributions across various dimensions. The industry directly supports approximately 7,000 jobs, resulting in a labor income of about \$380 million. This impact extends to value-added production, causing a ripple effect with an additional \$624 million. The total economic output is approximately \$1.3 billion. Considering indirect and induced effects, the overall impact on employment is much larger, supporting over 11,500 full time jobs. The total labor income across all sectors is approximately \$600 million. Total value added across all supporting industries is about \$980 million and total economic output is over \$2 billion. These estimates underscore the substantial economic role that the timber industry plays in the state of Louisiana.

For every job directly associated with the lumber industry, there is an additional positive economic effect. The ratio of total economic effect to direct effect is referred to as a multiplier. The timber industry's employment multiplier is 1.68. For every job created in the lumber industry another 2/3 of a worker supports it. This means that not only are the initial jobs in the industry important, but they also stimulate additional employment opportunities in related sectors. This multiplier effect can be calculated for along economic dimensions. The industry's labor income multiplier is 1.62, value added is 1.66, and total economic output is 1.56. These multipliers reflect the relationship of the lumber

industry with the broader Louisiana economy, underlining its ability to stimulate job growth and generate economic value far beyond its immediate impact.

Figure 10 shows timber industry employment in each parish relative to state employment. A location quotient is a statistical measure that helps assess the employment concentration of a particular industry or occupation in a specific area compared to a larger reference group (usually national or regional level). It essentially indicates whether a certain sector is overrepresented or underrepresented in a particular location. In the context of our analysis, the

Figure 10: Timber Industry Location Quotients by Parish (Parity = 1)

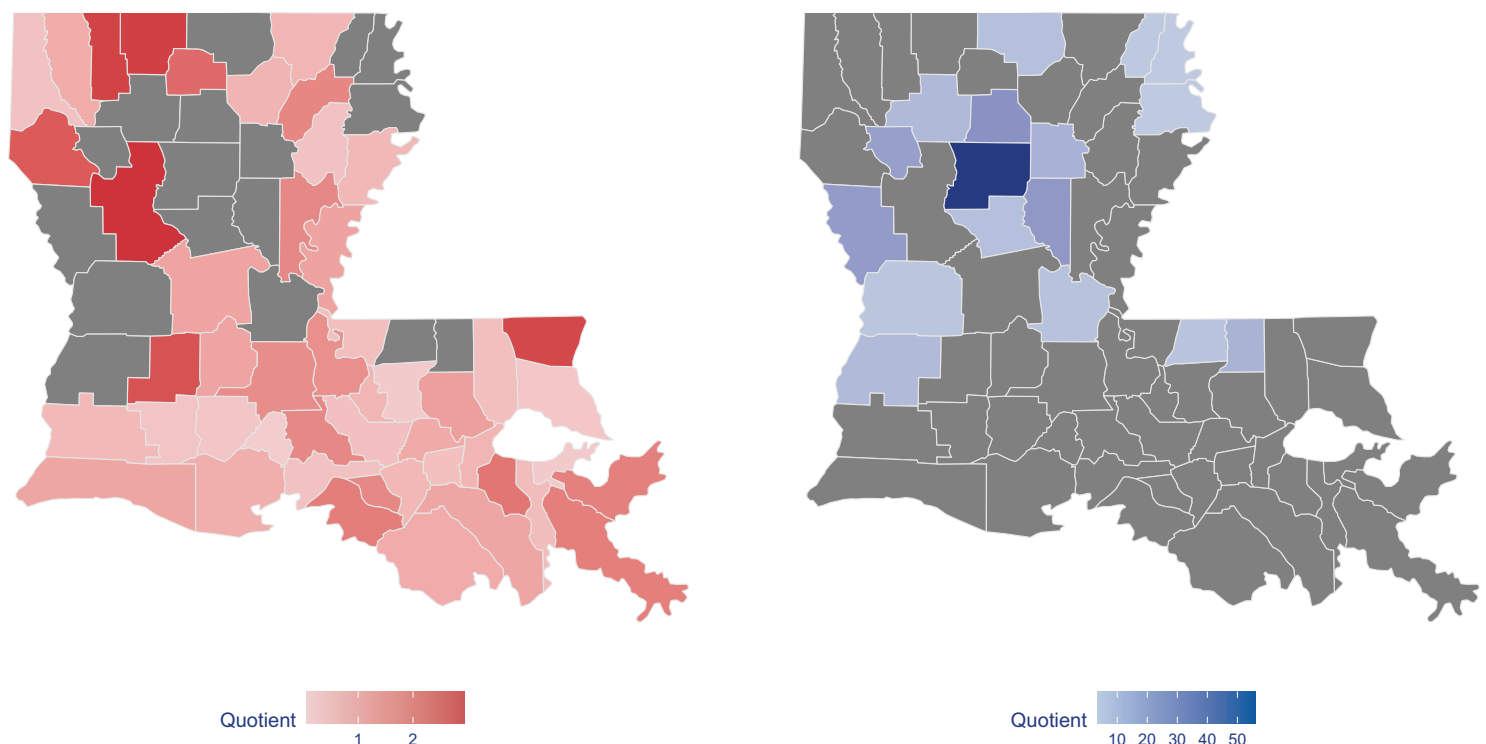
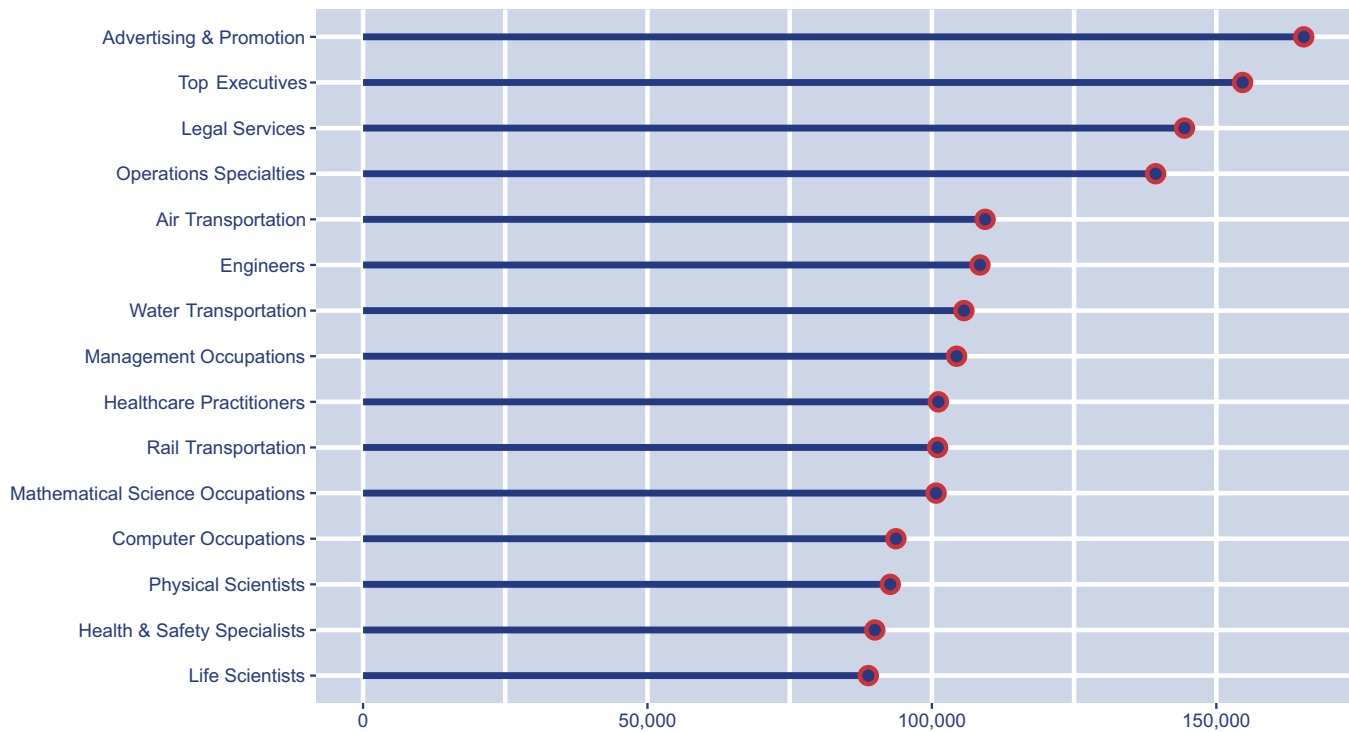


Figure 11: Estimated Adjacent Jobs by Average Pay per Worker (2022 Dollars)



location quotient serves as a valuable tool to evaluate the significance of the timber industry within each parish. On the red map, employment location quotient levels range between zero and three. Keep in mind that a quotient greater than two represents a more than doubling of the employment proportion in the reference group (the state in this case). On the blue map the scale starts out at a quotient level greater than three. The maps had to be separated due to these “superstar” parishes skewing the quotient level and not adequately showing visually the full range of the variation throughout the state. Winn Parish is the top employer in the state with a quotient level of 55. Winn’s economic output in the lumber industry is \$227 million, making lumber 23.6% of the parish-wide economy.

The timber industry directly contributes about \$342,000 in parish-level tax revenues, \$5,685,000 in state-level tax revenues, and \$69,007,000 in federal tax revenues annually. When accounting for indirect and induced effects, the overall tax revenue generation is much larger. The total annual tax revenue generated at the parish level is approximately \$4.1 million, while

the state sees a contribution of about \$21 million. Total annual federal government revenues are approximately \$104 million. This data underscores the fiscal impact of the timber industry’s presence in the state.

Figure 11 shows the top 15 occupations impacted by the timber industry. These positions are ranked according to average pay. When the timber industry grows or shrinks, these occupations will be the first affected. The shaded bars show the income for each position in real 2022 dollars.

The information makes it clear how crucial the timber industry is for Louisiana’s economy. It’s not just about numbers; these figures represent real things like jobs, income, and the strength of communities. In all instances, these 15 occupations supported by the timber industry have higher wages than the median pay in the state. This highlights that the timber industry is not only a major player in making money but a key factor in raising the standard of living throughout our communities.

Data for this report are provided by the Bureau of Economic Analysis. Parish level data are produced with a year-long lag. Current annual data extend to 2021. 2022 estimates are expected in December 2023.

The Childcare Cliff in Louisiana

BY ABIGAIL PIERCE

In September 2023, an estimated 23,333 child programs lost essential national government funding. The American Rescue Plan Act (ARPA) was passed in 2021 and was a response to COVID-19. It included the largest increase in support for childcare through the tax code, which helped millions of working families. ARPA represented a historic moment of support for state, local, and Tribal governments to support their recovery from the pandemic. This national funding allowed childcare centers to reduce tuition, raise staff pay, offer professional development, and update their facilities and equipment. This fund expired September 30, 2023, and has not been renewed by Congress.

During the COVID-19 pandemic, the United States lost an estimated 20,000 childcare programs in the first two years of the pandemic, which is 50,000 less than what is expected due to the end of ARPA. The ARPA gave states close to \$40 billion in federal emergency relief funds for childcare, which was an unprecedented investment for American families and the economy. This national fund saved more than one million jobs of early educators and allowed childcare to continue for as many as 9.6 million children according to the U.S. Department of Health and Human Services. The Century Foundation expects that close to one-third of childcare providers who received stabilization funding are now expected to close as a result of the loss of funding. The Century Foundation expects that 70,000 childcare programs will close nationwide due to the end of the American Rescue Plan stabilization fund. This will result in Louisiana having 1,076 child programs closed and 3,566 full-time equivalent jobs lost. Without government funding, child programs will not be able to stay open and this will result in over \$136 million in lost labor income for Louisiana. This will

not only affect labor income, but also result in 4,300 total job loss from all employment sectors in Louisiana. Childcare programs will have to let employees go, raise tuition costs, and cut the number of slots the programs have.

Figure 12 displays the loss of employees in other industries beyond childcare (indirect and induced effects). The real estate sector shows the hardest impact, and the overall trend of this data shows a loss in workers, mainly in women-dominated fields. This negative shock can be explained by several factors. With 1,076 programs expected to close in Louisiana, 76,752 children are projected to lose childcare, therefore relying on a parent to find another childcare alternative. Two-thirds of children under age six have all of their parents (both solo or coupled) in the workforce. The sectors of industries that are women-dominated are expected to be most impacted because mothers are historically the parents who are likely to leave the workforce to stay at home with their children or reduce their hours. The Bureau of Labor Statistics found that mothers become more likely than women

Figure 12: Forecasted Employment Lost in Industries (Percent of Non-Direct Total Impact)

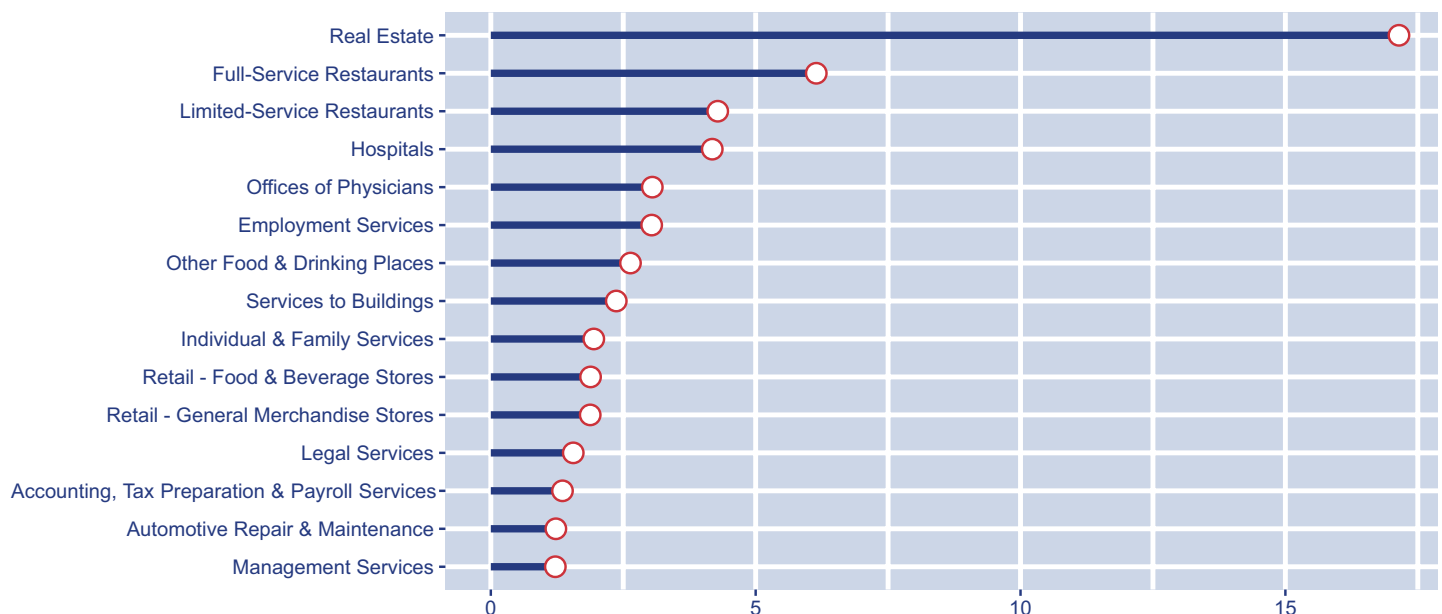
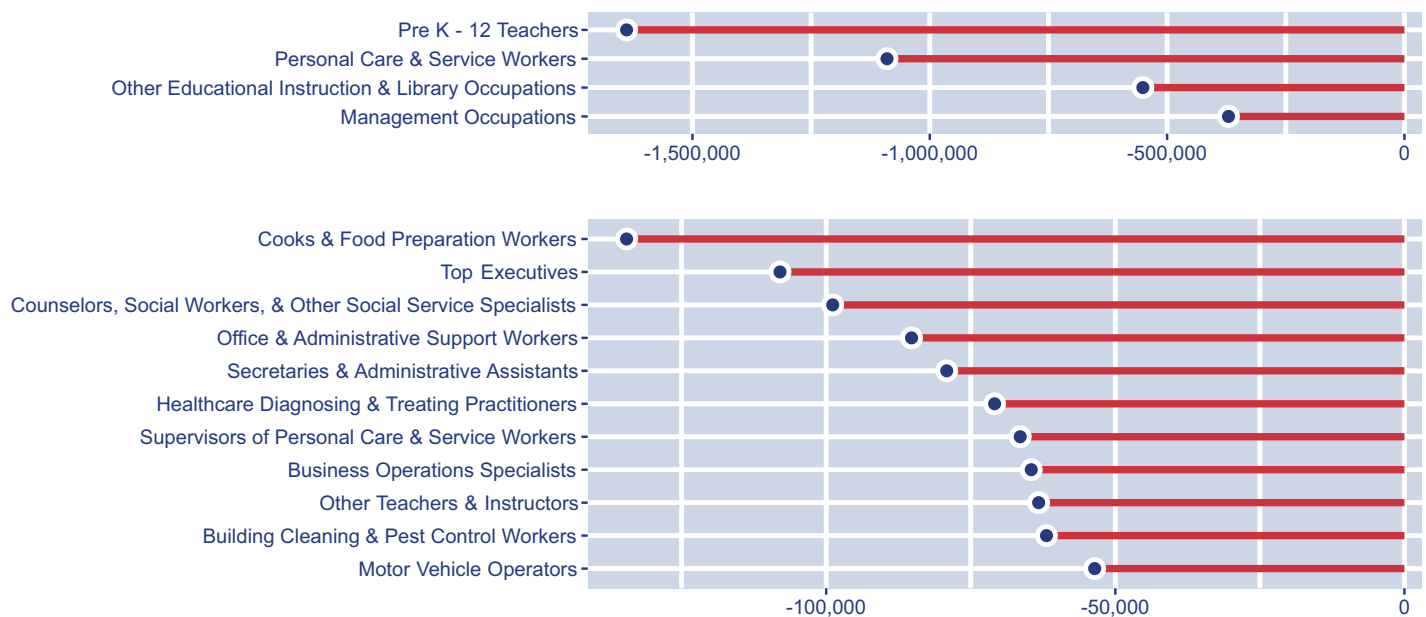


Figure 13: Forecasted Non-Direct Lost Worker Hours



without children to have part-time jobs during the ages of 25-54, which is the prime-working age. This has long-term consequences since part-time jobs are less likely to offer health benefits or employer-sponsored retirement savings accounts, and work disruptions can reduce Social Security benefits at the time of retirement.

Figure 13 visualizes the number of lost worker hours due to the loss of funding (indirect and induced effects). The sectors that see the largest lost hours are women dominated fields. The childcare sector in Louisiana employs about 14,330 full-time equivalent jobs. The closure of childcare programs will affect the workers of these programs the most, but other occupations that rely on this industry will also bear the cost of this policy inaction. Many early educators, who are primarily women and women of color, are expected to lose their jobs due to childcare centers making cuts and shrinking their staff size. The average wage and salary of a childcare worker is \$29,599 annually or about \$13.50 an hour. Childcare providers are among some of the lowest paid workers in the country, and the lack of national funding from ARPA

will continue to make salary growth prospects for early educators worse.

232,000 jobs will be lost nationally according to The Century Foundation. When you take into account that 232,000 jobs will be lost divided by 70,000 childcare programs shut down, the result is 3.3 jobs lost per program. With 1,076 programs closing in Louisiana multiplied by 3.3 jobs lost per program, it is expected that Louisiana will lose 3,566 full-time equivalent jobs in the childcare sector state-wide. These jobs generate \$136 million in labor income. It is estimated that Louisiana will lose \$320 million in total state output. This loss in revenue will force Louisiana to make essential budgetary cuts.

The childcare cliff should be considered an emergency not only for the United States, but for Louisiana. If lawmakers do not enact policy to help fund childcare programs in Louisiana, there will be 4,300 total jobs lost in Louisiana and a loss of \$320 million in total state output. Childcare affects more than parents and children. It has large impacts on many sectors of our state economy as well.

Resources:

<https://tcf.org/content/report/child-care-cliff/>

First Paragraph: <https://www.whitehouse.gov/briefing-room/statements-releases/2022/10/21/fact-sheet-american-rescue-plan-funds-provided-a-critical-lifeline-to-200000-child-care-providers-helping-millions-of-families-to-work/>

Second Paragraph: <https://tcf.org/content/commentary/three-million-child-care-spots-saved-american-rescue-plan-funding/>

Second Paragraph: <https://www.acf.hhs.gov/occ/map/arp-act-stabilization-funding-state-territory-fact-sheets>

Fourth Paragraph: <https://datacenter.aecf.org/data/tables/5057-children-under-age-6-with-all-available-parents-in-the-labor-force?>

Fourth Paragraph: <https://doi.org/10.21916/mlr.2022.7>

Fifth Paragraph: <https://www.epi.org/blog/care-workers-are-deeply-undervalued-and-underpaid-estimating-fair-and-equitable-wages-in-the-care-sectors/>

Data for this report are provided by the Bureau of Economic Analysis. Parish level data are produced with a year-long lag. Current annual data extend to 2021. 2022 estimates are expected in December 2023.

Recovering From COVID: MSA-Level Employment Rates

BY LANDACE ABSHIRE

The COVID-19 pandemic and subsequent stay-at-home order represents the largest economic shock to employment across all regions of Louisiana in at least the past 50 years. Recovering lost employment remains a challenge and the road to recovery is not evenly dispersed throughout the state. Currently four of the state's nine MSAs (population centers) have recovered from this shock. In some cases, these recovered MSAs have grown well beyond pre-pandemic employment levels. The remaining five MSAs that have not fully recovered are still down a combined 35,300 jobs while the state as a whole is only down 19,000 jobs. Figure 14 highlights the employment dynamics among our nine MSAs and the combined employment trends of the remaining parishes that are not a part of a metropolitan statistical area. Regions that have recovered are plotted in blue while the regions that are still underemployed are in red. The specific number of jobs above or below pre-pandemic employment levels are denoted in each subfigure title.

The Recovered Areas

Alexandria, Baton Rouge, Hammond, and Monroe MSAs have fully recovered from pre-pandemic employment shocks. There are certain industries that are prominent across the board in these areas that make up a disproportionately high amount of economic output for each MSA. Healthcare is a top industry in all four MSAs. Blue Cross Blue Shield of Louisiana as well as Ochsner Medical Center (Baton Rouge), St. Francis Medical Group and specifically P&S Surgical Hospital (Monroe), Acadia Healthcare (Alexandria), and Alverno Clinical Laboratory (Hammond) are all major economic drivers in their respective regional economies. The healthcare industry has rapidly grown due to high demand in the COVID years. Louisiana has an aging population according to the latest Census estimates and is frequently ranked one of the lowest states in the nation for healthcare access. State investment in this area represents an opportunity for economic growth. Retail is also a leading industry throughout Louisiana and is prominent in most recovered MSAs. Retail is a steady industry due to relatively consistent demand amongst consumers. In fact, it holds the highest number of jobs among these MSAs followed by healthcare, but produces less economic output than healthcare.

The Non-Recovered Areas

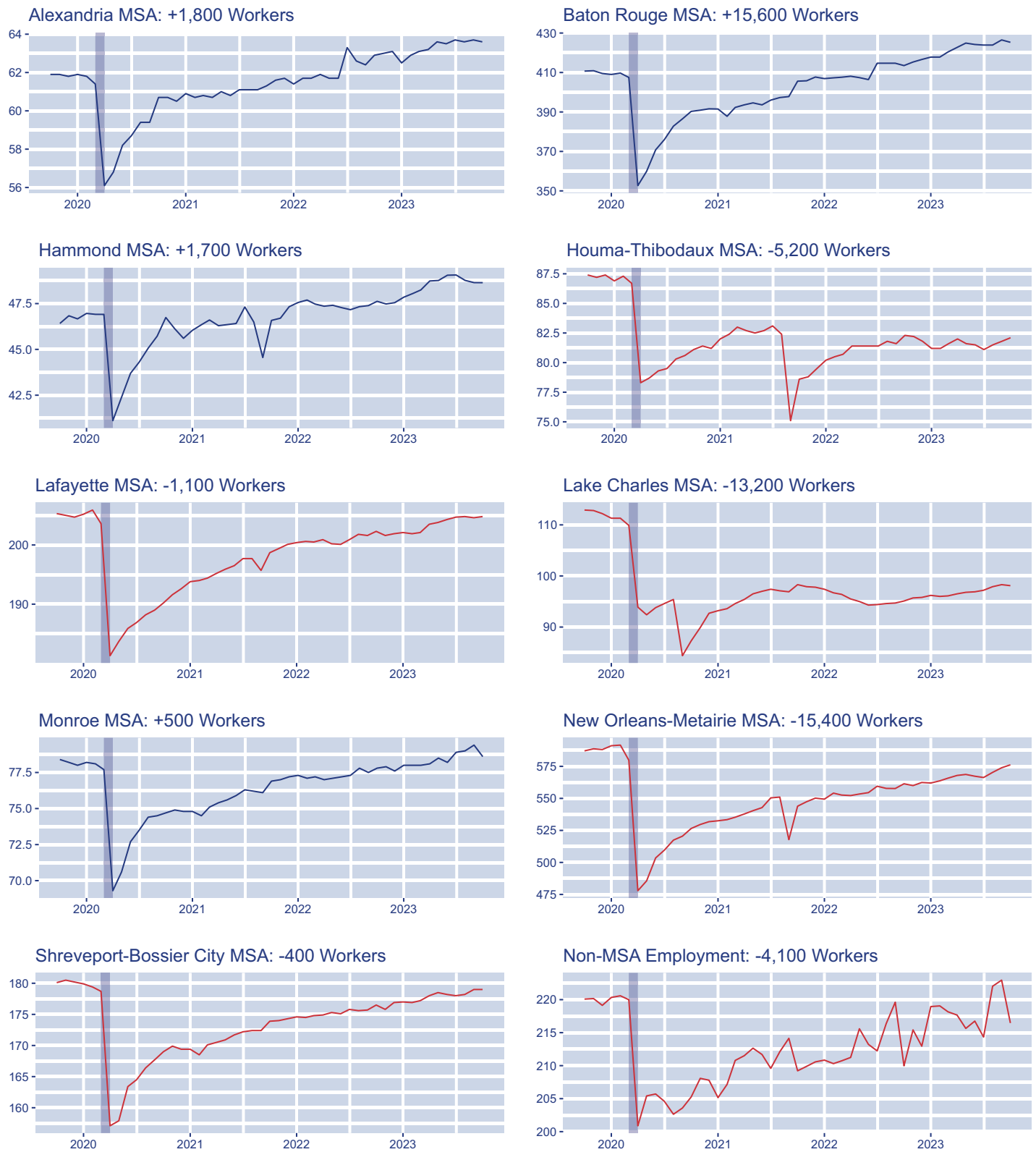
Industries such as agriculture, utilities, leisure and hospitality, and mining are struggling to recover employment rates following the pandemic. These industries are common in the regions that have not recovered. Each of these industries are relatively volatile which makes predictable recovery problematic. All of these industries are especially exposed to the risks associated from climate change. Not only does the increased volatility of storm patterns shock demand, but it also makes normal conditions difficult to maintain. This affects both the demand and the supply of labor which bleeds into the

recovery efforts of the MSAs that are heavily reliant upon these industries. The pattern of shock and recovery that is familiar to the coastal regions of the state leads to long term development problems for these communities. New Orleans-Metairie, Houma-Thibodeaux, and Lake Charles MSAs are among the areas both struggling to recover as well as facing growth challenges over the longer term. Weather and pandemic resurgence patterns affect tourism growth for New Orleans acutely. Houma-Thibodeaux and Lake Charles MSAs have faced storm related setbacks in recovery efforts that are etched across the economic data beyond what is visible in Figure 14.

Lafayette and Shreveport-Bossier City are the only non-recovered MSAs that show hope for recovery in the near future. Both MSAs are relatively well diversified and have a broad mix of industries that serves to insulate the community from industry specific shocks. Their lack of recovery is more endemic of economic development challenges and a shrinking middle class. If the employment rate in these regions is unable to recover, this could be a potential threat to gross state product. Since COVID, Louisiana has seen a 3% increase in broad labor force participation rate and a 9% increase in employment-population ratio as of August 2023. This is due largely to a decreasing population, a trend that has continued since 2017.

Though the pandemic took a toll on the employment rate amongst all regions of Louisiana, certain industries shine through and experience full recovery in certain areas. Louisiana's weather struggles play a disproportionately large factor in the employment of certain occupations. This creates challenges in certain industry-specific and region-specific labor markets. There are many potential threats if some regions are unable to recover, but due to increasing employment in certain MSAs, Louisiana has recovered approximately 92% of pandemic-related job losses.

Figure 14: Non-Farm Employment by Metropolitan Statistical Area (Thousands of Workers)



Data for this report are provided by the Bureau of Labor Statistics. Monthly data extend to October 2023.

Louisiana's Littlest Learners

BY ANNA GRIFFIN

Louisiana has one of the highest poverty rates in the nation at 18.6%, 7.5% higher than the U.S. Children at or below the poverty line experience a decline in the quality of education due to the impact of poverty. Early education, typically commencing around ages 2-3 in daycare settings, plays a pivotal role in a child's development. Head Start programs and other daycare programs focus on building soft skills in children to make them more accomplished adults. Children who completed Head Start programs earn on average an 11% higher salary than their peers who did not. Early childhood education programs lead to increased educational attainment. They also increase earnings by 20.6%, and reduce the likelihood of incarceration by 8%.

Figure 15: Parish-Level Head Start Programs per 100,000 Residents

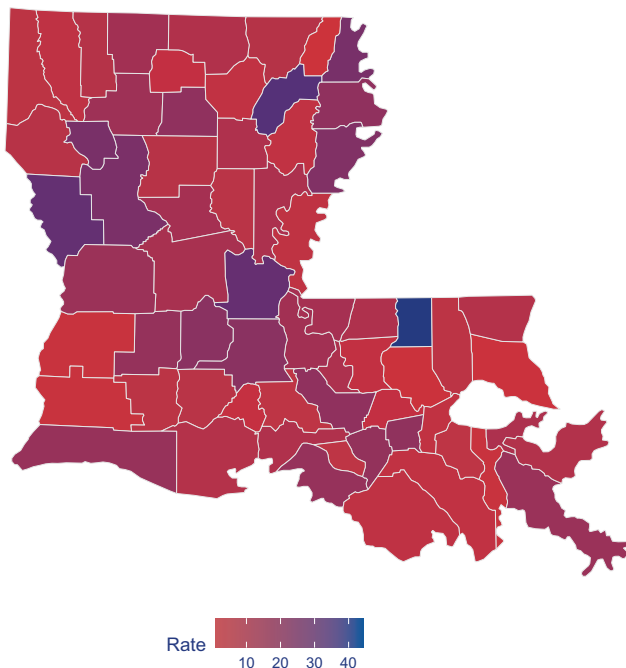
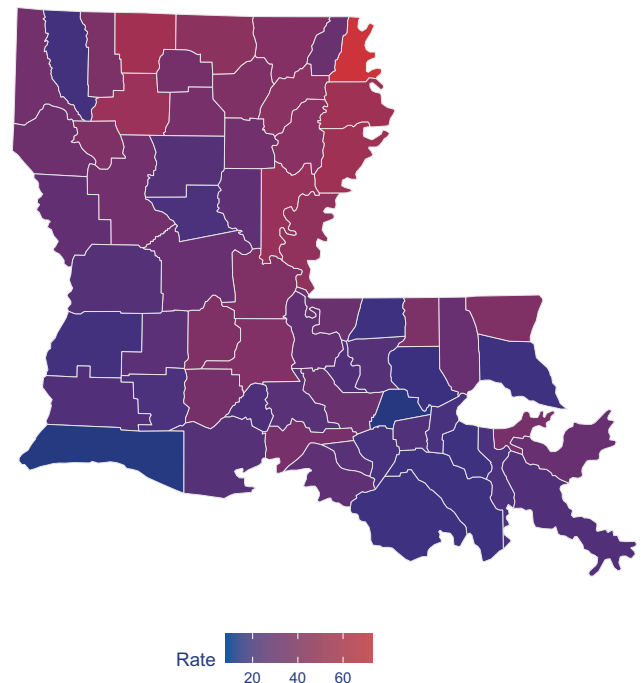


Figure 15 depicts the number of Head Start Programs per 100,000 residents, which varies significantly from parish to parish. For example, St. Helena Parish has two Head Start programs for the parish, with 885 children living below the poverty line. In Sabine Parish, there are seven programs and 1,330 children below the poverty line. The ratio of Head Start Programs to children in poverty varies significantly due to the unequitable distribution of funding. The median household incomes between these two

Figure 16: Childhood Poverty Rate (Percent)



parishes are almost the same. The funding for all Head Start programs comes mainly from the federal government, but local governments/organizations must provide at least 20% of total expenditures for these programs.

Figure 16 illustrates the scope of childhood poverty rates across the state. On the extremes of either end of the spectrum are anomalies worth noting. East Carroll Parish, with a 73% childhood poverty

Table 2: Top/Bottom 5 Parishes — Number of Programs per 100,000 Residents

		Head Start Programs per 100,000 Residents	Parish Poverty Rate	Childhood Poverty Rate	Median Household Income
Bottom 5	1	West Carroll	22%	29%	\$42,050
	2	Livingston	12%	15%	\$71,547
	3	St. Tammany	13%	16%	\$70,986
	4	Jefferson	18%	19%	\$58,638
	5	Beauregard	16%	17%	\$57,130
Top 5	1	East Carroll	47%	73%	\$25,049
	2	Avoyelles	31%	37%	\$37,903
	3	Sabine	20%	26%	\$39,975
	4	Richland	25%	42%	\$42,956
	5	St. Helena	25%	36%	\$40,857

rate affecting approximately 1,137 children and an overall poverty rate of 47%, has only two Head Start Programs. On the other hand, Ascension Parish has one of the lowest childhood poverty rates of 9%. Ascension Parish is in the suburbs of Baton Rouge, where the median household income is around \$82,000 a year. Ascension Parish has the means to provide for the 9% of children in the parish who live below the poverty line and has five different programs available throughout the parish.

Table 2 highlights differences in early education program opportunities between parishes with the highest and lowest number of Head Start Programs (population-adjusted). The bottom five parishes have very few Head Start programs per 100,000 people (ranging from 1.0 to 2.7). West Carroll has the fewest programs and the highest poverty and childhood poverty rates of the bottom five. At the same time, its neighbor, East Carroll, runs one more program than its neighbor, but has less than 8% of the population. The variation

in population makes it difficult to determine if funding is being effectively distributed. The remaining bottom five parishes include St. Tammany, Livingston, and Jefferson Parishes. Each are near New Orleans, offering more job opportunities, higher incomes, and increased tax revenue for Head Start Programs, but these programs are not available. These parishes represent opportunities for more effective education policies. All the top five population-adjusted parishes are relatively rural and thus low population regions. Each of these parishes have two or less Head Start Programs available but their low population means access is better on the individual student level. Despite this access, these parishes have relatively high poverty rates and some of the highest childhood poverty rates in the state. Head Start programs in Louisiana, which are crucial for children in poverty, offer daily meals, social skills, and essential knowledge. Still, inadequate parish contributions necessitate increased funding to break the cycle of poverty effectively.

Timothy J. Bartik, "The Long-Run Effects of High-Quality Pre-K: What Does the Research Show?" (W.E. Upjohn Institute for Employment Research, 2022, 2).
Rucker C. Johnson and C. Kirabo Jackson, "Reducing Inequality through Dynamic Complementarity: Evidence from Head Start and Public School Spending" (American Economic Journal: Economic Policy 2019, 11(4): 310–349, 313).



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