

SPRING QUARTER 2024



UNDERWRITTEN BY



Dean's Message

Thank you for reading this edition of the Regional Economic Analysis of Louisiana (REAL) Report, produced during Louisiana Tech's Spring Quarter of 2024. We hope that this report, along with previous issues, serves as a valuable tool by providing insight into recent economic developments in Louisiana.

This issue includes in-depth analyses written by undergraduate students and faculty in Louisiana Tech's College of Business. 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 undergraduates who work with faculty in the Center for Economic Research. Their work serves as partial fulfillment of the Regional Economic Analysis (ECON 425) course.

Louisiana Tech's Center for Economic Research serves to connect the University community with economic development efforts in the state by supplying detailed economic impact analysis of both private enterprise and government policy initiatives. It also serves as a hub of industry and research expertise, consulting with local and regional governments on projects and providing analysis to media.

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 you find this report relevant and 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
National and Louisiana Economic Indicator Forecasts4
Unemployment at the Industry Level Post-Pandemic
Misaligned Taxes and their Impact on Louisiana's Rural-Urban Divide
Skills Deserts and Economic Opportunity 10
Relational Rehabilitation
The State of Maternity Leave in Louisiana 14
Assessing Social, Economic Impacts of Childhood Lead Poisoning16
Regional Economic Disparities: A Sub-Parish Analysis

The views contained herein reflect the analysis of the authors and not necessarily those of Louisiana Tech University.

Meet the Team



Landace Abshire is a third-year business economics major from Baton Rouge, LA. She is involved in Phi Mu Fraternity, serves as vice president for Omicron Delta Epsilon, and is secretary of Tech's powerlifting team. She plans to graduate in the Fall of 2024 and is concurrently pursuing her master's in business administration.

Contact Landace at LLA026@LATech.edu.



Kody Herrick is a third-year business economics major at Louisiana Tech University from Sarepta, LA. He works part-time at Louisiana National Bank in Ruston. Kody plans to graduate in March of 2025.

Contact Kody at KGH009@LATech.edu.



Abhi Chadha is a thirdyear business economics major originally from New Delhi, India. Abhi works as a data analyst at Origin Bank and is actively engaged in the Student Government Association and Pi Kappa Phi Fraternity. He plans to graduate in Fall 2024 and pursue a master's in business administration.

Contact Abhi at ARC052@LATech.edu.



Abigail Pierce is a thirdyear business economics major from Deville, LA. She is Founder and President of Mock Trial, Chief Justice for Student Government Association and an executive board member of Phi Mu Fraternity. She graduated in May 2024 and intends to pursue a law degree.

Contact Abigail at AFP008@LATech.edu.



Anna Griffin is a third-year business economics major from Shreveport, LA. She is a member of Alpha Chi Omega Sorority. She spent one semester in France studying international economics and law. She plans to graduate in the Fall of 2024 and pursue graduate study.

Contact Anna at ACG048@LATech.edu.



Madison Remrey is a master's student in communication technologies from Tioga, LA. She earned her bachelor's degree in communication in 2022. She completed her master's degree in May and plans to continue her graduate studies and pursue a Ph.D. in political communication.

Contact Madison at MKR024@LATech.edu.



Lauren Hayes is third-year business economics major from Roanoke, Virginia. She is involved in Alpha Chi Omega sorority and serves as treasurer for Omicron Delta Epsilon honors society. She plans to graduate in Spring 2025.

Contact Lauren at LEH043@LATech.edu.



Dr. Patrick Scott is an associate 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**.

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

The last part of the recovery growth curve is proving to be the flattest yet. Job growth is slower because the state-wide labor market is fighting population growth challenges. Most models show only small job gains on the order of about 8,000 full-time equivalent workers into the fourth quarter of the year. The relatively optimistic models indicate job growth of about 21,000 over the same period, but with a much lower likelihood.

Punchline: Given no major shocks, job growth will be modest for much of the year.

Louisiana Unemployment Rate

Unemployment rates have stabilized at near historic lows for the state. The labor market is still relatively tight for employers to recruit and retain qualified workers. While Louisiana has seen growth in total hours worked, labor productivity is down. Employers don't seem to mind. Part of this is the distortionary effect of higher prices in 2022. Inflation is the same reason this is not likely to change soon. The Bureau of Labor Statistics will release 2023 annual estimates of the same report this Summer.

Punchline: The unemployment rate is on autopilot until we have another macroeconomic shock.







Figure 1: Forecasted Non-Farm Employment (Thousands)



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



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 which updates more frequently than real GDP. Industrial production is expected to grow into the fourth quarter. Forecasts at all horizons do not fully account for the full range of volatility of observed values, but the trend is positive even for our relatively pessimistic models.

Punchline: Heading into this phase of the business cycle means this gauge is expected to burn hot for the rest of the year.

National Trimmed Mean PCE Inflation

Inflation continues its march to 2% (the Fed's preferred range). Interest rate uncertainty, along with higher borrowing costs, is creating a backlog of business investment nationwide. Wage inflation is still higher than the 20year average, which makes this harder to pull off. The longer the Fed waits to pull the cord on rate cuts means the higher likelihood of our "soft-ish" landing being harder than we would like. Policy uncertainty begets economic uncertainty.

Punchline: The Fed's wait and see approach is dynamic inconsistency at its finest.

Monthly employment, unemployment rate, industrial production, and inflation rate data for this section extend to April 2024 and include the most current releases at the time of publication.

Unemployment at the Industry Level Post-Pandemic BY LAUREN HAYES

As of February 2024, Louisiana has experienced 35 consecutive months of employment growth. Currently, Louisiana is short about 27,000 jobs from pre-pandemic employment. Total non-farm employment in February 2020 was just shy of 2 million jobs, then COVID hit, and we lost around 280,000 full-time equivalent positions. The devastation from the pandemic transcended far more than economic losses. More than 18,000 people lost a family member or friend. While some industries seem to make a total recovery, others are still struggling to rebound entirely. There are a few key indicators that highlight the disproportionate recovery among industries. Joseph Curtin found in the Fall 2022 REAL Report that, the state made improvements to its unemployment recovery but was still in a deficit of about 57,000 jobs. Today, total non-farm employment appears to have recovered about 91% of total job losses. The non-recovered sectors represent a more permanent labor reconfiguration post-pandemic, a renormalizing of Louisiana's factors of production. Figure 5 shows six major sectors of Louisiana's economy and their employment levels before, during, and after the pandemic.



Figure 5: Louisiana Employment by Industry (Thousands of Workers)

Table 1: Employment	t Changes by	Industry (Thou	sands of Workers)
---------------------	--------------	----------------	-------------------

Industry	Pre-Pandemic	Total Emp. Fall 2022	Total Emp. 2024	Net Change
Leisure and Hospitality	238	220	223	-15
Manufacturing	138	138	139	1
Trade, Transport, and Utilities	378	370	372	-6
Education and Health Services	325	326	340	15
Mining and Logging	35	32	32	-3
Construction	138	129	138	0
Total	1252	1215	1244	-8

Education and health services, manufacturing, and construction have all managed to grow back to their prepandemic employment levels and continue their shortrun upward growth. While it appears on the charts as if these industries have completely obtained their original levels of employment, Joseph discussed the effect of population decline and shifting labor force participation rates, which may have slowed the employment recovery in these industries. Education and health services is the only industry to not only recover but return to a long-run growth trajectory. It is no surprise that the healthcare industry experienced meteoric growth following a public health crisis. Mining and logging as well as manufacturing are special cases since they both are showing persistent long-run declines in employment. Manufacturing has been able to rebound to pre-pandemic levels, but that level was a record low for the state before COVID. Despite manufacturing's relatively small workforce, it is the largest contributor to the state's real GDP. Currently, construction is experiencing the largest sector-wide growth rate at 3.8%. New labor additions in the construction industry are likely a result of the supply chain improvements post-pandemic.

Despite the economic growth statewide, certain industries continue to struggle to find the demand necessary to reemploy workers lost from the pandemic. Leisure and hospitality, mining and logging, and trade, transport, and utilities are struggling to recover. All three sectors have negative growth rates for the current year. When the pandemic hit, trade, transport, and utilities lost around 40,000 jobs alone, this is particularly detrimental because it is a "rigid" or "tight" industry. The St. Louis Federal Reserve defines market "tightness" and "slack" as the ratio of open job vacancies to unemployment relative to its industry. Trade, transport, and utilities' ratio is much higher than, say, an industry like manufacturing, therefore the industry is "rigid." Leisure and hospitality has seen a recent revival in growth, as 900 new jobs have been added just since November 2023. This gives much needed slack to the areas that heavily rely on tourism revenue, like New Orleans and Metairie. Table 1 highlights the industries struggling to rebound and their net change over time. One way to combat the lost revenue of these industries is assistance from the state to motivate some positive momentum, or to wait for the benefits from other well-performing industries to spread amongst the others (indirect or induced growth).

Table 1 summarizes the differences in employment growth by industry over time (by thousands of employees). Looking at economic health through the lens of employment by industry sector allows you to see which industries are helping move the state towards growth. The goal for any industry is to generate wealth and economic growth. The economic growth in Louisiana is not entirely determined by labor force participation, but it is a reliable indicator. About 91% of the jobs lost have been recovered, however there is still a deficit of around 27,000 jobs. Four years after the initial pandemic shock, certain industries have made a complete recovery. Lack of recovery in others could mean that the pandemic permanently altered the economic landscape in Louisiana. This is not to say that the deficit has had only negative effects on the state's economy. In fact, Louisiana was ranked 16th in economic growth nationally at the end of 2023, with manufacturing being the biggest contributor to GDP growth. Future trends of unemployment in Louisiana are expected to change drastically again, as the state is incorporating regulations that would reduce unemployment benefits. This will likely result in an increase in the labor force participation rate and possibly return affected industries to their pre-pandemic level.

Data for this report are provided by the Bureau of Labor Statistics. Monthly data extend to April 2024.

Misaligned Taxes and their Impact on Louisiana's Rural-Urban Divide

In most states, the way land is utilized directly influences its property tax valuation. Land that is classified for agriculture and timber are taxed differently from commercial and residential properties. Land dedicated to agriculture and timber benefits from tax incentives aimed at encouraging production in these sectors which results in lower property tax revenues for parishes. This tax relief for producers, while beneficial for those industries, means that parishes collect less revenue, impacting public services and infrastructure. Over time, this revenue shortfall can lead to systemic under-investment in infrastructure and public services if state resources are not allocated to make up the shortfall. This can degrade the quality of life, particularly in rural parishes, which rely more heavily on property taxes compared to urban areas with diversified tax bases. Without state intervention to offset these lost tax dollars, rural parishes disproportionately suffer more than urban parishes, exacerbating economic and social disparities between rural and urban regions in Louisiana.



Figure 6: Percentage of Total Acres Assessed for Timber or Agriculture

The map contained in Figure 6 illustrates the proportion of land each parish dedicates to agricultural and timber use. For the purposes of this figure, different classifications of agriculture and timber (based on quality) are treated equally. Darker shades indicate parishes with a higher proportion of land used for agricultural/timber production, while lighter shades represent parishes with less land devoted to these sectors. The heatmap shows that lighter-shaded parishes tend to be either relatively more urban or marshy. Urban areas, with their diverse land uses, typically have smaller proportions of land assessed at lower agricultural rates. Marshy regions are less suitable for agricultural activities, leading to lower percentages of land used for this purpose, as well, but for different reasons. This distinction is essential for understanding the varying land use and property tax implications across Louisiana's parishes.

Parish	Land Use	Pop. Change	Total Ag / Acres	Total Timber / Acres
Assumption	96.9%	-10.2%	33.6%	63.3%
Jackson	96.7%	-7.6%	3.9%	92.8%
Bienville	96.5%	-9.6%	6.0%	90.6%
St Helena	95.4%	-2.5%	22.5%	72.9%
Beauregard	94.5%	2.5%	8.7%	85.8%
St Charles	3.3%	-0.6%	3.3%	0.0%
Jefferson	2.3%	1.9%	2.1%	0.2%
Plaquemines	1.8%	2.1%	1.8%	0.0%
St Bernard	0.6%	21.9%	0.6%	0.0%
Orleans	0.0%	11.7%	0.0%	0.0%

Assumption Parish, which has the highest percentage of ag-timber land use, collects about \$21.6 million in property taxes. Meanwhile, Plaquemines Parish assessed \$62.5 million in property taxes. Plaquemines Parish only uses 1.8% of its land for agricultural purposes, yet it has nearly 50 times more in severance taxes than Assumption Parish, which uses 96.9% of the land for ag-timber production. This is just one of many examples of how unevenly severance and property taxes are distributed across the state.

Table 2 enumerates the extremes ends of the spectrum from Figure 6. The first five parishes exhibit an exceptionally high percentage of land devoted to agricultural and timber production combined, with each surpassing 94%. This breakdown highlights the significant allocation of land in each parish for these specific purposes. The predominant use of land in these regions is tied to agricultural and forestry activities, which are significant contributors to the local economies. The high percentage indicates a strong reliance on land-based industries, reflecting the rural character and agricultural productivity of these areas. However, the limited tax revenue generated in these parishes due to the statewide tax incentive policy has eroded the tax base used to build the community. This further contributes to the decline in population over time that is affected by other issues. Some of this decrease in population can be attributed to the reduced funding available for essential public services and infrastructure, which diminishes the overall quality of life and economic opportunities, prompting residents to relocate to areas with better resources and amenities.

The bottom five parishes show minimal land use for agriculture and timber, with Orleans Parish at nearly 0%. The issue lies in how the land is assessed, as these areas are more urbanized and therefore have higher property values compared to agricultural land. These areas are predominantly urban and suburban, where land is allocated more for residential, commercial, and infrastructure purposes rather than agricultural or timber uses. For instance, Orleans Parish, encompassing New Orleans, is a major urban center with limited open land for industries such as agriculture or forestry. The low percentages in these parishes reflect a more diversified economy with significant contributions from sectors such as tourism, services, and industry in places like St. Charles and Jefferson.

The population change column quantifies the 10-year percentage in parish population. Of the top five parishes for agriculture and timber land use, four have a decreasing population. The parishes with the lowest land use for agriculture and timber have in increasing population, with exception of St. Charles Parish which is not statistically different from no change for the last 10 years. Lower property tax revenues due to land-use tax assessment policy mean less funds at the parish level to invest in community development over the long-term. This contributes to a broader problem where rural communities are less attractive to new people and business growth slows. This can lead to a downward economic spiral, where declining populations further reduce the tax base, and place more strain on public services and economic vitality.

Skills Deserts and Economic Opportunity BY LANDACE ABSHIRE

Education is essential to developing the quality of life in a state-wide economy. The U.S. Census Bureau reports that only 27% of the state has a four-year college degree or higher. As mentioned in Lauren Hayes' report on page 6, the manufacturing sector is still the largest contributor to gross state product for Louisiana. However, the days of relatively low-skilled, large-employment manufacturing are over for the United States, which makes it harder for Louisiana to attract those types of jobs. Louisiana's workforce future is tied to the dynamics of the broader national economy.

Nationwide, the U.S. is shifting to highly skilled and specialized manufacturing employment which requires post-secondary education. The Bureau of Labor Statistics reports that a college degree insulates workers from facing the full dynamics of recessionary effects. On average, the unemployment rate for a college degree holder is less than half of that for someone with just a high school degree or GED equivalent. The labor force participation rate for college graduates is on average 15% higher and less volatile when recessions occur. Is a college degree worth it? Yes.

Turning back to Louisiana, Figure 7 shows the percent of the parish population with some degree of postsecondary education. This includes associate's degrees, some college experience (but no degree), bachelor's degrees, and higher. The darker shaded regions correspond to areas where education access is relatively high. These regions tend to also have higher median pay, more economic development, and increased diversity of economic opportunities. These same hotspots are visualized in Figure 9 on page 13 of the Winter 2024 REAL Report. That figure shows the percent of total Louisiana industries that are present in each parish. Increased access to education improves labor market outcomes because of the symbiotic relationship between institutions of higher education and the private sector. While this correlation between higher education, economic development, and access to resources is evident, it is essential to recognize that not all individuals in these areas may have equal opportunities or access to these services. Socioeconomic disparities, systemic barriers, and other factors can still create challenges for some populations within these regions.

Figure 7: Proportion of Population with Post-Secondary Education Experience (Percent)



Figure 8 depicts the percentage of the population in each parish that has only a high school education or lower. The portion of this population that tends to enter the labor force does so without a hard or marketable skill and tends to take employment in areas that provide on-thejob training. The 'social contract' among workers and employers has eroded since the weakening of pension requirements for employers. These policy changes increase in pace starting in the 1980s and continue through the late 1990s. This comes at a cost to society. While workers enjoy the mobility benefits that they gain, both employers and employees commoditize labor. When labor is substitutable, both sides of the market benefit. When it is not, due to a skills mismatch, the unskilled worker suffers a systemic disadvantage. The darker shades of red captured by Figure 8 indicate regions with a higher concentration of individuals that terminate their education without pursuing post-secondary alternatives. The darker regions of Figure 8 correspond to the lighter regions of Figure 7. These parishes are "skills deserts," meaning they tend to have lower levels of educational attainment, reduced workforce engagement, and fewer alternatives for workers when employers leave the region. This is where policy efforts may need to be more focused on improving educational attainment and skills development.

While higher educational levels are not pertinent to some forms of labor, they do help to learn other trades, transferrable skills, and soft skills. It is important to understand that while education levels may not continue past high school on account of the individual's choice, it could also depend on parish policies, pricing, inclusivity, and requirements. Education enhances critical thinking, problemsolving abilities, and decision-making skills. Well-educated individuals in leadership positions within organizations and governments make informed decisions that positively impact economic policies, resource allocation, and longterm planning. Innovation and technological progress: Higher levels of education promote research, innovation, and the development of new technologies. Educated individuals are more likely to engage in research and development activities, which can lead to breakthroughs and advancements that drive economic growth and improve living standards. As citizens, it is our job to open as many doors as possible for students to continue their education if that is what they desire, so the only thing hindering them is their own decision not to continue.

Some specific policy measure Louisiana can take to boost education outcomes across all parishes include investing in educational resources in underserved areas, both urban and rural. The state can increase access to vocational training and rehabilitation services across the state to better serve those who need these services. Understanding the socioeconomic barriers that limit educational opportunities for disadvantaged populations is necessary to improving outcomes. Increase state support for partnerships between educational institutions, businesses, and community groups to carve a path for individuals desiring more education and help. Finally, target all levels of educational outcomes. By developing targeted policies designed to identify students at every educational step that need assistance to move onto the next, we grow the economic pie for all.



Figure 8: Proportion of Population with only a High School/GED Equivalent or Lower (Percent)

References:

https://scholarship.law.georgetown.edu/legal/50/

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 2022. 2023 estimates are expected in December 2024.

Relational Rehabilitation BY ANNA GRIFFIN

Louisiana ranks fourth in the nation for the percentage of individuals with disabilities residing in hard-to-count census tracts, and over 36% of the total population with disabilities in the state lives in one of these "hard-to-count" tracts.¹ Within Louisiana, there are over 1.1 million individuals with disabilities, encompassing a range of conditions from mental disabilities to physical disabilities such as deafness, blindness, and loss of bodily functions. Fortunately, advancements in technology and services have enabled people with disabilities to lead more independent lives.

The Louisiana Office of Workforce Commission provides several services in Louisiana. These include independent living services for individuals with severe physical or psychological disabilities that limit their ability to function independently; vocational rehabilitation services, which help individuals with disabilities acquire the skills necessary to secure and maintain employment and develop lifelong careers; and blind services, which offer a combination of the services provided by independent living services and vocational rehabilitation. This report focuses on vocational rehabilitation services and the number of individuals served per parish.

Louisiana Rehabilitation Services (LRS) provides support for approximately 17,000 individuals over the age of 18, equipping them with the training and skills needed to enter the workforce. These 17,000 individuals represent about 1.1% of the total number of people with disabilities in Louisiana. The primary objective of vocational rehabilitation is to assist individuals in building lifelong careers, thereby reducing the unemployment rate and poverty rate and increasing the education level among people with disabilities in Louisiana. Eligibility for vocational rehabilitation services generally includes physical or mental impairment that substantially impedes employment and the requirement for vocational rehabilitation services to prepare for, secure, retain, or regain employment.

In Louisiana, 29.2% of individuals with disabilities live in poverty, a rate that is 14.2% higher than that of individuals without disabilities. Those living in poverty stand to benefit significantly from the services offered by LRS, which help individuals identify their strengths, refine their skills, and secure employment. Vocational rehabilitation often covers these costs when additional training or education is required to pursue a desired career. For individuals with intellectual or educational skills, vocational rehabilitation may fund further education, such as bachelor's and master's degrees, or more advanced training as needed. In Louisiana, 20.3% of individuals with disabilities have less than a high school education. Various factors, such as developmental disabilities, may impede their ability to complete high school. This limited educational attainment severely restricts their employment opportunities. Some individuals may require additional vocational training, such as trade school, to capitalize on their practical skills. Beyond training, vocational rehabilitation also assists recipients in securing employment that matches their skills. Vocational rehabilitation also covers the cost of necessary medical equipment in addition to training. For instance, for individuals who are deaf, have permanent hearing loss, or are hard of hearing, LRS funds the acquisition of devices such as cochlear implant processors, hearing aids, and hearing alert dogs. In the United States, approximately 12 million people have a hearing disability, with 253,275 residing in Louisiana. Alexandria, Louisiana, has one of the highest concentrations of deaf individuals. Of the 253,275 people with a hearing disability in Louisiana, 50.7% are unemployed. Individuals with hearing disabilities face numerous challenges in the workforce, such as difficulties in crowded environments and the need for interpreters. Vocational rehabilitation plays a crucial role in mitigating these barriers by providing necessary support and advocating for the rights of individuals with disabilities. Caseworkers inform clients of their rights and ensure they know the services and accommodations available to them.

Figure 9 highlights vocational rehabilitation utilization rates across Louisiana. The parishes with the highest usage of vocational rehabilitation services—Caddo, Ouachita, and East Baton Rouge—stand out due to several key factors. East Baton Rouge Parish, being the most populated in Louisiana, naturally has a larger pool of individuals who might need these services. Additionally, these parishes benefit from well-established healthcare networks, including specialized rehabilitation centers that offer comprehensive

¹Hard-to-count census tracts are those in the bottom 20% of 2010 Census Mail Return Rates (i.e. Mail Return Rates of 73% or less) or tracts for which a mail return rate is not applicable because they were enumerated in 2010 using the special update/enumerate method.

Figure 9: People who Utilize V.R. Services in each Parish Compared to the Total Number of Clients



support to individuals with disabilities. This infrastructure, coupled with effective outreach and advocacy programs, increases awareness and accessibility of vocational rehabilitation services.

Economic and demographic factors also play a significant role. East Baton Rouge Parish's diverse economy provides numerous employment opportunities, making vocational rehabilitation services particularly valuable for integrating individuals with disabilities into the workforce. Furthermore, partnerships between rehabilitation centers and local educational institutions enhance the effectiveness of these services by offering tailored training programs. Demographic characteristics, such as a higher proportion of elderly residents or lower-income populations, also contribute to the greater demand for rehabilitation services in these areas. Overall, the combination of these elements explains why these parishes have the highest percentages of people utilizing vocational rehabilitation services.

In conclusion, Louisiana Rehabilitation Services in Louisiana is a vital service that supports individuals with disabilities. By offering a wide range of services—from job training and placement to assistive technology and educational funding—vocational rehabilitation empowers individuals with disabilities to achieve greater independence and economic self-sufficiency. These services not only improve the quality of life for individuals with disabilities but also contribute to the broader goals of reducing unemployment and poverty rates among this population, fostering a more inclusive and equitable society.

References:

National Disability Rights Network. (2019). *States ranked by percent of people with disabilities*. https://www.ndrn.org/wp-content/uploads/2019/07/States-Ranked-by-Percent-of-People-with-Disabilities.pdf

Kraus, L., Lauer, E., Coleman, R., & Houtenville, A. (2024). "2024 Annual Disability Statistics Compendium," Institute on Disability, University of New Hampshire. https://www.researchondisability.org/sites/default/files/media/2024-03/draft-pdf-full-compendium-with-links-and-cover.pdf

Data for this report is provided by Louisiana Rehabilitation Services and the U.S. Decennial Census.

The State of Maternity Leave in Louisiana BY ABIGAIL PIERCE

Maternity leave is a critical period for new mothers, providing necessary time for recovery and bonding with their newborns. However, many women face challenges related to insufficient leave policies, unpaid leave, and the pressure to return to work too soon. This article examines the state of maternity leave in Louisiana, highlighting key statistics and exploring the implications for women, employers, and society.

In Louisiana, a majority of women surveyed work up until the time they deliver their child. Figure 10 shows that 62% of women continued working until delivery, with only 13% taking time off before giving birth. This high percentage reflects both financial and job security pressures many women face, which often necessitate working as long as possible.

For many women in Louisiana, maternity leave means a loss of income. Figure 11 indicates that 50% of women who worked during their pregnancy received unpaid leave after delivery. This lack of financial support places a substantial burden on new mothers, forcing them to make difficult choices between their health, their child's well-being, and their financial stability. Moreover, women who return to work after taking paid leave are about 40% less likely to receive public assistance in the year after giving birth compared to those who had no leave at all. Given that 50% of women in Louisiana did not receive paid leave, a significant proportion may require public assistance post-birth.

The inadequacy of maternity leave time is another significant concern. Figure 3 reveals that 66% of women felt they received too little time off. The World Health Organization recommends at least six weeks for recovery after birth, and up to two months for those who had a C-section. Current Louisiana Family and Medical Leave Act (FMLA) provides up to 12 weeks of unpaid leave, but only for those who have been employed for at least 12 months with an employer that has 50 employees or more. Small businesses that employ relatively few workers are only obliged to provide six weeks of leave unpaid. This policy leaves many women with insufficient time to recover and adjust to motherhood. There is currently no policy in place mandating that employers in Louisiana give women paid time off after having a child, leaving many women with no option but to return to work shortly after delivery.

Figure 10: Employment Outcomes Before Delivery (Percent)

6%

9%

6%

13%



No Leave After Delivery
Unpaid Leave After Delivery

Returning to work after childbirth is another challenging aspect. Figure 13 shows that 57% of women returned to work after having their child, while 22% did not plan to return to work at all. It is important to note that at this time in the leave process, women have observed the firm's leave policy and know enough to determine the work climate they return to. The decision not to return is often influenced by the lack of adequate maternity leave, financial pressures, the need for more time to care for their newborn, and the rise of childcare costs. In a study by the National Partnership, they found that women make up 48% of Louisiana's labor force and that if women in Louisiana participated in the labor force at the same rate as women in countries with paid leave, there would be an estimated 95,000 additional workers in the state and \$2.6 billion more wages earned statewide.

The lack of paid maternity leave has far-reaching consequences. Economic studies have shown that access to paid family leave significantly increases the likelihood that workers will return to their jobs instead of dropping out of the labor force. The median cost to employers of replacing an employee is estimated to be about 21% of that employee's annual salary. Thus, offering paid leave not only benefits employees but also helps employers retain skilled workers and reduces turnover costs.

In a survey conducted by the Conference Board, women reported being less satisfied with their jobs than men for the seventh consecutive year. The biggest disparities were in areas like job security, bonuses, promotion policies, and sick days. Additionally, a 2024 study found that women with paid maternity leave were more likely to be satisfied with their jobs compared to those without it.

The current state of maternity leave in Louisiana highlights significant gaps and challenges that women are facing. With 62% of women working until delivery and 50% receiving unpaid leave, it is understandable that women are less satisfied with their jobs than men. Adequate paid maternity leave, not only benefits women and their families but also enhances job satisfaction, reduces reliance on public assistance, and helps employers retain skilled workers.





Figure 13: Plans for Return to Work Given Employer Policies (Percent)



References:

https://tulanehullabaloo.com/62803/intersections/louisiana-maternity-leave/

 $https://www.jec.senate.gov/public/_cache/files/646d2340-dcd4-4614-ada9-be5b1c3f445c/jec-fact-sheet---economic-benefits-of-paid-leave.pdf \\ https://nationalpartnership.org/wp-content/uploads/2023/04/paid-leave-means-a-stronger-louisiana.pdf$

 $https://www.axios.com/newsletters/axios-markets-8be10460-0d71-11ef-a26d-b942a8588b07.html?chunk=3&utm_term=emshare\#story3$

Jahan, M. (2024). Do employers' offers of paid maternity leave increase women's job satisfaction? Applied Economics, 1–15. https://doi.org/10.1080/00036846.2024.2303621 Data for this report is provided by the Louisiana Pregnancy Risk Assessment Monitoring System – Wave 8. Data for this and other waves can be found at: https://partnersforfamilyhealth.org/data-center/.

Assessing Social, Economic Impacts of Childhood Lead Poisoning

Childhood lead poisoning comes with serious ramifications. The CDC says childhood lead exposure can cause lifelong issues such as developmental and growth delays, hearing and speech problems, difficulty learning and paying attention, and serious illness and death.

The Louisiana Department of Health says there are four main sources of exposure to lead for Louisiana children: lead-based paint, lead-contaminated soil, leadcontaminated dust from paint or soil, and drinking water. According to a study from Loyola University at Chicago, it is estimated that young children with blood lead levels of at least, if not more than, 10 micrograms of lead per deciliter of blood will lose five to seven IQ points.

According to Loyola University at Chicago, for every one IQ point lost, a child loses \$16,809 in lifetime earnings. Loyola University at Chicago also says preventing childhood blood lead poisoning could save the U.S. up to \$44 million each year in healthcare costs along with \$1.8 billion in costs associated with violent crimes.

The Louisiana Healthy Homes and Childhood Lead Poisoning and Prevention Program (LHHCLPPP) is a government initiative focused on addressing childhood lead poisoning in Louisiana. This program exists to help ensure children who are most at risk of childhood lead exposure are taken care of and are protected from the consequences of lead exposure, which most children cannot avoid — especially if they are from low-income backgrounds.

Using 2017 data provided by the LHHCLPPP, Figure 14 presents the percentage of children 6 years old and younger in each region who test positive for specified thresholds of lead levels per deciliter of blood. For example, Subfigure A represents the density of children in each region who test positive for blood lead levels that are equal to or greater that five micrograms of lead per deciliter of blood.

Subfigure A shows that Region 5 (Southwest Louisiana — Allen, Beauregard, Calcasieu, Cameron, and Jefferson-Davis Parishes) has the highest relative percentage of

children 6 years old or younger who have blood lead levels of at least, if not more than, five micrograms of lead per deciliter of blood. This is true for Region 5 across all four figures.

Falling just below Region 5, Region 8 (Northeast Louisiana — Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, and West Carroll Parishes) has the second highest percentage of children 6 years old or younger who have a blood lead level of more than or equal to five micrograms of lead per deciliter of blood. Region 9 (Livingston, St. Helena, St. Tammany, Tangipahoa, and Washington) and Region 4 (Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, and Vermillion Parishes) have the lowest percentage of children 6 years old and younger with a blood lead level of more than or equal to five micrograms of lead per deciliter of blood.

Subfigure B represents the density of children in each region who are 6 years old or younger and test positive for a blood lead level of at least, if not more than, 10 micrograms of lead per deciliter of blood. Both, Region 8 (NELA) and Region 5 (SOWELA) have the highest percentage of children who meet this threshold. Region 1 (near the Gulf Coast — Jefferson, Orleans, Plaquemines, and St. Bernard Parishes) falls right behind Regions 5 and 8 as the third highest region with children who have a blood lead level of at least 10 or more micrograms of lead per deciliter of blood.

Subfigure C represents the density of children in each region who are 6 years old or younger and have a blood lead level of at least, if not more than, 15 micrograms of lead per deciliter of blood. Again, Region 5 (SOWELA) has the highest percentage of children whose blood lead level meets this threshold. Region 4 (South Central Louisiana) and Region 9 continue to have the lowest percentage of children who meet this threshold.

Figure 14: Proportion of Children Tested with Elevated Blood Lead Levels by Region (Percent)

Subfigure (A): Children Under Age 6, BLL (μ g/dL): \geq 5



Subfigure (B): Children Under Age 6, BLL (μ g/dL): \geq 10



0.6 0.8 1.0 1.2

Subfigure (C): Children Under Age 6, BLL (μ g/dL): \geq 15



Percent 0.2 0.3 0.4 0.5 0.6 0.7

Subfigure (D): Children Under Age 6, BLL (μ g/dL): \geq 20



Subfigure D represents the density of children in each region who test positive for a blood lead level of at least, if not more than, 20 micrograms of lead per deciliter of blood. As in every other figure, Subfigure D shows Region 5 has the highest relative percentage of children 6 years old and younger who have blood lead levels that meet this threshold. Region 9 (Livingston, St. Helena, St. Tammany, Tangipahoa, and Washington Parishes) has the lowest relative percentage of children who are 6 years old or younger with a blood lead level of equal to or greater than 20 micrograms of lead per deciliter of blood. Assessing the patterns found in Figure 14 highlights that the generally more rural regions and parishes have higher relative percentages of children ages 6 years old or younger with elevated blood lead levels more often than other regions and parishes.

As it stands, Louisiana law requires blood lead level testing for all children ages 6 months to 6 years old. However, there is no legislation that enforces the mandate, so many health care providers do not perform blood lead level testing (Louisiana Healthy Homes and Lead Poisoning Surveillance System Report, 2017).

The CDC standard for statewide lead testing is for 25% of children aged 6 years and younger to receive testing, but as of 2017, less than 15% of children in this age group are being tested for blood lead poisoning. This is despite the Louisiana code mandating blood lead level (BLL) testing in children 6 and under, and that BLL is covered by Medicaid and most private insurance companies.

In 2017, the parishes with the highest rates of BLL testing include Claiborne (26.5%), East Carroll (24.1%), DeSoto (22.4%), Orleans (21.4%), and Washington (20.5%) (Louisiana Healthy Homes and Lead Poisoning Report, 2017).

The Louisiana Department of Health identifies four barriers to blood lead level testing:

- Physician and parent compliance
- Lack of education and awareness around lead poisoning, so people don't ask about testing
- Lack of follow up testing after age 2
- Lead testing is not offered at all clinics

The Louisiana Healthy Homes and Lead Poisoning Report (2017) says the main way they focus on increasing BLL testing rates is through provider education, outreach, and training. This method puts responsibility on health care providers to ensure those who are recommended for BLL testing receive the proper exams. Humans are a communicative group by nature, and that makes communication vital to successful public health outreach (Rimal & Lapinski, 2009). Reaching effective results in childhood lead prevention of Louisiana children could be benefited through the application of the health belief model (HBM), a communication theory that found its roots in the 1950s. Social psychologists Hochbaum, Rosentock, and others developed the HBM while they were working in the U.S. Public Health Service to determine why people do not participate in disease prevention and detection programs (Glanz et al., n.d.). This communication theory argues that health behaviors will change depending on a combination of several factors including perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Jones et al., 2016).

As current childhood lead poisoning efforts focus mainly on healthcare provider behaviors, it may be beneficial to add an approach that targets the behaviors of guardians and parents to find out why they are not participating in disease prevention and detection (i.e. blood lead testing) as it pertains to having children ages 6 years old and younger tested for lead poisoning. The HBM can be applied here by asking the following questions:

How susceptible do the guardians/parents believe their children are to lead poisoning? (Perceived susceptibility)

- How severe do the guardians/parents believe the effects of lead poisoning will be to their children? (Perceived severity)
- What benefits do guardians/parents see in having their children tested for lead poisoning, if any? (Perceived benefits)
- What barriers exist in preventing guardians/parents from having their child tested for lead poisoning? (Perceived barriers)
- How can parents/guardians be encouraged to bring their children to be tested for lead poisoning? In what ways can they best be reached? What forms of communication are they most likely to listen to? (Cues to action)
- How can we encourage guardians/parents that this is something that testing is easily achievable and case mitigation is easily manageable? (Self-efficacy)

Another useful communication theory in prevention efforts of childhood lead poisoning is the extended parallel process model. The EPPM focuses on the use of fear (or lack thereof) to understand why someone may or may not participate in a certain health behavior. Frightening messages are evaluated by people, first, to determine if they are at risk. Then they determine if there is something they can do to prevent the potential outcome. If people are scared enough into believing there is no hope, then they will just avoid the issue rather than address it (Popova, 2011). For example, it might be beneficial to share with those who are at risk of lead poisoning what their risk is and what the harmful consequences would be if they don't act. However, should the information not be communicated properly or should it be processed in an unexpected way by the receiver, then the person(s) at risk of the adverse health outcomes will just avoid addressing the issue altogether, which could lead to continued health issues or worse outcomes.

The HBM and EPPM can be seen applied in several successful public health campaigns. The well-known health campaign "Know Your Lemons: Worldwide Breast Cancer" is a great example of both theories contributing to the success of public health outreach efforts. "Know Your Lemons" is a health campaign with the goal of encouraging women to learn the signs of breast cancer and receive routine testing. The campaign's values as listed on its website include empowering people, equitable design, global visibility, making an impact, and opening discussion.

"Know Your Lemons" empowers people through education. It ensures equitable design through overcoming literacy issues and considering all demographics in message design to address gender and health inequities. It ensures globally visibility by overcoming cultural taboos through using lemons instead of breasts to visually communicate their message. It opens discussions by creating an environment removing fear from the topic (getting tested, potential of positive results, etc.). According to the campaign's website, patients who saw the campaign had a 39% lower rate of Stage 4 breast cancers compared to those who did not see the campaign. Further, 94% said after seeing the campaign, they felt more confident about their breast health.

This campaign employs the HBM by effectively communicating to its target audience how susceptible they are to breast cancer, how severe the effects of breast cancer can be, what the benefits are to routine testing, gives cues to action, and empowers patients into being confident through the process. It also considers a range of demographics when crafting messages to reach as many patients as possible.

The extended parallel process model can be seen in the campaign through its careful balance between communicating the dangers of breast cancer alongside letting patients know they do have the agency and resources available to them (through the campaign, at the least) to look for symptoms, get tested, and stay informed.

References:

"About Childhood Lead Poisoning Prevention." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention,

 $www.cdc.gov/lead-prevention/about/index.html \ensuremath{\#:} w:text=Lead\% 20 lood, can\% 20 be\% 20 permanent\% 20 and\% 20 disabling. Accessed 1 June 2024.$

Glanz, Karen, et al. Health Behavior and Health Education. University of Pennsylvania, Med UPenn, https://www.med.upenn.edu/hbhe4/contact.shtml, Accessed 2024.

Jones, Christina L et al. "The Health Belief Model as an explanatory framework in communication research: exploring parallel, serial, and moderated mediation." Health communication vol. 30,6 (2015): 566-76. doi:10.1080/10410236.2013.873363

"Louisiana Childhood Lead Poisoning Prevention Program." Lead Poisoning Prevention | Department of Health | State of Louisiana, ldh.la.gov/lead-poisoning-prevention#. Accessed 1 June 2024.

Popova L. The Extended Parallel Process Model: Illuminating the Gaps in Research. Health Education & Behavior. 2012;39(4):455-473. doi:10.1177/1090198111418108 Rimal, Rajiv N, and Maria K Lapinski. "Why health communication is important in public health." Bulletin of the World Health Organization vol. 87,4 (2009): 247-247a. doi:10.2471/ blt.08.056713

"The Story of Know Your Lemons Foundation." Know Your Lemons® for Early Detection, www.knowyourlemons.org/our-story. Accessed 1 June 2024.

United States, Congress, Office of Public Health, et al. Louisiana Healthy Homes and Childhood Lead Poisoning Prevention Program, 2017.

 $https://ldh.la.gov/assets/oph/Center-PHCH/Center-PH/cshs/LHHCLPPP/Louisiana_Lead_Report_2017_FINAL.pdf. Accessed 2024.$

Data provided by Louisiana Healthy Homes and Childhood Lead Poisoning Prevention Program (LHHCLPPP) is the most recently released (2017) at the time of publication.

Regional Economic Disparities: A Sub-Parish Analysis BY ABHI CHADHA AND C. PATRICK SCOTT, PH.D.

Every regional economy is dominated by economic hotspots. These hotspots have a relatively more diverse and stable economic base, group of related or affiliated industries that support the employment of that region. One of Louisiana's more acute challenges is its lack of integration among economic bases throughout the state. The most recent Bureau of Economic Analysis estimates indicate that only 48% of what the state produces is a final good or service. This leaves specific locales across the state relatively more exposed to the business fluctuations of their respective economic base.

At the state level, the uneven dispersion of people and economic opportunities is relatively easy to see. This pattern has been shown in numerous dimensions across all the previous REAL Report issues published by the Center for Economic Research. But if one zooms in on the economic picture within the state, we find similar disparities of economic bases within a given parish as well. At the zip code or neighborhood level, the economic base becomes the surrounding zip codes and neighborhoods. Parish-wide economies are fractals of the state-wide economy. This concept is at the heart of understanding inequality and is the backdrop of this report.



Figure 15: Proportion of Economic Benefit Captured by Zip Code

Economic development officers (EDOs) understand intuitively that location of business growth is important. This is easiest to see in the case of a relatively large-scale manufacturing firm. Proper site selection is of primary importance in that case, but most economic development is organic growth of small businesses that hire less than 10 workers. These types of firms account for over 50% of labor market fluctuations throughout the business cycle nationally.

Ouachita Parish is a relatively good case study for this phenomenon. The parish boasts a diverse economic landscape, featuring pockets of relatively high business activity and income juxtaposed with areas of lower economic engagement. At the zip code level, where economic benefits and opportunities vary significantly across communities, this disparity is particularly evident. Recognizing these differences is crucial for effective economic planning and policymaking, as it highlights areas requiring targeted interventions to promote equitable growth and, in some cases, reverse the long-term effects of past policy.

To quantify this, a pseudo-experiment is designed where the economic impact of a hypothetical bank branch is estimated. The branch is "moved around" in the analysis among each of the functional zip codes (ZCTA codes) within the parish. The introduction of this new bank branch is assumed to entail a capital investment of approximately \$4.5 million. This cost internalizes the assumption that the branch is a part of an existing bank charter and does not need to fully build out a new asset portfolio. However, the initial size of the shock is of secondary importance since the results are expressed as proportions. A smaller or larger capital investment does not change the results that are discussed below. The economic effects of this investment vary across the parish's zip codes, reflecting differing levels of economic integration and diversity within each area.

Figure 15 summarizes the main economic effects of multiple economic impact analyses. On the vertical axis we have the main zip codes within Ouachita Parish. The bottom axis represents the proportion of the economic effect that is captured within each zip code compared to the total economic effect of the bank. The proportion represents the economic benefit to each community that the capital investment brings. The denominator for this proportion is the total economic effect including and beyond the zip code. Thus, the proportion quantifies the zip code level economic base. Zip codes with greater economic integration, more consumer wealth, and other past capital investments reap more of the economic rewards of additional bank investment. Zip codes 71291 and 71292 are the city of West Monroe, while 71201, 71202, and 71203 are the city of Monroe. Interstate-20 bisects both cities and the zip codes 71291, 71201, and 71203 are north of the interstate, while 71292 and 71202 are below. Both zip codes below I-20 receive lower economic return to the community from the hypothetical bank opening for the reasons discussed above. The reader is cautioned to not interpret this as a judgement regarding the overall economic impact. 71292 had one of the highest overall economic impacts in both real and nominal terms of all the zip codes analyzed, but the overall impact is disproportionately supported by the other zip codes. The figure only pertains to the economic base that the zip code supports.

It is relatively easy to see that 71202 has a disproportionately high leakage rate. Most of the economic effect leaks out from the zip code, and the additional rounds of supply chain growth and consumer spending do not lead to a virtuous economic cycle within the zip code. That said, the direct effect of the new bank branch does create a positive economic effect that is still of similar magnitude to the rest of the zip codes. The total economic effect here is nearly 97% comprised of the direct effect. The neighborhoods contained in 71202 have lived with the long-term effects of credit rationing, as it is known within the academic literature. The most widely known of these types of policies are redlining. Redlining was a federal policy that limited lending opportunities based on race, in largely ethnic minority areas. These policies on the federal level were reversed in 1968 under the Fair Housing Act, but the private effects of redlining still linger today in many urban areas. Today, the effects of redlining exist as credit rationing, charging relatively higher interest rates or limiting access to banking activities (both have the same effect) in specifically targeted majority-minority districts. Both examples of credit rationing are often referred to as reverse redlining because they have the veneer of addressing the issue, but the realized effects of these practices are intended to perpetuate a racial wealth divide.

Figure 16 is constructed similarly to Figure 15. The bars for each zip code represent the share of federal, state, and parish-level revenues contributed by the direct or home location of the hypothetical bank expansion. Converting the proportion to a percent (multiplying by 100) quantifies the percent of total tax revenues that are generated by the home zip code. In most instances, there is a uniformity to the tax burden within the zip code that the bank is located. 71201 is an outlier, as seen in Figure 15. Its size, industrial diversity, and income level drive this result. The remaining zip codes are not that distinguishable from one another in terms of tax burden.

Consuming Figures 15 and 16 together illustrates the broader point regarding economic bases. At the parish and state level, the tax burden is nearly uniform except in the case of 71201. 71291, 71292, and 71203 have a relatively higher economic benefit captured within the parish compared to 71202 (Figure 15). 71202 has a similar tax burden compared to 71291, 71292, and 71203 (Figure 16). While income taxes are relatively progressive in nature (lower tax burden when incomes are down), property taxes are not as progressive, and sales taxes are regressive in nature (hurt the working poor disproportionately more). In this hypothetical economic development, 71202 pays for the economic development disproportionately more than other zip codes but does not reap the same rewards in return due to the regressive nature of the tax code.

The location of a bank in the 71202 zip code does not create an equally sized virtuous cycle as in other zip codes in Ouachita Parish, but the tax burden is similar. The economic benefits are exported to what should be the economic base for the zip code. Due to the lack of economic integration in 71202, the surrounding neighborhoods syphon off the economic benefit while not sharing more of the tax burden. This effect is driven by lack of economic diversity in job opportunities, low industry presence, and relatively low income levels.

While it is easy to see the economic symptoms from this exercise, the underlying illness is a bit harder to diagnosis. Redlining itself is not necessarily even the underlying condition. Across the southeastern United States, we see the effects of redlining and credit rationing. That too though is a symptom of a broader inequality that is a long-term result of weaponized policy. Undoing these policies requires careful planning, input from affected communities, and a thorough understanding of how policy can lead to unplanned consequences over time.



Figure 16: Proportion of Tax Burden by Zip Code

Data for this report are provided by the Bureau of Economic Analysis. Parish and zip code level data are produced with a year-long lag. Current annual data extend to 2022. 2023 estimates are expected in December 2024.



502 West Texas Avenue PO Box 10318 Ruston, LA 71272

318.257.4527

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.