THE NEW ORLEANS REGIONAL ECONOMIC INDEX

GREATER NEW ORLEANS ECONOMIC DATA CENTER

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This report has two objectives. The first is to provide a bi-monthly update of job growth and other economic indicators in Louisiana and the New Orleans Metropolitan Statistical Area. The second objective is to use this data to facilitate discussion about the state of the region's economy, and by doing so, to influence public policy in a positive and pro-active way. A series of indices are used to track job demand among select industries, parishes and the state using a comparative scale.

State Employment Demand Index

Table 1 below shows the incremental job change beginning in August 2005 and up to July 2024 and reflects 2023 benchmark revisions in jobs made in March 2024. (Note: a revision to U.S. and state data revised in March 2024 was issued on August 21, 2024, lowering U.S. CES job estimates by 818,000, but increasing the Louisiana benchmark March 2024 estimate from 1,953,600 CES jobs to 1, 970,700 CES jobs. However, the detailed revised estimate by sector will not appear until March 2025). Summary revisions are found in the appendix of this document. The report covers the most current statewide employment data series released on August 16, 2024, by the Bureau of Labor Statistics.



TABLE 1

Overview of Louisiana's Seasonally Adjusted Total Employment Picture

As the above table illustrates, Louisiana's overall job recovery through July 2024 continues a slow and choppy recovery to the pre-pandemic February 2020 seasonally adjusted job level. Based upon the preliminary revised job growth trend, the state seasonally adjusted CES job level is not likely to recover to the February 2020 level until late 2024. Any economic slowdown will further push back the job recovery to the February 2020 level further into the future.

Somewhat forgotten, but still important, is that fact that the overall non-seasonally adjusted state level CES jobs have (finally) recovered to the pre-August 2005 (June 2005) CES job level. This took eighteen years (state passed that benchmark in April 2023) to reach this milestone.

Louisiana's job recovery has consistently been weak relative to the United States. By July 2024, the U.S. economy preliminarily added 6.3 million total seasonally adjusted jobs above the pre-Covid February 2020 high. In February 2020, total seasonally adjusted U.S. jobs were estimated at 152.5 million. By July 2024, that level was estimated at 158.7 million seasonally adjusted jobs or 4.1% above the February 2020 level.

Whereas (as of July 2024) Louisiana's revised preliminary (see note in Louisiana Employment Index section) total seasonally adjusted job recovery was 2.1% less than the of the February 2020 level or 41,100 fewer seasonally adjusted total jobs. As of July 2024, U.S. private sector non-seasonally preliminary adjusted jobs were 4.4% greater than the February 2020 private sector level. In Louisiana, that value was 1.2% below the February 2020 level. Table 2 shows the total job growth trend between January 200 and July 2024. Two major constraints are affecting Louisiana's job recovery. The first constraint is the fact that Louisiana's labor force growth has historically either stagnated or grown very slowly (see Table 6). Louisiana's Labor Force Participation has historically lagged that of the U.S. For example, Louisiana's average for the twelve months of non-seasonally adjusted labor force data for January 2023 through December 2023 shows approximately 25,000 fewer individuals in Louisiana's labor force than the annual average for 2019. Louisiana average participation rate in 2023 was estimated at 58.6%. The U.S. nonseasonally adjusted participation rate over the same period was estimated at 62.6%. (Source: Bureau of Labor Statistics.) Second, overall job recovery in key sectors has been sluggish. (See Table 2) (Note: while Louisiana's Participation Rate still lags the U.S., the U.S Participation Rate has deteriorated over time.)

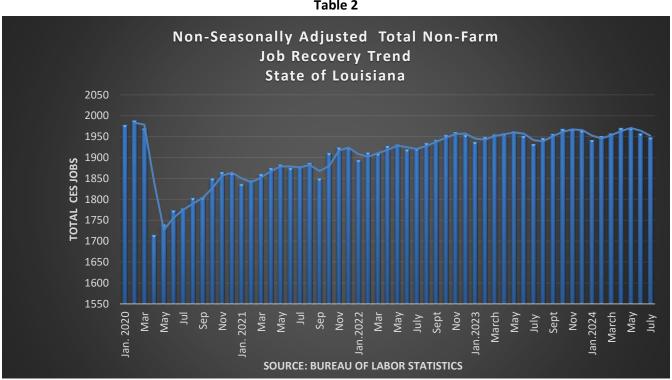
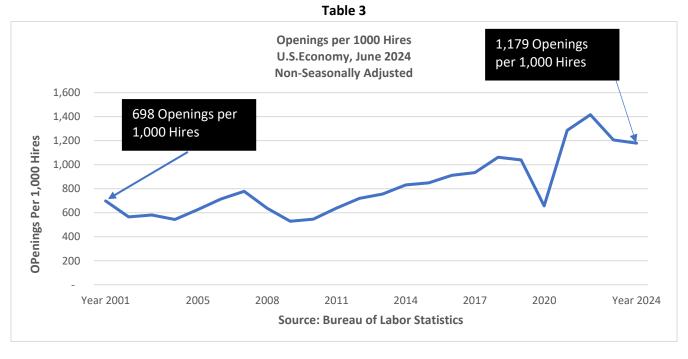


Table 2

Louisiana's non-seasonally adjusted Leisure and Hospitality in July 2024 still had 20,000 fewer jobs than the annual average for 2019. July 2024 non-seasonally adjusted estimate of manufacturing jobs were 600 less than the annual average for 2019. The July 2024 non-seasonally adjusted estimate of Business and Professional Services CES jobs were 3,700 greater than the 2019 annual average. Jobs in Business and Professional Services continued to expand throughout 2021 and 2022. However, the average job growth in 2023 showed a decline over the 2022 estimate. The annual CES average for jobs in Business and Professional Service fell from 221,000 in 2022 to 219,000 in 2023. July 2024 showed a bump in job growth in this sector, and the estimated CES jobs in Business and Professional Services was 219,900.

U.S. Employment Picture

The revised estimate of U.S. job growth shows the U.S. economy added 114,000 seasonally adjusted jobs between June 2024 and July 2024. The U.S. economy has completely recovered all non-seasonally adjusted jobs lost during the Covid-19 crisis, using February 2020. as the benchmark for comparison. By July 2024, total non-seasonally adjusted U.S. jobs were 7.5 million greater than pre-Covid pandemic February 2020. Revised non-farm nonseasonally adjusted employment increased by 28.2 million from the bottom of the pandemic trough in April 2020 to July 2024. One major constraint on growth in the job economy is the dearth of skilled workers to fill jobs. Table 3 illustrates the extreme problem of lack of job seekers in the economy. The BLS survey for the month of June 2024 shows both the number of private hires and openings weakening relative to the same month in 2023. However, the relative imbalance between hires and openings shows only minor improvement. In June 2023, there were 6.4 million non-seasonally adjusted private sector hires and 7.7 million private sector openings. In short, there were 1.2 openings per every 1 hire. In June 2024, there were 1.18 private sector openings for every private sector hire. Relative to the 6.7 million opening positions, the number of total non-seasonally adjusted unemployed in June 2024 was 6.8 million. In June 2023, 7.7 million private sector openings, and the number of unemployed was 6.0 million. Hence, the most current private sector openings relative to the non-seasonally adjusted total unemployment suggests a tightening of available job openings relative to the unemployed. This suggests an uptick in the unemployment rate due to frictional factors between labor supply skills and business demand for skills, given the tightness between to private sector demand and labor supply.



The table suggests that labor demand remains far stronger than the reported job growth data. Looking at data for pre-Covid January 2020, there were 5.4 million hire and 6.3 million openings. Compare those figures with the hires (4.7 million) and openings (6.7 million) in June 2024, you see a problem. As the above table illustrates, even though the hires per openings have fallen from the historical highs in earlier post-pandemic years, the openings per hires remain well above long-term historical levels. Though job data shows a slowdown in job demand, the aggregate numbers in this survey still show a healthy mismatch between openings and hires. This skilled labor force imbalance (aggravated by the Covid-19 Pandemic) is likely caused by (a) increased retirements from occupations, and (b) a corresponding increase in the number of individuals entering the job market with poor or no skill sets. It is suggested that (b) is caused by a dysfunctional educational system and social policies that discourage individuals from developing needed skills.

The demographic picture of an aging population was well known for thirty plus years. The Covid-Pandemic simply accelerated the underlying causes of this problem. This is best described as "kicking the can down the road problem." One important final note, openings relative to hires, as the table shows, are declining (but still well above historical). This might be an early indicator that businesses are beginning to feel a softening of product demand, businesses or redefining the roles of employees or employers are substituting technology for labor.

Table 4 reports U.S. seasonally adjusted labor force participation rate for the month of August over the period 2000 to 2024.

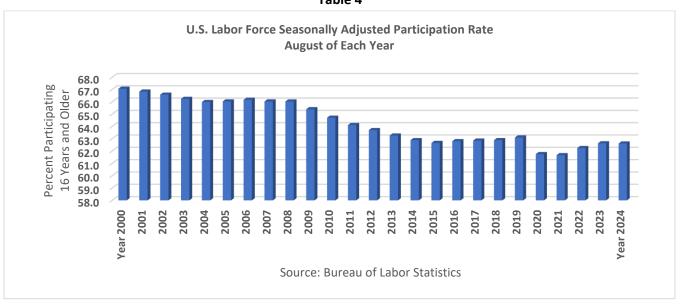


Table 4

Detailed Louisiana Non-Farm Non-Seasonally Adjusted Job Change – July 2024 over July 2023

Table 5 shows sector to sector gains and losses of non-seasonally adjusted employment non-farm employment from July 2023 to July 2024. The July 2024 estimate shows that the state's job economy still had not recovered to the prepandemic February 2020 CES job level. As Table 2 points out, the state began a robust job recovery from the April 2020 economic shutdown to November 2020. Between December 2020 up to August 2021, the recovery slowed. Between 2021 and 2022, the state's job economy showed an annual average increase of 50,900 non-seasonally adjusted CES jobs. Between 2022 and 2023, the average increase in non-seasonally adjusted CES jobs was 23,900. For the seven months of data in 2024 over the same period in 2023, the state added an anemic 7,300 CES non-farm non-seasonally adjusted jobs.

The current configuration of the energy sector has shown job growth stagnation between 2021 and 2024. The July 2024 CES job level remains well below the peak job level in February 2012 or 27,700 fewer CES jobs. Construction activity came roaring back between 2020 and 2021. However, the industry job growth remained stagnant between 2021 and 2023. Construction CES employment has come back in 2024 with the addition of 8,900 CES jobs between July 2023 and July 2024, but the July 2024 figure remains 18,300 fewer construction jobs below the October 2018 peak. July 2024 CES job estimate was 137,600 CES jobs. Business and Professional Services showed rapid recovery from the economic contraction caused by the Covid-19 job contraction up through 2022. However, by mid-2023 sector experience a slow and slight contraction. Job growth weakness has concentrated in the Professional, Scientific and Technical Services sector, and in the Administrative and Support Services with no job growth between the annual average of 2023 and the average for the seven months of data for 2024. Most of the contraction in jobs has been focused in Administrative and Support Services, with the loss of 1,200 CES jobs between the annual average for 2023 and the average for the seven months of data in 2024. Data suggests that the support services sector is under pressure from technological innovation and concentration which has reduced job demand.

Table 5

| Table 5 | | | | | | | |
|--|---|-----------|--|--|--|--|--|
| STATE OF LOUISIANA Non-Seasonally Adjusted Job Grov July 2023 to July 2024 | Total Non-Farm Employment July 2024 | | | | | | |
| Construction | 8,900 | 137,600 | | | | | |
| Health Care and Social Assistance | 5,600 | 291,500 | | | | | |
| All Others | 4,600 | 126,400 | | | | | |
| Government | 2,900 | 306,800 | | | | | |
| Professional and Business Services | 2,500 | 219,900 | | | | | |
| Wholesale Trade | 800 | 68,600 | | | | | |
| Support Activities in Transportation | 300 | 20,100 | | | | | |
| Truck Transportation | -100 | 17,100 | | | | | |
| Mining | -1,000 | 30,300 | | | | | |
| Retail Trade | 200 | 216,400 | | | | | |
| Information | -1,500 | 17,600 | | | | | |
| Manufacturing | -1,200 | 137,300 | | | | | |
| Private Educational Services | 600 | 47,000 | | | | | |
| Financial Activities | -1,200 | 96,300 | | | | | |
| Leisure and Hospitality | -5,400 | 214,600 | | | | | |
| Total Change | 16,000 | 1,947,500 | | | | | |

Source: Current Employment Survey Data, Bureau of Labor Statistics, August 2024

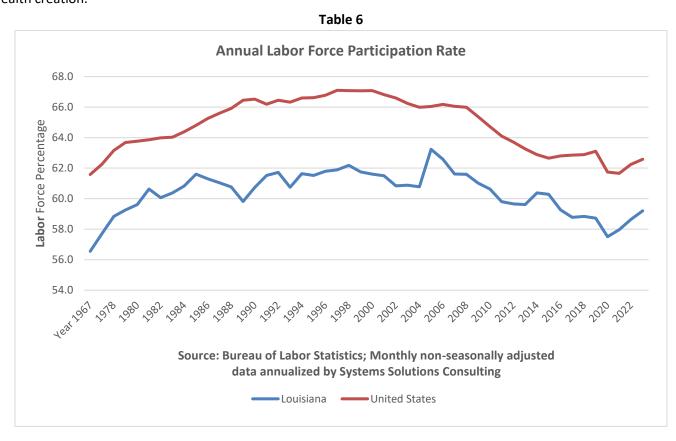
State Unemployment Rate for July 2024

Total employment and labor force data are collected through a household (sample) survey known as the Current Population Survey (CPS). Current Employment Survey (CES) data are collected from a sample survey of employers. The CPS sample is collected by the Census Bureau and the CES data is collected by the Bureau of Labor Statistics.

The seasonally adjusted unemployment rate in July 2024 was 3.9% for Louisiana. Total seasonally adjusted employed residents in the CPS survey decreased by 5,400 individuals between July 2023 and July 2024. The

seasonally adjusted labor force between July 2023 and July 2024 increased by 4,700 individuals. Seasonally adjusted employed residents were estimated in July 2024 at 1,994,400. The total labor force was estimated at 2,075,600 individuals.

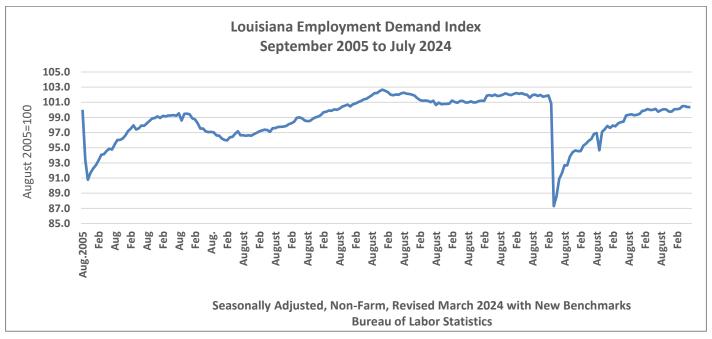
Table 6 below shows the historical relationship between annual average labor force participation rate between Louisiana and the U.S. As Table 6 illustrates, Louisiana's Labor Force Participation Rate (LFPR) and the U.S. began to converge around 2008. The annualized rate between the U.S. and Louisiana narrowed from 4.4% in 2008 to 3.4% in 2023. In practical terms, however, Louisiana's lower participation rate serves as a major drag on the ability of the economy to generate wealth and results in a higher percentage of the working age population not contributing to wealth creation.



Statewide Job Seasonally Index for Non-Farm Employment

Table 7 below shows the CES job demand index (repeating Table 1) up to July 2024. Data are statewide job index trend in *seasonal adjusted non-farm employment* within each year.

Table 7

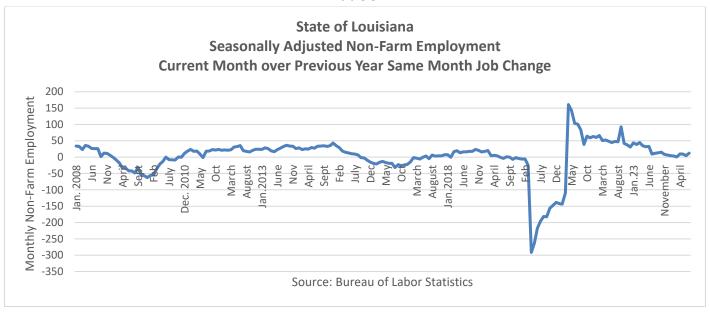


The seasonally adjusted job index fell to its lowest level in April 2020 to 87.4 (August 2005 = 100). Since April 2020, the index increased by 15.0% to 100.4 (August 2005 = 100) as of July 2024. It is critical to remind the reader that Table 7 illustrates that the state's economy entered the COVIR-19 public health crisis on a weak economic footing. The index peaked in December 2014 at 102.7 (August 2005 = 100) and as Table 7 illustrates, began a slow decline until March 2017. From that point until February 2020, the state's CES job economy showed a slow, but steady improvement.

Table 8 reports seasonally adjusted month-over month job change. It shows a dramatic job contraction occurring due to the shutdown of the non-essential service economy. Between April and June 2020, as the economy reopened, the economy recovered 76,000 of the 269,000 jobs (seasonally adjusted) lost between February and April 2020. Between June and December, the recovery accelerated, adding 66,000 seasonally adjusted CES jobs. Between January 2021 and December 2021, the economic recovery slowed, adding about 60,000 seasonally adjusted CES jobs.

Between the non-seasonally adjusted annual average job (note: you cannot average seasonally adjusted CES data; you can only report between two data points.) for 2021 (1,878,800) and the non-seasonally annual average for 2022 (1,929,700), the state added 50,900 non-seasonally adjusted CES jobs. The annual average non-seasonally adjusted increase for 2023 showed a revised increase of 23,900 CES jobs. Given the current trend, the state CES job *level* will likely recover to the February 2020 job level no earlier than the 4th quarter 2024 or the 1st quarter 2025.

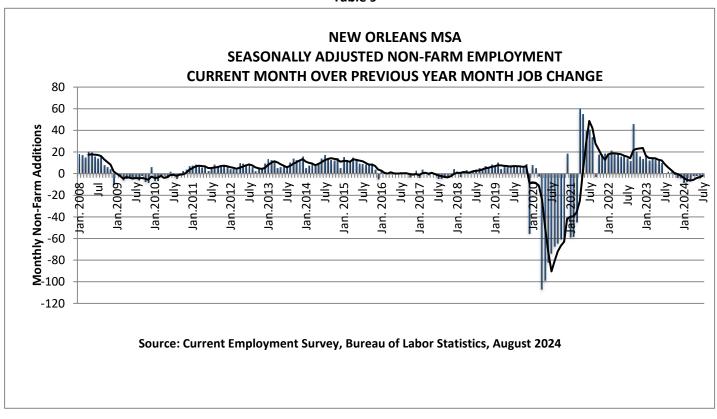
Table 8



The New Orleans Metropolitan Statistical Area (MSA) Non-Farm Employment Demand

Table 9 looks at historical *year over year* seasonally adjusted employment growth in the New Orleans MSA. The table illustrates the collapse of the MSA economy due to the Covid-19 pandemic. The seasonally adjusted CES New Orleans MSA employment index in July 2024 was a revised 91.1 (August 2005 =100.0). In February 2020, the index value was 95.5.

Table 9



Non-Seasonally Adjusted Non-Farm Private Sector Job Growth Overview

Table 10 shows that private sector job growth recovery from April Covid-19 lockdown began to stall in November 2020. Measured on an annual average basis, the MSA private sector economy added 12,700 CES non-seasonally adjusted jobs between 2020 and 2021. Non-seasonally adjusted private sector annual average CES jobs in 2021 were still about 39,800 less than the 2019 level. For the annual average for 2022, CES MSA private sector jobs were 20,000 fewer than the annual average for 2019. The annual average of data for 2023 was 15,200 less than the 2019 average. The average difference between 2019 and the seven months of data for 2024 increased to 19,800. For six of the seven months of data in 2024, total non-seasonally adjusted CES jobs were down relative to the same month in 2023. In short, January thru June came in with less jobs in 2024 than in 2024.

One of the key job growth sectors, Leisure and Hospitality, was crippled by the Covid-19 Pandemic. Looking at the non-seasonally adjusted annual average of data for 2023, and comparing that to the 2019 annual average, the New Orleans MSA industry remained down by 10,900 CES jobs. In relative terms, the annual average for 2023 for the industry measured in relative terms, shows that New Orleans MSA Leisure and Hospitality employment level had recovered to 88.1% of the 2019 annual average. At the national level in 2023 and using annual average as a measure, Leisure and Hospitality jobs recovered back to the pre-pandemic 2019 annual average job level. Both CES job data in Accommodations and Food and Drinking Places in the New Orleans MSA remain (as measured on an annual average basis) well below the 2019 average in 2023 and the seven months of data in 2024. (For 2024, the average for the seven months of data was 11,300 lower than for the 2019 annual average.)

Table 17 in this report shows the Food and Drinking Places annualized jobs up to and including the data series in 2023. CES jobs in Accommodations have recovered, as of average for the four months of data in 2024, only 77% of the 2019 annual average. (The U.S. figure is 88.5% as of April 2024.) Between April 2023 and April 2024 in the New Orleans MSA, Leisure and Hospitality increased by 700 CES jobs. As of April 2024, total non-seasonally adjusted jobs in Leisure and Hospitality stood at 81,500 CES jobs. In pre-pandemic February 2020, that figure was 92,800 CES jobs.

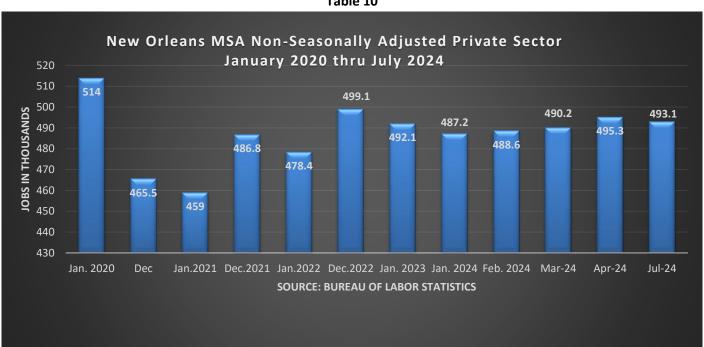


Table 10

Table 11

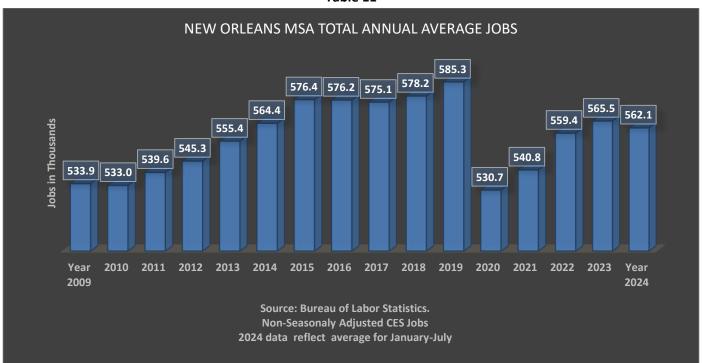


Table 11 provides a snapshot of the MSA job economy recovery from 2009 to 2024, providing a context of the extent of **job recovery required to return to a level of job growth needed to (even) return to the 2019 job level.** Further, it shows that starting in 2015 and up to pre-Covid Pandemic economic impact that the regional job economy had been stagnating. This raises the question, given the pre-pandemic economic weakness, will the post-pandemic job economy recover to a lower level than the pre-pandemic level? This reflects the pattern that the post-Katrina job recovery never returned to the pre-Katrina MSA job economy level, stabilizing at a lower level. The key sector to look at, over time, is the Leisure and Hospitality sector which (potentially) recovers output, but at a lower level of job demand.

Table 12

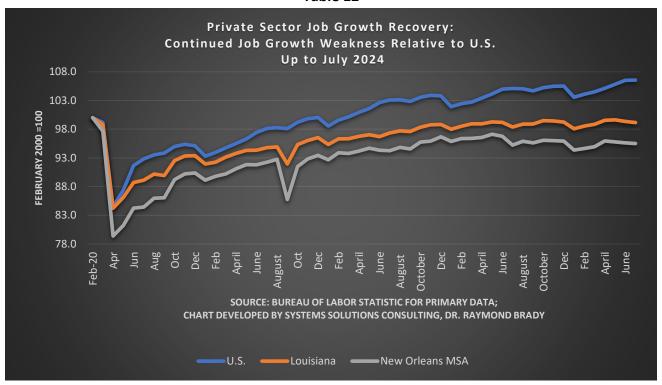


Table 12 looks at the trend in private sector job recovery from February 2020 to July 2024. Since the data are not seasonally adjusted (seasonally adjusted data for Louisiana's MSAs only available for totals) January data always reflects job contractions in each year. The key observation here is that job changes at the U.S., Louisiana and the New Orleans MSA are indexed at a comparative base (in this case February 2000, prior to the Covid lockdown), allowing for a comparison of job growth. The index graph tells us that the New Orleans MSA economy was more severely impacted by the Covid-19 lockdown than both the overall state and U.S. job economies. In April 2020, total private sector jobs in the New Orleans MSA had fallen to 79% from the February 2020 job level. Whereas Louisiana and the U.S. index had fallen to about 84% from the February level. Moving forward to the latest month of data (July 2024 for all three geographies), the New Orleans MSA index had risen to 95.5% of the February 2020 job level. Louisiana's index had risen to 99.2%, and the U.S. private sector jobs index was 106.6% of the February 2020 level.

The sluggish recovery from the Covid lockdown derives from two potential primary factors. First, job growth prior to the lockdown, as pointed out in Table 11, was weak.

Further, one rarely citied reason for the sluggish recovery of the New Orleans MSA job economy derives from fact the New Orleans job market never recovered from the 2005 Katrina Hurricane disaster. In 2004, the *MSA total covered jobs* were estimated at 595,156 jobs. (Data source: Quarterly Census of Employment and Wages) For the annual average 2023, the MSA total covered jobs was 532,983.

In 2004, *Jefferson and Orleans* had a combined non-farm job level of 461,000 jobs. The annual average for 2023 was 369,823. (*Note: 2000 and 2001 data are not used because of the data distortions caused by the Covid-19 Pandemic.*) Second, the importance of the customer-oriented leisure and hospitality industry made the region's economy very vulnerable to a disease that prevented large crowds from gathering. In July 2024, the industry was still down by

14,100 private sector CES jobs from the pre-Covid month of February 2020. Sectors that prevented the MSA economy from falling deeper into an economic hole were Health Care and Social Assistance increasing its share from 10% of total CES jobs in 2004 to 13.3% of total seven months of data average CES jobs 2024, and Professional and Business Services increasing its annual average share from 11.8% in 2004 to 15.2% of *total* seven months of CES data for 2024. Profession, Scientific and Technical Services increased its relative share of Professional and Business Services from 33.9% in 2004 to 45.9% of the seven months of Professional and Business Services data for 2024. Correspondingly, Retail Trade CES jobs *as a fraction of total private sector jobs* took a nosedive going from 13.3% in 2004 to 11.5% in 2024. Manufacturing share of private sector CES jobs fell from 7.8% in 2004 to 6.1% in 2024.

Finally, the MSA economy experienced a growing dependency on non-farm proprietors to sustain economic growth in the MSA. In 2004, 16.7% of total employment was classified as non-farm proprietors. In 2022, (the latest year for data) that fraction had increased 30.1%. In Louisiana, that fraction increased from 16.4% to 27.3%. In the U.S., the fraction increased 18.6% to 25.6%.

Using Bureau of Economic Analysis (BEA) data, between 2004 (note: the year 2004 was selected as the base because it was one year prior to the destructive 2005 Hurricane Katrina and of which neither the MSA employment or population even recovered to the 2004 levels.) and 2022 (latest year for data), total MSA employment (number of jobs) increased by 41,996 jobs. Looking more closely at the data, wage and salary jobs fell by a whooping 75,575 jobs. At the same time, the economy was saved by an increase in non-farm proprietors of 117,571. Proprietors are defined as owners of non-corporate businesses, which primarily consist of sole proprietorships and partnerships. Wage and salary jobs accounted for 83.1% of total jobs in 2004. That share fell to 69.8% in 2022. Correspondingly, non-farm proprietors share went from 16.9% in 2004 to 30.2% in 2022. This shift from less wage and salary jobs to more proprietors' jobs was an historical shift and (likely) has had an impact on overall personal income growth in the metropolitan area. Why? Let's look at an example. Average income in current dollars for proprietors was \$34,275 (BEA data) in 2004. In 2022, BEA data shows that average income for proprietors was estimated at \$33,653 in current dollars. (Note: proprietors income tends to fluctuate more so than wage and salary income. For example, in 2019 and prior to the impacts of Covid-19 impacts on the economy, proprietors' income average was \$39,974). At the same time, earnings for wage and salary employment went from \$35,016 in 2004 to \$63,290 in 2022. Hence, the increasing share of proprietors relative to wage and salary employment most likely affected average aggregate income growth, since proprietor income in current dollars fell by 1.8% (note: Southern Urban CPI increased by 56.1% over this period.)

Affecting further downward pressure on aggregate income growth is the growth in the Leisure and Hospitality industry relative to the growth of the entire job economy. Although significant as a job creation industry, the nature of the industry produces lower wages level. (Note: wages defined by the quarterly census include bonuses, stock options, severance pay, the cash value of meals and lodging, tips and other gratuities, and, in some states' employer contributions to certain deferred compensation plans, such as 401(k) plans.)

The Quarterly Census of Employment and Wages data for 2023 shows that average pay in Leisure and Hospitality was 56% of the total regional average. In 2004, that fraction was 52%. At the same time, Leisure and Hospitality share of *total private sector jobs* (part-time and full-time) increased from 16.5% in 2004 to 17.9% in pre-Covid 2019. (Measured as annual averages). Any increase in the share of Leisure and Hospitality relative to total private sector jobs would place downward pressure on the growth in total average pay.

No doubt, Leisure and Hospitality is an important job generator in the regional economy. But because the industry produces low value added and value of output, (the highest real GDP contribution to the New Orleans MSA economy was in 2015.Leisure and Hospitality in that year contributed a GDP of \$2.6 billion out of an economy size of \$20.7 billion.)

The current regional economy is driven primarily by three large economic sectors: Leisure and Hospitality, Health Care and Business and Professional Services. The combination of a narrower number of wage and salary job sectors with a growing importance of proprietors in the regional economy where the average growth in proprietors' income was substantially less than the inflation rate over this period offers *one potential explanation* why the New Orleans MSA job economy was hit harder (see Table 11 by the Covid-19 lockdown and reflecting a slower recovery than both Louisiana and U.S (see Table 12).

Table 13

| New Orleans Metropolitan Statistical Non-Farm Non-Seasonally Adjusted J | Total Non-Farm Jobs | Total Non- Farm Jobs August 2005 | |
|--|------------------------|--|---------|
| July 2023 to July 2024 | | July 2024 | |
| All Government | 1,400 | 68,600 | 103,900 |
| All Others | 1,000 | 25,500 | 23,600 |
| Transportation, Warehousing & Utilities | 1,900 | 29,400 | 28,000 |
| Professional and Business Services | 1,200 | 75,600 | 74,300 |
| Manufacturing | -100 | 29,900 | 41,500 |
| Wholesale Trade | 400 | 22,300 | 26,300 |
| Mining | 0 | 3,200 | 8,500 |
| Financial Activities | 700 | 29,900 | 33,300 |
| Information | -800 | 6,300 | 10,500 |
| Private Educational Services | 400 | 30,900 | 18,800 |
| Retail Trade | -900 | 56,600 | 67,500 |
| Construction | -700 | 28,400 | 30,100 |
| Health Care and Social Assistance | 600 | 77,100 | 62,200 |
| Leisure and Hospitality | -2,200 | 78,000 | 86,000 |
| Total Change | 2,900 | 561,700 | 614,500 |

Source: Current Employment Statistics, U.S. Bureau of Labor Statistics, August 2024

Note: Data reflects March 2024 BLS benchmark revisions

Table 13 provides details of the job level and change between July 2023 and July 2024. Two important observations should be made on this point. Nineteen years after the Hurricane Katrina disaster (August 2005), the region's total job economy has not come near to recovering to August 2005 CES total CES job levels. The closest the MSA economy has come to recovering from August 2005 Hurricane disaster was in 2019 with an annual average of 585,300 CES jobs. (Note: the 2023 annual average was 565,500 total CES jobs.) To some, this fact may be insignificant, but to others, it presents (potentially) one more insight into why the New Orleans MSA economy is recovering at a slower pace from the economic contraction associated with the Covid-19 Pandemic.

From the covid-19 lockdown low point (April 2020) in which the New Orleans MSA economy job economy contracted by 108,500 CES jobs between February and April of 2020 to July 2024, the New Orleans MSA recovered a total of 80,000 of the 108,500 lost.

Which sectors contributed the most to this recovery up to the February 2024 data? Leisure and Hospitality, although still weak, added 35,000 CES jobs to the total recovery of 83,800 jobs between the identified periods. This was followed by Health Care and Social Assistance with an addition of 10,300 CES jobs. Professional and Business Services added 8,600 CES jobs between these periods, and Retail Trade recovered 7,100 CES jobs and. These sectors accounted for 76% of the total recovered jobs. It remains to be seen that those sector in decline or stagnating *before* the Covid-19 Pandemic, such as mining services, wholesale trade, manufacturing, financial activities might use the pandemic as a mechanism to further consolidate their activities with the region and further narrow opportunities for job growth.

Annual Average Pay Stagnation in the New Orleans MSA and Particularly the City of New Orleans

Chart 14 looks at the most current Quarterly Census of Employment and Wages (QCEW) data. This chart graphs average annual wages between 2004 to 2023. *All data are in current dollars*. When viewing this data, it is important to use the word, "average," when trying to understand what has happened over this period.

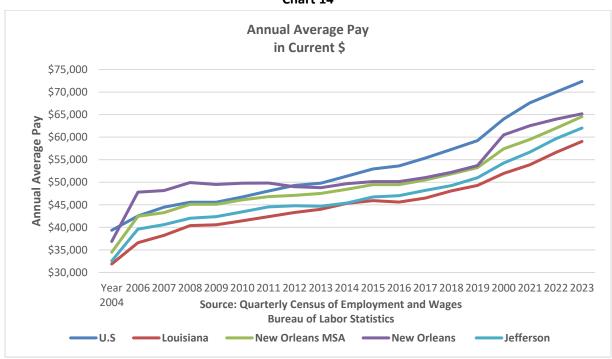


Chart 14

Between 2010 and 2023, average annual pay (in current \$) in the New Orleans MSA increased by 40.0%, going from \$46,108 2010 to \$64,555 in 2023. In the city of New Orleans, average annual pay increased from \$49,804 in 2010 to \$65,185 in 2023 or 30.9%. At the same time, the Southern non-seasonally adjusted Urban CPI increased by 40.3%. The U.S. average annual wage rose by 54.8% over this period. (NOTE: Annual pay includes bonuses, stock options, severance pay, profit distributions, cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans. Source: QCEW, Bureau of Labor Statistics. Annual Average Pay is defined as the total annual wages divided by average annual number of QCEW jobs.)

Chart 14 illustrates what happens when an event (in this case the Covid-19 Pandemic) dramatically affects employment levels and their associated wages. The pandemic dramatically affected demand for the services in the Leisure and Hospitality industry. With the reduction of jobs and the wages associated with those jobs, the impact was to substantially alter the long-term trend in the overall *calculated* average pay in the affected areas. How? The calculated parish-wide average is simply the sum of total wages divided by total jobs. By reducing the number of low-paying jobs

and the associated pay, the overall parish-wide level jumps substantially above the long-term trend. The increase between 2021 and 2022 better reflects the calculated average annual increase of between 2% and 3% annual increase. Table 15 presents the actual averages for select areas from 2004 to 2023.

Table 15

| | | | Average Annual Pay (Cur | rent \$) | |
|---|----------|-----------|-------------------------|-------------|-----------|
| | U.S | Louisiana | New Orleans MSA | New Orleans | Jefferson |
| Year 2004 | \$39,354 | \$31,880 | \$34,487 | \$36,877 | \$32,549 |
| 2006 | \$42,535 | \$36,604 | \$42,434 | \$47,796 | \$39,601 |
| 2007 | \$44,458 | \$38,229 | \$43,255 | \$48,163 | \$40,612 |
| 2008 | \$45,563 | \$40,381 | \$45,108 | \$49,948 | \$42,007 |
| 2009 | \$45,559 | \$40,579 | \$45,121 | \$49,514 | \$42,390 |
| 2010 | \$46,751 | \$41,461 | \$46,108 | \$49,804 | \$43,429 |
| 2011 | \$48,043 | \$42,380 | \$46,827 | \$49,844 | \$44,560 |
| 2012 | \$49,289 | \$43,284 | \$47,083 | \$49,006 | \$44,793 |
| 2013 | \$49,804 | \$44,011 | \$47,509 | \$48,810 | \$44,668 |
| 2014 | \$51,361 | \$45,338 | \$48,437 | \$49,689 | \$45,384 |
| 2015 | \$52,937 | \$45,919 | \$49,492 | \$50,157 | \$46,733 |
| 2016 | \$53,611 | \$45,624 | \$49,458 | \$50,150 | \$47,034 |
| 2017 | \$55,375 | \$46,498 | \$50,488 | \$51,018 | \$48,203 |
| 2018 | \$57,265 | \$48,097 | \$51,848 | \$52,222 | \$49,273 |
| 2019 | \$59,219 | \$49,297 | \$53,245 | \$53,691 | \$50,999 |
| 2000 | \$64,013 | \$51,968 | \$57,415 | \$60,492 | \$54,272 |
| 2021 | \$67,610 | \$53,886 | \$59,469 | \$62,546 | \$56,663 |
| 2022 | \$69,985 | \$56,605 | \$61,962 | \$63,972 | \$59,642 |
| 2023 | \$72,357 | \$59,058 | \$64,555 | \$65,185 | \$62,028 |
| Area Income 2010-2023 % Change | 54.8% | 42.4% | 40.0% | 30.9% | 42.8% |
| Southern urban CPI % Change 2010- 2023 | 40.3% | | | | |

Source: Quarterly Census of Employment and Wages: BLS

A potential cause of the lack of robustness in the calculated average pay data for the MSA and particularly Orleans Parish comes from the changing distribution of employment and the loss of high paying manufacturing, mining and select services sectors (finance, research and engineering) jobs, with a corresponding growth in lower paying jobs. Between the 2009-2010 recessionary low point *annual average (2009-2010)* MSA employment and the pre-Covid annual average for 2019, the New Orleans MSA added 62,400 *private sector jobs*.

The annual average employment growth for Leisure and Hospitality over the same periods accounted for thirty-seven percent (37%) of the private sector job growth. Of the increase in Leisure and Hospitality, seventy-eight percent (78%) was in Food and Drinking Places. While Leisure and Hospitality industries are critical assets in the MSA economy, the dominance of Leisure and Hospitality raises questions about the lack of job diversity among employment sectors in the

private sector of the *economy*. This issue is relevant because, as reported by the Quarterly Census of Employment and Wages, estimated New Orleans MSA annual pay in 2023 in the Leisure and Hospitality industry was only fifty-six percent of the *MSA annual average* (\$36,402 vs. \$64,555). In Orleans Parish (the center of the Leisure and Hospitality Industry in the New Orleans MSA) *annual average* pay was 54.5% of the city average or \$\$35,552 versus \$65,185.

This relationship between wage levels has pretty much *remained constant since 2004*. With thirty-nine percent of total private sector growth in the MSA occurring in Leisure and Hospitality and with an average pay (recall what the term "average pay" contains) around fifty-seven percent of the regional average, the net consequence is downward pressure on the growth in MSA *calculated average pay*.

Further, demographic changes (retirement of teachers, etc.) within the Educational Services employment population has resulted in a stagnation in the average pay in Educational Services *partly* due to a shift in the distribution of jobs by class, (more younger teachers vs. seniority teaches). In 2009, average pay in MSA Educational Services was reported (source: Quarterly Census of Employment and Wages, BLS) at \$47,620 and the MSA average was \$45,121. In 2023, BLS reported the annual weighted average pay in that industry at \$54,466 or an increase of 31.7% over fourteen years with the MSA average pay reported at \$64,555 or a 43.07% increase. All these values are in current \$.

In short, the combination of substantial job growth in low pay jobs in Leisure and Hospitality (as reported by the Census of Employment and Wages), with the **stagnation of pay** *growth* in sectors such as Educational Services further weights down the regional average. These two industries accounted for sixty-two percent (62%) of the job growth between 2009-2010 *annual average* private sector jobs and *the annual average* Pandemic private sector CES job growth in 2023.

Clearly, MSA Professional and Business Services fared far better in terms of annual average pay changes. In 2009, average pay in Professional and Business Services was reported at \$51,564. In 2023, that average increased to \$74,992 or a 45% increase over fourteen years in current dollars. (*Note: U.S average pay in Professional and Business Services in 2023 was \$102,284 and increased by 75% over this period.*) The fundamental problem with respect to distribution of job growth is the fact that Professional and Businesses Services share of total private sector jobs has not substantially changed since 2009. (*Note: in 2009*, the fraction was 15%; for the annual average of data for 2023, the fraction is 15.1%.) While MSA Professional and Business Services added about 6,700 CES jobs between 2009 and 2023, the Leisure and Hospitality sector added about 13,000 CES jobs. (*Note: the job growth post-Covid in Leisure and Leisure and Hospitality up to the 2023 annual average of data has not recovered to the annual average for the year 2019, and Professional and Business Services was minimally affected by the Covid-19 economic slowdown. The industry sector by October 2022 had recovered all jobs lost.) Prior to the Covid-29 Pandemic disaster, Leisure and Hospitality share went from 15.1% in 2009 to 18% in 2019. CES job growth in Professional and Business Services mitigates the downward pressure on the calculated regional pay average associated with Leisure and Hospitality average pay. <i>Unless greater balance (higher wage paying jobs) in job growth can be obtained, the economic structure will continue to shift to a low wage paying structure, affecting consumption and poverty.*

Analysis of Key Growth Sectors

Professional and Business Services is a critical sector in the New Orleans MSA economy. In 2019, the sector ended the year with an annual average increase of 1,600 CES jobs between 2018 and 2019. *Prior to the March 2024 BLS annual revision, the annual average number of jobs for 2022 exceeded the 2019 annual average by 2,800 CES jobs*. After the revision and final estimate THAT GROWTH EVAPORATED. Total CES jobs in Professional and Business Services were revised down with a loss of 11,000 CES jobs between 2019 and 2023. In the Professional, Scientific and Technical Services sector, 1,100 CES jobs were added between 2022 and 2023. **Professional, Scientific and Technical Services**

showed resilience in the post-Covid -19 era, adding jobs, but in 2023 that growth began to stagnate. Between the annual average for 2023 and the average for the seven months of data in 2024, the sector added 450 CES jobs. Administrative and Support Services continued a downward spiral in job losses between 2022 and 2023, declining by 1,200 CES jobs. In July 2024, Administrative and Support Services CES jobs numbered 29,200. In February 2020, that estimate was 34,200 CES jobs. This is a sector to watch because these jobs are vulnerable to technology shifts, and the Covid-19 Pandemic might have offered businesses the opportunity to consolidate and re-structure occupations.

Health and Social Assistance CES jobs have recovered back to the February 2020 level, and by April 2024 the sector had 1,100 more CES jobs than in February 2020. This was a substantial downward revision of the pre-March 2024 estimate. The July 2024 level was 75,600 jobs. Ambulatory Health Care CES job growth began a process of stagnating job growth in 2023 adding only 500 jobs between the annual average of 2022 and 2023. The average for seven months of data in 2024 showed a 200 decline from the 2023 average. The July 2024 CES job estimate was 32,200. However, the sector did add 1,800 CES jobs between February 2020 and July 2024. Hospital CES jobs were pretty much constant, adding or subtracting a couple of hundred jobs depending on the year. The July 2024 estimated job level was 25,300. This figure was 1,800 greater than the pre-Covid level in February 2020 level.

Retail Trade in the New Orleans MSA has been in a downward spiral in CES jobs since 2015. The downward slide accelerated in 2020 because of the Covid-19 Pandemic but began to stabilize in 2021. However, the annual average for 2023 shows that the total jobs in retail trade was still down by 2,500 (58,100 total jobs) relative to the 2019 annual average CES jobs of 60,600. July 2024 CES estimated jobs were 56,600. On a positive note, the industry did recover more than 7,300 jobs by July 2024 over the "shut-down month" of April 2020 (49,300 CES jobs). In recent history, instore employment opportunities peaked in 2015-2016 and began a downward spiral well before the Covid-19 Pandemic which shocked the economic system. Employment opportunities in 2019 were down on an annual average basis by 800 jobs over the 2018 level. It is noteworthy that jobs in Retail Trade peaked in the year 2000 at 71,100. With the growing penetration of the on-line market, along with changing shopping habits, traditional retail shopping continues to go through major adjustments.

Total Construction employment, as measured on an annualized average basis, peaked in 2008 at 34,100 jobs in the New Orleans MSA. Total Construction employment began a downward slide after 2008 and bottomed out in 2010 at 31,100. Between 2011 and 2014, construction employment remained relatively stable with the 31,000 to 32,000 range. An uptick occurred in 2015, with the annual average coming in at 31,800 level. Between 2015 and 2016, **Construction** employment fell by 2,200 jobs as measured on an annual average basis. Measured on an annual average basis, total Construction non-seasonally adjusted fell another 400 jobs between 2016 and 2017. A turn-around began to occur in the middle to late 2017 and has slowly improved throughout 2018 and into 2019. The year 2020 was a wash-out for the industry, with a continued downward trend in jobs, primarily due to lack of major construction activity in the MSA. The annual average in 2019 was 29,200 jobs. Average annual CES jobs in 2021 were 27,400. The annual average for 2022 was 28,100. The annual average for 2023 was 28,600 CES jobs. The average for the seven months of data in 2024 was 27,700.

Manufacturing employment in the New Orleans MSA peaked in 2008 at an annual average level of 38,800 CES jobs. The 2024 average seven month CES manufacturing jobs in the New Orleans MSA was estimated at 30,100. The most significant shakedown in manufacturing jobs occurred between 2008 and 2013 with the loss of 6,900 CES jobs primarily due to the loss of shipbuilding activity in the New Orleans MSA area. The loss of shipbuilding in the MSA and ancillary industries devastated aggregate employment in manufacturing, affecting personal income and GDP levels and growth.

Between 2004 and 2020, inflation adjusted GDP in manufacturing contracted by 31%. Today, ship building is just a skeleton of its historical pass and as of the 1st quarter of 2024 was only about 13% of the pre-Katrina August 2005 employment of 9,700. Non-durable manufacturing, such as chemicals and associated by-products, had remained relatively stable throughout the pandemic and post-pandemic. The annual average non-durable manufacturing CES jobs in 2019 was 18,800 CES jobs. In 2022, annual average jobs in non-durable manufacturing were 18,200 CES jobs. The annual average for 2023 CES job was 18,400. The average for the seven months of data in 2024 was 18,400.

Wholesale Trade employment growth has been weak for almost a decade. Employment in this sector peaked in 2007 at 24,500. Since 2007, the industry has added or lost a few hundred jobs, depending upon the month and year. In 2019, annual average employment was 22,300 individuals. For 2021, the annual average was 20,900 jobs. The annual average for 2022 was 21,800. The annual average for 2023 was 22,000 CES jobs. The average for the seven months of data in 2024 was 22,200 CES jobs.

Job growth in Financial Services Activities has been concentrated in the Finance and Insurance sub-sector of this industry. Credit Intermediation and Related Activities have shown little or no job growth for the last several years along with Banks. Annual average employment for the overall sector (Financial Services Activities) in 2014 was 28,800 jobs. In 2015, the annual average was 29,600 jobs. The annual average for 2016 was 30,100 jobs. Between 2016 and 2019, industry employment fluctuated between 30,000 and 31,000 jobs. In 2019, annual average employment was 31,300 jobs. Even in the post-pandemic period of 2021, employment in this industry continued to show no growth, averaging 28,000 CES jobs in that year. The annual average for 2022 was 29,000 CES jobs. The annual average for 2023 was 29,100. The average for seven months of data in 2024 was 29,300 CES jobs. Clearly some of this growth stagnation is due to the impact of technology on this industry, but fundamentally these trends reflect the overall weakness of the region's economy. The post-Katrina Financial Services sector employment simply reflects the fact that the pre-Katrina financial sector in the New Orleans MSA was already weak, with employment stagnating starting in late 1990. The sector was confronted with a post-Katrina reality of a smaller consumer and business market, and cautious re-building of financial services after the national financial crisis of the last several years. A simple comparative analysis of the value of output (GDP) of the financial service sector (NAICS 50) is made between the Birmingham MSA and the New Orleans MSA over time. Combining the GDP for financial services between the New Orleans and the Birmingham GDP shows that in 2001, the New Orleans share was 51.3% of the total. In 2022 (the latest year for this data), that share shrunk to 43%.

Information CES annual average employment at the New Orleans MSA level peaked in 2013 at 9,300 jobs. Motion Picture and Sounding Recording Industries employment saw an increase and was up between the annual average for 2014 and the annual average for 2015 by 600 jobs. The annual average for 2016 showed a drop of 1,500 jobs over the same period in 2015. CES annual average jobs in 2016 was 7,500 jobs. Between 2016 and 2019, Information employment has stabilized in the 7,500 to 7,700 range. The industry employment base has been hit hard during the Covid-19 Pandemic, losing about 1,700 jobs when measured as the annual average between 2019 and 2020.

Beyond the impact of the pandemic, the industry has been moving side-ways or occasionally adding jobs and again losing jobs since 2016. The February 2020 CES job estimate in the industry was 9,000 CES jobs. The industry did dig out of the job hole caused by the pandemic. The annual average for 2022 shows an 800 job increase over the February 2020 level. That gain was, however, wiped out in 2013 with a decline of 1,700 CES jobs. (Measured as the difference between the annual average for 2023 and the February 2020 pre-Covid level.) The annual average for 2023 was 7,300 CES jobs. Part of the decline in 2023 could be attributed to the movie industry strike, but the industry has shown no recovery in 2024. The average for the seven months of data in 2024 for Information was 6,300 CES jobs.

The MSA Unemployment Picture

The July 2024 non-seasonally adjusted unemployment rate, as reported by the Bureau of Labor Statistics, showed a drop in the unemployment rate of 0.2% between June and July, coming in at 4.4%. There was virtually no change in the labor force between July 2023 and July 2024. The total estimated labor force in July 2024 was estimated at 590,800 individuals. Total non-seasonally employed residents fell by 4,900 between July 2023 and July 2024. Total employed residents were 565,000 individuals. The July 2024 labor force level was 5,900 less than the February 2020 pre-Covid level.

New Orleans Metropolitan Statistical Area Key Employment Sectors Indices: Education and Health Services, Leisure and Hospitality and Business and Professional Services

These industry clusters account for 54% of the total private sector employment in the MSA. Table 16 below shows the three indices used to measure the employment strength of these sectors in the three metropolitan area economies. The table covers the period of August 2005 to July 2024.

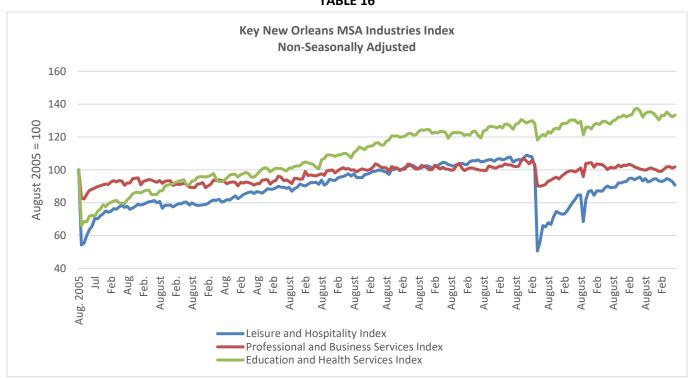


TABLE 16

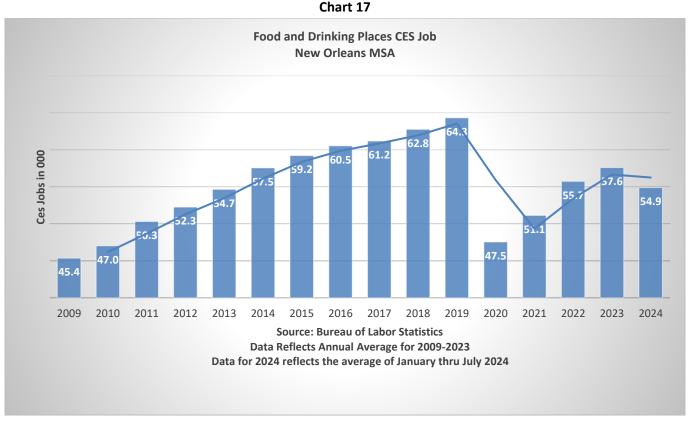
Source: Prepared by Dr. Raymond Brady, Systems Solutions Consulting; Primary Source: BLS CES Data

Table 16 Illustrates the depth of CES jobs losses associated with the Covid-19 shutdown and the relative weakness of recovery specifically in Leisure and Hospitality and Professional and Business Services. As the table shows, Educational and Health Services didn't experience the dramatic job contraction of the Professional and Business Services and Leisure and Hospitality sectors. *Nearly fifty percent of New Orleans MSA job growth prior to the Covid-19 Pandemic had come from the broad Education and Health Services Sector.* The sector recovered relatively quickly from the April 2020 economy shutdown, job growth increasing by 12.9% between April 2020 and July 2024.

The Education and Health Care index stood at 133.3 (August 2005 =100) in July 2024. (all data are non-seasonally adjusted). The sub-sector, Educational Services, showed an annual average increase of 800 CES jobs for 2020 and 2021.

Between the 2021 annual average increase in CES jobs and the annual average for 2022, jobs increased by 1,300. Between the annual average for 2022 and the annual average for 2023, total CES Educational Services employment increased by 600 jobs. *In July 2024, there were an estimated 34,300 CES jobs*. *Hospital employment*, measured over the average for 2020 and 2021 increased by 1,200 CES jobs. Between the annual average in 2021 and the annual average for 2022 showed a decline of 700 CES jobs. Between the annual average CES employment for 2022 and the annual average for 2023, hospital CES jobs increased by 400 jobs. *The July 2024 figure stood at 25,300 CES jobs*. As measured on an annual average basis between 2020 and 2021, *Ambulatory Care Services* increased by 1,200 CES jobs, reflecting recovery from the Covid-19 lock-down. Ambulatory Care CES jobs between the annual average for 2021 and the annual average for 2022 showed a 600-job increase. Between the annual average for 2022 and the annual average for 2023 job growth showed a 500 CES job increase. July 2024 CES jobs were 32,200. Between July 2023 and July 2024, the sector gained 400 CES jobs.

The Leisure and Hospitality Index was measured at 90.7 (August 2005 =100) in July 2024. The Covid-19 Pandemic devastated this industry in the New Orleans MSA. The index in February 2020 was 107.9. (100= August 2005) Preliminary July 2024 CES estimate for jobs in Leisure and Hospitality in the New Orleans MSA was 78,000. This is 14,800 fewer jobs than February 2020. It is also important to note that the industry did recover 35,000 CES jobs between April 2020 (the low-point in the Covid-19 lockdown job level) and July 2024. At the height of the pandemic "lock-down" in April of 2020, the jobs in the industry were estimated at 43,500. It is ironic that in December 2019, the industry had arrived at its highest level of employment with 93,700 jobs. The hardest hit sector in this pandemic has been Food and Drinking Places. As of July 2024, the CES job level was about 15.9% below the February 2020 job level. Food and Drinking Places had been the job growth driver in the Leisure and Hospitality sector. Chart 17 shows the trend in the industry. For the period 2009 to 2024, annual average data estimates are presented.



20

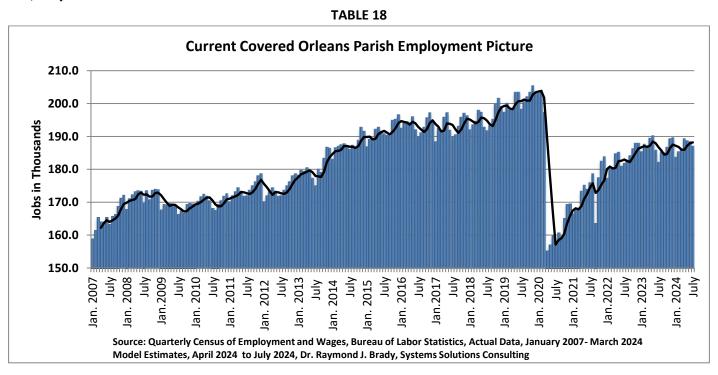
The Professional and Business Services Index stood at 101.7 (August 2005 = 100) in July 2024. Recent data suggests Professional and Business Services employment fell by fell by 300 CES jobs when averaged over the seven months of data in 2024 over the annual average for 2023. The sub-sector Professional and Technical Services Administrative Services sector employment basically stagnated over the seven months of data in 2024, as compared the annual average in 2023. The sector averaged 34,300 in 2023. For the seven months of data in 2024, the average was 34,700. The overall number of jobs *in Professional and Business Services* in July 2024 was still down by 3,000 CES jobs when compared to the pre-pandemic high of February 2020. Most of this contraction was in Administrative and Support Services. In July 2024, 29,200 individuals were employed in Administrative and Support Services. There were 75,600 CES jobs in July 2024 in Professional and Business Services.

NEW ORLEANS-JEFFERSON- ST. TAMMANY EMPLOYMENT INDICES

These employment indices differ from those of the state and MSA. The state and MSA indices are derived from the monthly reported Current Employment Survey (CES) published by the Bureau of Labor Statistics (BLS) and the Louisiana Workforce Commission. The New Orleans, Jefferson and St. Tammany indices are built around Quarterly Census Employment and Wages (QCEW) data which is a census of employment produced by the Louisiana Workforce Commission and BLS. Several statistical models are used to estimate current QCEW data using CES data as the independent variable. The re-calibrated models reflect the most current historical data through March 2024. This document contains an evaluation of the current model's performance.

ORLEANS PARISH

New Orleans QCEW non-seasonally revised adjusted jobs increased by an estimated 32,800 jobs between April 2020 and July 2024. However, the July 2024 job estimate was still 16,000 jobs less than the February 2020 level. The estimated QCEW (Quarterly Census of Employment and Wages) jobs in the City of New Orleans in July 2024 was 187,100 jobs.



QCEW data shows, as illustrated in Table 18, that job growth had been stagnant between mid-2015 to early 2018. By mid-2018, the job economy began a strong-turn around. For 2019, average QCEW jobs increased by 5,400 over the same period in 2018. The Covid-19 Pandemic shows that the "bottom fell out" of the City of New Orleans economy, starting in March 2020. Between 2019 and 2020, New Orleans QCEW employment contracted 28,700 jobs as measured on an annual average basis. Between the annual averages for 2020 and 2021, New Orleans QCEW employment stabilized at around 173,000 jobs. Annual average QCEW data for 2022 showed the city of New Orleans QCEW employment level at 183,100. Annual average QCEW data for 2023 shows the city of New Orleans QCEW employment was 186,800. The average for the months of January through July was an estimated 188,300 QCEW employment. The revised index (based upon March 2024 benchmark revisions) stood at 78.1 in July 2024 (August 2005 = 100).

The latest QCEW annual average data is for 2023. With specific focus on parish technology sectors, a specific set of industry sectors were identified as "technology" sectors. These sectors area: software creators (NAICS 5112 revised to NAICS 5132I), data processing services (NAICS 518), engineering services (NAICS 54133), graphics design (NAICS 54143), computer systems design services (NAICS 5415) and private sector scientific research and development services (NAICS 5417) Data shows that in Orleans Parish (New Orleans) total employment in these sectors increased by 1,881 between 2004 (pre-Katrina) and 2023. The total annual average private sector employment in these industries was 3,554 in 2004. For 2023, QCEW jobs in these select industries averaged 4,725. Gains were made in computer systems design services (NAICS 5415) during this period, with employment going from 1,072 in 2004 to 1,998 in 2023. At the same time, engineering services (NAICS 54133) employment declined going from 1,701 in 2004 to 1,464 jobs in 2023. Software publishers (NAICS 5112 revised to NAICS 5132) went from an annual average of 8 employees in 2004 to 358 jobs in 2023. In NAICS 5417 (private sector Scientific Research and Development), QCEW jobs in 2004 were 268. In 2023, that number was 354 jobs. The number of establishments in computer design services jumped from 163 in 2004 to 733 in 2023, with the average number of jobs per establishment falling from 6.6 employees per establishment (2004) to 2.7 employees for 2023. Although there has been growth in the computer design services (NAICS 5415), the relative concentration (Location Quotient) of employment in this sector relative to the U.S. sector has not changed over the period 2004 to 2023 at 0.7. This implies that the industry remains a local serving industry relative to the U.S. industry.

Lack of substantiative growth in the "high tech" sector, along with the loss of substantial higher paying jobs in mining and manufacturing and the corresponding substantial job growth in Leisure and Hospitality, has had a depressing impact on the overall average wage level in the city (see Table 15 above).

City-wide average wage stagnation appears to be occurring in reported wage and salary statistics for Orleans Parish. Most current QCEW data shows that between 2010 and 2023, (see Table 15) average yearly wages in Orleans Parish increased by 30.9% in current dollars. (Source: Quarterly Census of Employment and Wages data, Bureau of Labor Statistics). The 2023 average pay level in current dollars was \$65,185. The Southern Urban CPI over that period from 2010 to 2023 increased by 40.3%. In Orleans Parish, average yearly wages in private sector Leisure and Hospitality were \$26,919 in 2010 and \$35,552 in 2023 or a 32.1% increase between 2010 and 2023. (Source: BLS QCEW data). Given the share of total job growth, Leisure and Hospitality industry has had to have a depressing impact on calculated total average yearly wages over time. NOTE: Annual pay includes bonuses, stock options, severance pay, profit distributions, cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans. Source: QCEW, Bureau of Labor Statistics.

Table 19 below identifies employment in broad industry sectors between pre-Katrina 2nd quarter 2005 and 1st quarter of 2024. Prior to the Covid-19 health crisis, the parish was down by about 40,000 jobs (4th quarter 2019) relative to the 2nd quarter 2005 data. The on-slaught of the Covid-19 health crisis resulted in that figure swelling to -57,813. (Latest QCEW data for 1st quarter 2024) A major fraction in the job losses, associated with the health crisis, mostly came from the decimation of the Leisure and Hospitality sector. Between the 1st quarter 2020 and the 2nd quarter 2020, New Orleans economy shrunk by 44,116 Quarterly Census of Employment and Wages (QCEW) jobs. By the 1st quarter 2024, the parish had recovered 66% of the parish total job losses that occurred between the 1st quarter 2020 and the 2nd quarter 2020 or 29,114 QCEW jobs.

Table 19

| | i abic 1 | - | | | |
|--|-----------|-------------------------|-------------------------|----------------------------------|--|
| | Year 2005 | | Year 2024 | Change 2nd Quarter 2005 to | |
| | NAICS | 2nd Quarter | 1 st Quarter | 1st Quarter 2024 | |
| | | Quarterly Employment | Quarterly Employment | | |
| ORLEANS | | 244,151 | 186,338 | -57,813 | |
| Professional and technical services | 54 | 14,554 | 15,485 | 931 | |
| Agriculture, forestry, fishing and hunting | 11 | 56 | 166 | 110 | |
| Utilities | 22 | 1,894 | 1,151 | -743 | |
| Accommodation and food services | 72 | 36,782 | 35,926 | -856 | |
| Real estate and rental and leasing | 53 | 4,070 | 3,015 | -1,055 | |
| Information | 51 | 4,896 | 3,579 | -1,317 | |
| Other services, except public administration | 81 | 7,227 | 5,537 | -1,690 | |
| Construction | 23 | 6,128 | 3,807 | -2,321 | |
| Arts, entertainment, and recreation | 71 | 8,641 | 6,066 | -2,575 | |
| Management of companies and enterprises | 55 | 4,631 | 2,047 | -2,584 | |
| Wholesale trade | 42 | 5,999 | 3,294 | -2,705 | |
| Mining | 21 | 4,181 | 1,053 | -3,128 | |
| Finance and insurance | 52 | 8,384 | 4,940 | -3,444 | |
| Manufacturing | 31-33 | 8,573 | 4,640 | -3,933 | |
| Health care and social assistance | 62 | 32,291 | 28,174 | -4,117 | |
| Educational services | 61 | 28,578 | 23,503 | -5,075 | |
| Transportation and warehousing | 48-49 | 13,687 | 8,416 | -5,271 | |
| Public administration | 92 | 17,186 | 11,700 | -5,486 | |
| Retail trade | 44-45 | 19,195 | 13,234 | -5,961 | |

Source: Quarterly Census of Employment and Wages, Louisiana Workforce Commission

About 69% of the total QCEW job recovery by the 1st quarter 2024 from the decline between the 1st quarter 2020 to the 2nd quarter 2020 was concentrated in Arts and Entertainment and Accommodations and Food Services. By the 1st quarter of 2024, Leisure and Hospitality had recovered 17,600 jobs of the loss of 24,101 jobs in the industry between the 1st quarter 2000 and the 2nd quarter 2000. Further and to emphasize, the Covid-19 health crisis only contributed to the job losses noted in Table 19.

As noted in the previous paragraph, the City of New Orleans economy prior to this crisis was still down by about 43,000 QCEW jobs as of the 1st quarter 2020 when compared to the 2nd quarter 2005. In short and by the heavy job losses associated with the Covid health crisis, the city of New Orleans total QCEW job economy had not recovered from the Hurricane Katrina disaster.

Over the 1st quarter 2020 to the 1st quarter 2024, greatest losses were concentrated in Accommodations and Food Services with a loss of 6,972 jobs. This was followed by Administration and Waste Services down by 2,073 QCEW jobs. Information QCEW jobs fell by 1,719. This was followed by Retail Trade down by 1,590. Public Administration was down by 1,146 QCEW jobs. Finally, Management of Companies was down 1,031 QCEW jobs. The above sectors accounted for 79% of the total QCEW job losses. During this period, Health Care and Social Assistance gained 609 QCEW jobs. This was followed by manufacturing gaining 232 QCEW jobs.

The non-seasonally adjusted (revised as of March 2024 by BLS) unemployment rate in Orleans Parish was 4.2% in July 2024. There was 0.01% decline in the unemployment rate between June 2024 and July 2024 in the unemployment rate. July 2023 unemployment rate was 4.2%. Between April 2023 and April 2024, the BLS model estimated that the Orleans Parish's labor force increased by 200 individuals over this period and was estimated at 177,000 in July 2024. Employed residents declined by 1,400 between these periods. BLS estimated that the number of employed residents was 168,000 in July 2024.

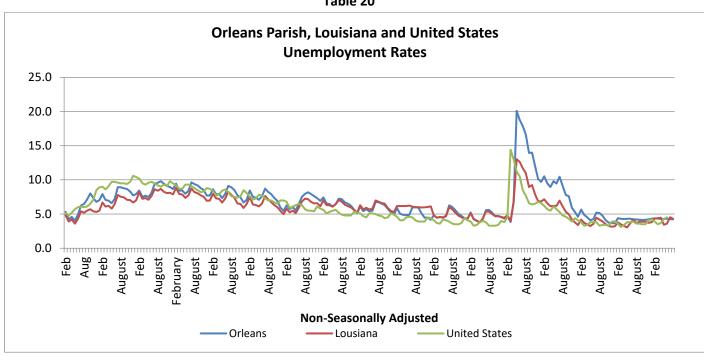


Table 20

Source: Bureau of Labor Statistics (August 2024)

Jefferson Parish

Table 21 below looks at the current Jefferson Parish employment picture starting in January 2007. The solid line is a 2-week moving average of QCEW employment estimate. Jefferson Parish's non-seasonally adjusted employment index was 85.1 (August 2005 =100) in July 2024. As of July 2024, the QCEW employment estimate was 182,100 jobs, with an increase of 900 QCEW jobs between July 2023 and July 2024. July 2024 estimate was still 9,000 fewer QCEW jobs than February 2000. (This reflects BLS revisions made by BLS going back to 2007.) For 2020, average QCEW jobs in Jefferson parish was 176,400. For the same period in 2019, it was 189,700. The annual average for 2021 was 179,296. The annual average for 2022 was 181,400 jobs. The annual average for 2023 was 182,400. The estimated average for seven months of data in 2024 shows 182,200 QCEW jobs.

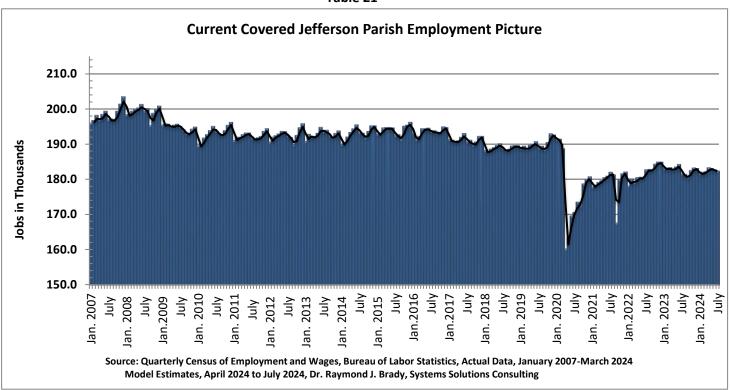


Table 21

Table 22 presents data from the 2nd **quarter of 2005 to the 1st quarter 2024.** Basically, the table tells us that eighteen years after Hurricane Katrina, total QCEW jobs in the parish remains less in the 1st quarter 2024 than that of the 2nd quarter 2005 (pre-Hurricane Katrina quarter). The parish overall employment picture has never fully recovered from the loss of more than 7,000 high paying ship building and related manufacturing jobs since 2009. In the context of job growth, the loss of the high paying jobs at Avondale was the "Katrina Effect" on the parish's job picture.

As of the 1st quarter 2024, Jefferson Parishes pre-Covid 19 aggregate job picture remained well below its peak job level of 202,900 QCEW jobs in December 2007. Manufacturing in 2004 in Jefferson Parish employed 18,200 people, and the latest parish level data (1st quarter 2024) from BLS shows 8,668 QCEW manufacturing jobs. Table 23 below graphically illustrates the impact of the Covid-10 Pandemic.

Table 22

| Table 22 | | | | | | | | |
|--|-------|-------------------------|-------------------------|----------------------------|--|--|--|--|
| | | Year 2005 | Year 2024 | Change 2nd Quarter 2005 | | | | |
| | NAICS | 2nd Quarter | 1st Quarter | to 1st | | | | |
| | | Quarterly Employment | Quarterly Employment | Quarter 2024 | | | | |
| JEFFERSON | | 216,401 | 182,440 | -33,961 | | | | |
| Educational services | 72 | · suppressed | 8,691 | * | | | | |
| Health care and social assistance | 81 | 28,672 | 34,569 | 5,897 | | | | |
| Management of companies and enterprises | 62 | 2,602 | 2,887 | 285 | | | | |
| Professional and technical services | 61 | 10,212 | 10,493 | 281 | | | | |
| Transportation and warehousing | 53 | 8,920 | 8,971 | 51 | | | | |
| Agriculture, forestry, fishing and hunting | 11 | 80 | 39 | -41 | | | | |
| Public administration | 48-49 | 6,619 | 6,091 | -528 | | | | |
| Other services, except public administration | 44-45 | 6,432 | 5,848 | -584 | | | | |
| Utilities | 22 | 1,366 | 697 | -669 | | | | |
| Arts, entertainment, and recreation | 92 | 5,065 | 4,128 | -937 | | | | |
| Information | 54 | 3,462 | 2,443 | -1,019 | | | | |
| Real estate and rental and leasing | 56 | 4,919 | 3,881 | -1,038 | | | | |
| Mining | 21 | 1,980 | 203 | -1,777 | | | | |
| Finance and insurance | 55 | 9,315 | 7,527 | -1,788 | | | | |
| Construction | 23 | 13,960 | 11,550 | -2,410 | | | | |
| Administrative and waste services | 71 | 16,951 | 13,450 | -3,501 | | | | |
| Wholesale trade | 51 | 13,056 | 9,553 | -3,503 | | | | |
| Accommodation and food services | 31-33 | 23,126 | 18,045 | -5,081 | | | | |
| Retail trade | 52 | 30,902 | 24,698 | -6,204 | | | | |
| Manufacturing | 42 | 17,338 | 8,668 | -8,670 | | | | |
| · · · · · · · · · · · · · · · · · · · | | | | | | | | |

Source: Quarterly Census of Employment and Wages, Louisiana Workforce Commission

Table 23

Job Change Between 4th Quarter 2019 and 1st Quarter 2024

Jefferson Parish, Louisiana

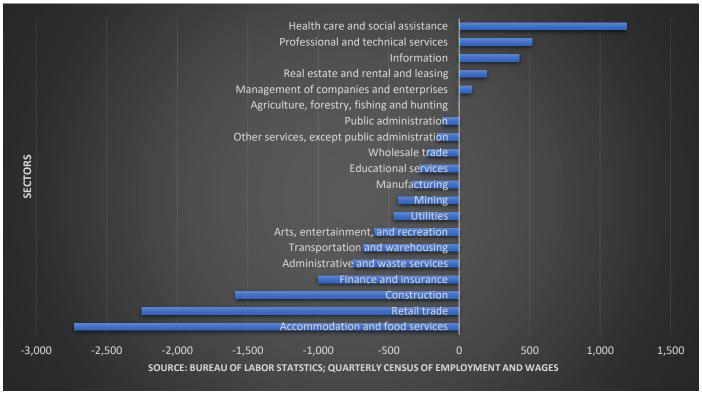
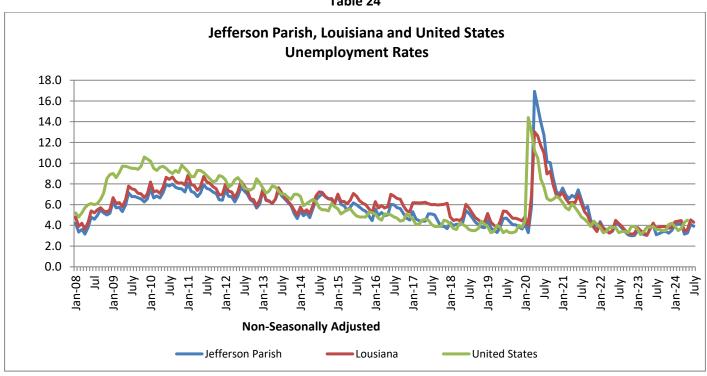


Table 24 shows an estimate of Jefferson Parish's resident unemployment rate at 3.9% in July 2024.

Table 24



Source: Bureau of Labor Statistics (August 2024)

The rate decreased by 0.2% between June and July. In July 2023, it was estimated at 3.9%. (Revised as of March 2024 by BLS) Non-seasonally adjusted employed residents showed an estimated decrease of 1,500 individuals between July 2023 and July 2024. Employed residents were estimated at 202,200 individuals in July 2024. The parish resident labor force remained static between July 2023 and July 2024. The parish resident labor force was estimated at 210,400 individuals in July 2024.

St. Tammany Parish

St. Tammany's July 2024 QCEW estimated jobs was 96,100 QCEW jobs. St. Tammany Parish QCEQ non-seasonally employment increased by 1,000 jobs between July 2023 and July 2024. It is important to note that job growth in St. Tammany Parish started to flatten in late 2023 and continued into July 2024.

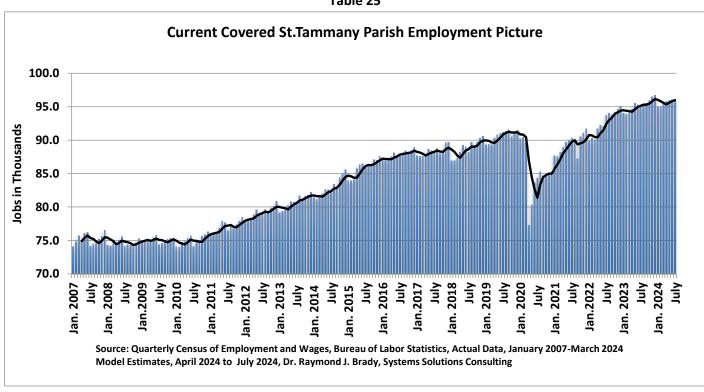


Table 25

The job growth index stood at a revised 140.5 in July 2024. (August 2005 = 100) The Covid-19 Pandemic had devastated the job picture in St. Tammany Parish. Comparing the annual average of CES jobs in 2019 and the annual average for 2020, Parish QCEW jobs decreased by 4,900. However, by the 4th quarter 2022, QCEW jobs in the parish had expanded well pass the job losses of associated with 2nd quarter 2020. (91,120 vs. 94,605). By the 1st quarter 2024, this increase QCEW jobs in these select sector *above the 4th quarter 2019 level* were: Health Care and Social Assistance QCEW jobs increasing by 1,542 QCEW jobs. This was followed by Professional and Technical Service jobs, increasing by 1,119 QCEW jobs. Accommodation and Food Services increased by 392 QCEW jobs and Finance and Insurance had increased by 334 QCEW jobs. The above sectors accounted for 66% of the QCEW job growth between these periods. Retail Trade, Mining and Management of Companies accounted for 93% of the job losses during this period or 1,230 QCEW jobs.

Jefferson-Orleans-St. Tammany Job Demand Indices

Table 26 shows the indices for Jefferson, Orleans and St. Tammany based upon actual QCEW job data up to March 2024, with model estimates up to July 2024.

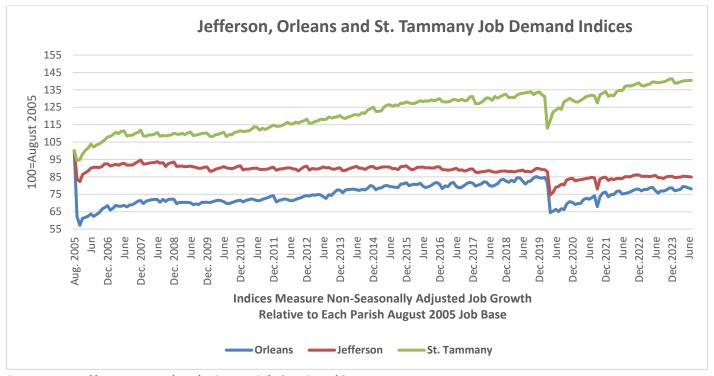


Table 26

Source: Prepared by Dr. Raymond Brady, Systems Solutions Consulting

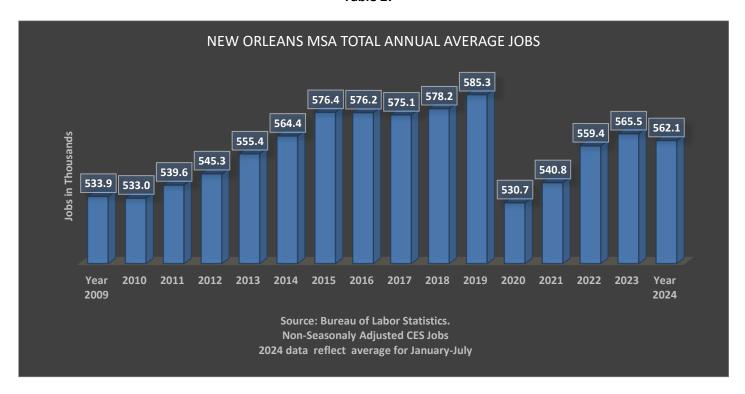
Table 26 shows a flattening of growth across all the major parishes in the MSA. This is particularly ominous in St. Tammany Parish since this parish has been a job growth leader in the New Orleans MSA.

Regional Conclusion

Covid-19 had a devastating impact on the employment economy of the New Orleans MSA. In February 2020, total CES jobs in the New Orleans MSA were 590,600. The April lock-down caused the MSA job economy to shrink to 481,700 jobs in that month or a loss of 108,600 CES jobs. Between April 2020 and February 2024, the MSA job economy recovered 78,300 CES jobs. Approximately sixty-nine percent (69%) of that bounce back occurred between April and December 2020. Between December 2020 and December 2021, the MSA added 20,000 CES jobs. Between January 2022 and December 2022, the New Orleans MSA economy added 22,600 CES jobs. Between the annual average for 2022 and the annual average for 2023, the New Orleans MSA economy added 6,100 CES jobs. For the average of the seven months of data in 2024 over 2023, The MSA CES job level fell by 4,200 CES jobs.

Table 27 repeats Table 11 to illustrate the difficulty for the region to recover back to the pre-Covid-19 historical trend. The annual average number of CES jobs in 2020 was 531,300. The average for 2019 was 585,300 jobs or 54,000 above the annual average for 2020. The annual average for 2021 shows CES jobs at 538,600. The annual average for 2022 shows 556,200 CES jobs. The average for 2023 was 565,500 CES jobs. The average for the seven months of data in 2024 was 562,100

Table 27



Independent of the Convid-19 Pandemic, a key structural problem facing the New Orleans MSA is an employment distribution increasingly concentrated in fewer and fewer sectors. A long-term view of the New Orleans MSA suggests lots of job growth on the lowest part of the wage latter. For example, 42,600 CES *private sector jobs* were created between the annual average 2009-2010 recessionary low point and the seven-month average of CES data for 2024. During this period 2009-2010 to 2024, Health and Social Assistance led private sector growth accounting 49% of the growth. This was followed by Leisure and Hospitality, which accounted for 26% of the growth. Private Educational Services accounted for 24% of the growth. These three sectors accounted for ninety-nine percent (99%) of the non-seasonally adjusted private sector *job growth* in the New Orleans MSA annual average 2009-2010 and average for the seven months of data for 2024.

The Leisure and Hospitality sector is critical to the mix of job demand sectors in this economy. However, its increasing dominance will pose long-term problems associated with wealth creation and distribution for the resident population. Data suggests that gains in Leisure and Hospitality employment growth are having a depressing effect on average wage and salary growth in the New Orleans MSA. Table 15 points to the dilemma of an economy built around Leisure and Hospitality. A potential cause of the lack of robustness in the calculated average pay data for the MSA and particularly Orleans Parish comes from the changing distribution of employment and the loss of high paying manufacturing, mining and select services sectors (finance, research and engineering) jobs, with a corresponding growth in lower paying jobs. Between the MSA CES employment 2009-2010 recessionary low point and the pre-Covid annual average for 2019, the New Orleans MSA added 62,400 private sector jobs. The annual average employment growth for Leisure and Hospitality over the same periods accounted for thirty-seven percent (37%) of the private sector job growth. The dominance of Leisure and Hospitality raises questions about the lack of diversity among employment sectors in the private sector of the economy. This issue is relevant because, as reported by the Quarterly Census of Employment and Wages, estimated New Orleans MSA annual pay in 2023 in the Leisure and Hospitality industry was only fifty-six percent of the MSA annual average (\$36,402 vs. \$64,555).

MSA GROSS DOMESTIC PRODUCT WEAKNESS

Table 28 below points to another problem with wealth creation in the New Orleans MSA. In inflation adjusted dollars and prior to the Convid-19 Pandemic, the MSA has been faring poorly with respect to real (2017 chained \$) growth in its Gross Domestic Product (GDP). (Note: the 1st value for 2017 reads as \$78.2 billion.) Using an older version, the GDP inflation adjusted data measure shows the region wealth creation peaked in 2010 (note: 2010 data shows the real private sector GDP at \$84.6 billion; the 2019 estimate was \$69.7 billion and in 2021, the estimate was \$63.3). Source: BEA

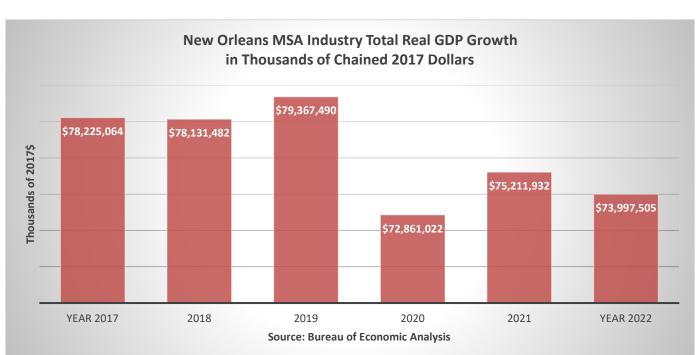


Table 28

As Table 28 vividly points, the MSA GDP has been in relative stagnation in inflation adjusted values since the onset of the Covid-19 Pandemic. As noted earlier, tables using inflation adjusted 2012 values show that real GDP peaked in 2010 never recovering to that level. This should be ringing alarm bells, and parallels weakness in average pay data.

Analysis of the more detailed industry data in the New Orleans MSA between 2017 and 2022 (latest available data) shows a mixed picture of industry sectors that contributed to the change in real GDP growth in the MSA. For example, weakness in the inflation adjusted GDP for Leisure and Hospitality began earlier than the Covid-19 period 2000-2021. The current series shows that in 2017, the industry produced its highest value output (\$5.7 billion). Manufacturing, which faulted the greatest in term of GDP inflation adjusted valued output was \$13.8 billion in 2017 and \$10.3 billion in 2022. Losses were concentrated in non-durable manufacturing that fell from \$12.5 billion in 2017 to \$8.9 billion in 2022. Further, as noted earlier, growth is occurring in many industries whose average pay is less than the current regional wage and salary average, putting downward pressure on the average regional pay. Leisure and Hospitality, although important, total direct contribution to the MSAs real GDP was \$4.9 billion in 2022 (in 2017 chained \$) (note: chained \$ reflects adjustment for inflation). The calculated Bureau of Economic Analysis (BEA) estimated (wage and salary employment) was 84,351, and the calculated inflation adjusted GDP per worker in Leisure and Hospitality (in 2017 chained \$) was \$58,090 (\$4.9 billion/84,351).

To point out the substantial difference in value of output per worker in Leisure and Hospitality with that of the MSA, the following simple analysis is performed. Total 2022 inflation adjusted GDP for the New Orleans MSA was \$74 billion (in 2017 chained \$), and total Bureau of Economic Analysis (BEA) jobs in the MSA in 2022 was estimated at 575,569. The calculated GDP per MSA worker (\$76.3 billion/549,091) was \$128,568 (in 2012 chained \$) in 2022. Hence, the value of output per worker in Leisure and Hospitality was 2.2 times less the average for the MSA. Hence, value of output affects wealth creation.

To better understand the consequences of Table 28, the New Orleans MSA total inflation adjusted GDP over the identified period (2017-2022) is compared with that of the Birmingham MSA and Charleston-North Charleston GDP with that of New Orleans MSA.

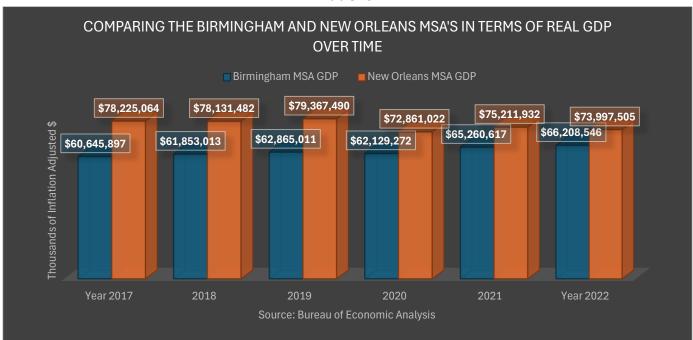


Table 29

What does Table 29 tell us? While the Birmingham inflation adjusted GDP MSA *grew* by 9.2% or by \$5.6 billion between 2017 and 2022, the New Orleans MSA inflation adjusted GDP *contracted* by 5.4% or by \$4.2 billion. *The key observation here is a comparison of trends*. Between 2017 and 2019 (pre-Covid), the New Orleans MSA GDP grew at a snail pace in inflation adjusted GDP by 1.5% or adding \$1.5 billion to the wealth of the MSA economy. Over the same time frame, the Birmingham MSA economy grew by 3.7% in real terms or \$2.2 billion. *The consequence of this trend is that the Birmingham GDP will have matched or overtaken the New Orleans MSA in wealth creation by the end of this decade*. For example, in the year 2017 the total Birmingham GDP was 77.5% of the New Orleans MSA GDP. In 2022, that fraction has risen to 89.5%.

In the critical sector, such as Educational Services, Health Care and Social Assistance, the inflation adjusted GDP in the New Orleans MSA increased between 2017 and 2022 by \$872 million. In the Birmingham MSA, that increase was \$1.1 billion. In 2022, the inflation adjusted GDP in the New Orleans MSA in this sector was \$7.9 billion, and the Birmingham inflation adjusted GDP was \$7.5 billion. However, given trends, the inflation adjusted GDP in this sector is likely to exceed that of New Orleans MSA by 2027.

Only in Leisure and Hospitality in the New Orleans MSA, does the inflation adjusted GDP have a commanding lead in the value of GDP. The only problem, in general, is that this industry is not a significant contributor to overall wealth creation.

Table 30 presents a comparison of the New Orleans MSA inflation adjusted GDP with that of Charleston MSA inflation adjusted GDP. Although the wealth creation in the New Orleans MSA is substantially greater in 2022, the level disguises what is occurring internally in each economy. While inflation adjusted GDP in the New Orleans MSA fell by 5.4% between 2017 and 2022, the GDP in the Charleston MSA jumped by 16.6% over this period. Charleston's share of the New Orleans MSA inflation adjusted GDP increased from 53% in 2017 to 66% by 2022.

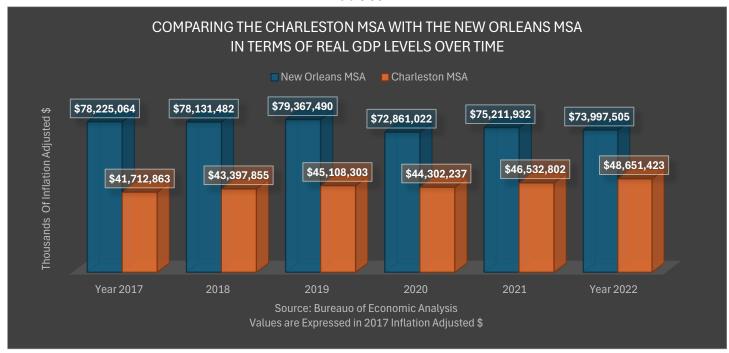


Table 30

Evidence does suggest that the Covid-19 Pandemic decimated the New Orleans MSA economy to a greater degree relative to the other economies discussed. Clearly, Table 27 shows the impact on CES employment, and it is likely that total annual average CES jobs in the New Orleans MSA will not return to the 2019 level until 2025. A cursory review of both the Birmingham and Charleston MSA job economies suggests a lesser impact of the pandemic on those economies, with a quick turnaround. Therefore, this observer would argue that underlying weaknesses in the New Orleans MSA economy simply were exacerbated by the pandemic. As one example, these weaknesses show up in lack of population growth. The New Orleans MSA population growth has stagnated since 2013. (Source: U.S. Census Bureau estimates) Latest Census Bureau data up to 2023 shows a MSA population decline of 1,800 individuals between 2013 and 2023. Further, U.S. Bureau of Labor Statistics (BLS) show a virtual stagnation in labor force growth (non-seasonally adjusted) in the New Orleans MSA between pre-pandemic February 2020 and April 2024. The New Orleans MSA labor force growth was estimated to have grown by only about 3,000 individuals during this period. (Source: BLS data)

Without overplaying the economic problems, a review of **Table 28 suggests the pre-pandemic economic picture simply laid the foundation for the post-pandemic sluggish recovery.** *One might suggest that the same scenario can* be penciled in for the pre-Katrina economic environment and the post-Katrina economic environment. Table 19 and

Tables 22 illustrate that the key employment economies of Orleans and Jefferson never have recovered to the pre-Katrina job economies in those parishes.

NEW ORLEANS: THE REGION'S JOB LEADER

New Orleans, the region's job leader, as Table 18 illustrates, began a slowdown in job growth in late 2016 and throughout 2017. New Orleans lost 2,200 QCEW jobs between 2016 and 2017. However, starting in early 2018, the job growth weakness reversed itself and the parish ended 2018 by adding an average of 2,500 QCEW jobs over 2017. QCEW job growth accelerated toward the end of 2018, and New Orleans added an estimated average of 5,400 QCEW jobs for 2019 over the same period in 2018. The Covid-19 Pandemic (see Table 18) shows that the "bottom fell out" of the New Orleans economy, starting in March 2020. Between 2019 and 2020, the city of New Orleans QCEW lost 28,700 jobs as measured on an annual average basis.

Using the 1st quarter 2000 (Quarterly Census of Employment and Wages) as a benchmark quarter (beginning of the economic consequences of the Covid-19 Pandemic) to assess the lingering impact of the Covid-19 Pandemic, QCEW jobs were still down by 17,593 jobs in the 1st quarter 2024 over the 4th quarter 2019. As of July 2024, New Orleans had an estimated 187,900 QCEW jobs.

Over the 1st quarter 2020 to the 1st quarter 2024, *greatest losses* were concentrated in Accommodations and Food Services with a loss of 6,972 jobs. This was followed by Administration and Waste Services, which was down by 2,073 QCEW jobs. Information QCEW jobs fell by 1,719. This was followed by Retail Trade down by 1,590. Public Administration was down by 1,146 QCEW jobs. Finally, Management of Companies was down 1,031 QCEW jobs. The above sectors accounted for 79% of the total QCEW job losses. *During this period, Health Care and Social Assistance gained* 609 QCEW jobs. *This was followed by manufacturing* gaining 232 QCEW jobs.

JEFFERSON PARISH: THE RETAIL CENTER OF THE REGION

Jefferson Parish's non-seasonally adjusted employment index was 85.1 (August 2005 =100) in July 2024. As of July 2024, the QCEW employment estimate was 182,100 jobs, with an increase of 900 QCEW jobs between July 2023 and July 2024. July 2024 estimate was still 9,000 fewer QCEW jobs than February 2000. (This reflects BLS revisions made by BLS going back to 2007.) For 2020, average QCEW jobs in Jefferson parish was 176,400. For the same period in 2019, it was 189,700. The annual average for 2021 was 179,296. The annual average for 2022 was 181,400 jobs. The annual average for 2023 was 182,400. The estimated average for seven months of data in 2024 shows 182,200 QCEW jobs.

The parish overall employment picture has never fully recovered from the loss of more than 7,000 high paying ship building and related manufacturing jobs since 2006. In the context of job growth, the loss of the high paying jobs at Avondale was the "Katrina Effect" on the parish's job picture. Just as Orleans Parish employment level has not recovered to its pre-Katrina of QCEW jobs of 240,700 jobs, Jefferson Parishes pre-Covid 19 aggregate job picture remained well below its peak job level of 202,900 QCEW jobs in December 2007. Manufacturing in 2004 in Jefferson Parish employed 18,200 people, and as of the 1st quarter 2024, there were 8,668 QCEW manufacturing jobs.

The economic damage done to Jefferson Parish by the Covid-19 Pandemic was not as severe as the damage done to Orleans Parish, but as noted earlier job losses did occur. These losses further pushed back job recovery from Hurricane Katrina which was eighteen years ago. QCEW data for the 1st quarter 2024 (Table 22) shows that total jobs in the parish were still 33,961 fewer than the 2nd quarter 2005.

Only Health Care and Social Assistance, Professional and Technical Services, Transportation and Warehousing and Management of Companies and Enterprises show recovery from that natural disaster of 2005 (Table 22 above). Looking closer at the continuing impact of the Covid-19 lockdown from the 4th quarter of 2019 to the 1st quarter 2024, the parish was still down 9,209 QCEW jobs. In that order, Health Care, Professional and Technical Services, Information and Real Estate regained or surpassed the 4th quarter 2019 job levels in this sector. Greatest losses were concentrated in Accommodations and Food Services. This sector was down by 2,731 jobs, between the 4th quarter of 2019 and the 1st quarter 2024. This was followed by Retail Trade down by 2,253, and Construction down by 1,588 jobs. Finance and Insurance was down by 1,000 QCEW jobs.

TECHNOLOGY AND ENGINEERING

Let's look at the most recent data on key technology and engineering NAICS sectors at the New Orleans MSA level.

(NOTE: the earlier look was a look at Orleans Parish) The following sectors (all identified using the latest 2023 annual average data from the Quarterly Census of Employment and Wages ,BLS) were identified as the key technology and engineering sectors in the New Orleans MSA: software publication (NAICS 5112, revised to NAICS 5132), data processing services (NAICS 518), engineering services (NAICS 54133), graphics design (NAICS 54143), computer systems design services (NAICS 5415) and private sector scientific research and development services (NAICS 5417). The sum of these added 2,862 jobs at the MSA level in 2023 over 2004. Total annual average private sector jobs in these industries were 8,566 in 2004. For 2023, QCEW jobs in these select industries averaged 11,428. Gains were made in computer systems design services during this period, with jobs going from 2,736 in 2004 to 3,855 in 2023. Engineering Services jobs increased, going from 4,129 in 2004 to 5,165 jobs in 2023. Software publishers (NAICS 5112 revised to 5132) went from an annual average of 8 employees in 2004 to 511 jobs in 2023. However, the average size (Software publishers) establishment in 2023 was 4.6 employees per business. In NAICS 5417 (private sector Scientific Research and Development), QCEW jobs in 2004 were 425 QCEW jobs. In 2023, that number was 584 jobs. The number of establishments in computer design services jumped from 398 in 2004 to 1,451 in 2023, with the average number of jobs per establishment falling from 12.9 employees per establishment (2004) to 2.7 employees for 2023. Although there has been growth in the computer design services (NAICS 5415), the relative concentration (Location Quotient) of employment in this sector relative to the U.S. sector has not changed over the period 2004 to 2023 at 0.7. This implies that the industry remains a local serving industry relative to the U.S. industry.

In the *Life Science Core Group, NAICS, 3345, 3391, 5417 and 6215* (which is critical to the establishment of a biotechnology industry) employment showed some increase in the MSA. In 2004, there were 2,044 people employed in these private sector jobs, with 218 establishments. The annual average level for 2023 was 3,181 jobs in these sectors, with 460 establishments. The average number of employees per establishment fell from 9 employees per establishment to 7 employees per establishment.

The region has been confronted in the past with promises of a robust biotechnology industry in downtown New Orleans. This industry had not materialized, in a substantial manner as expected, as the data reveals. The assumption here was that the investment of several billion dollars in an academic and health care medical complex would stimulate the establishment of a biotechnology industry. The academic and health care investment have certainly strengthened the city of New Orleans and region's economy and added several hundred to a couple of thousand medical-related jobs over time. Building a major academic research and technology complex requires far more than a new medical complex. The "numbers game," of thousands of jobs being created by the new medical complex is (also) based upon a cascade of assumptions and simply does not reflect the reality that a critical mass of large-scale academic science,

engineering and financial resources are necessary to generate thousands of jobs in medical science and biomedical engineering. For example, total NIH grants to all institutions (public and private) in Fiscal Year 2023 in the city of New Orleans was \$144 million, majority of which went to Tulane University. Total NIH grants in the city of Birmingham (public and private) were \$328 million in Fiscal Year 2023.

Further, the "fly in the ointment" is that health care, as we know it, will undergo substantial changes in the next twenty years that will place more and more strain on the physical plant (large scale hospitals) of health care to function cost-effectively in an environment where costs will drive medical innovation.

Nineteen years after the 2005 disaster, data shows an economy with bright spots (particularly, Leisure and Hospitality and Health Care and Social Assistance. (Independent of the Covid-19 health and economic disaster). However, one area of concern has been a significant loss of economic diversification. This has led to a disproportionate growth of industries with average wage levels at the lower end of the regional average. Remember, the average for a region is a calculated value derived from the distribution of wages among sectors. The problem is that the regional average in the case of the New Orleans MSA and its constituent parishes is simply a function of the types of jobs and industries.

METHODOLOGY AND COMPONENTS OF EACH INDEX

The base month for each index is August 2005 (August 2005 = 100). This month was chosen because it was the last full month of data prior to Hurricanes Katrina and Rita. Each index reflects (a) the monthly employment level of non-farm non-seasonally adjusted employment reported by the U.S. Bureau of Labor Statistics in its Current Employment Survey (CES) and (b) the current estimated employment level in the lagged Quarterly Census of Employment and Wages (QCEW) data. Actual QCEW monthly data lags CES data by six months and reporting differs between CES and the QCEW. CES is a survey, and QCEW is a census of administrative records of employers. Current employment estimates for Jefferson, Orleans and St. Tammany are generated by ordinary least squares equations created from QCEW historical data series as reported by the Louisiana Workforce Commission.

In the current series, least squares equations were developed spanning the CES and QCEW monthly data series from July 2004 to March 2024 and used to predict current QCEW estimated total employment for the MSA, Jefferson, Orleans, and St. Tammany Parishes as a function of the current monthly CES data. *The current series equations were updated in September 2024*. The next update of estimating equations will occur in December 2024 with the release of QCEW data for April, May, and June 2024. All employment data are then transformed into indices. An employment index is available for the following:

- (a) Louisiana
- (b) New Orleans MSA
- (c) Jefferson Parish
- (d) Orleans Parish
- (e) St. Tammany Parish
- (f) New Orleans MSA Leisure and Hospitality
- (g) New Orleans MSA Business and Professional Services
- (h) New Orleans MSA Health and Education Services

Model Accuracy

Model accuracy is defined as a three-month average difference between model estimated and actual QCEW employment data for the current series months, in this case, January, February, and March 2024. The three-month QCEW actual employment for the three-month period is compared against the ordinary least squares estimated employment to assess model performance. For Table MA1, and for the current period, the model underestimated

the reported job level by 1,800 jobs or 0.3% for the January, February and March 2024 period. The final QCEW job average for the three-month period was 524,400. The model average for the three-month period was 522,600. For Table MA2 (Jefferson), the model **underestimated jobs by 0.5%** or 900 jobs. The actual average for the three months of QCEW data was 182,500 jobs. The projected three-month average was 181,600 jobs. For MA 3 (Orleans), the model underestimated **job demand by 0.8%** or an average of 1,500 jobs. The actual average for the QCEW data was 186,400 jobs. The model projected an average number of jobs for the three-month period at 184,900 jobs. For St. Tammany, the model **over-projected the actual number of QCEW by 0.7%** or by 300 jobs. The QCEW data three-month average estimate was 95,200. The model projected 96,500 jobs. Tables MA 1 (Model Accuracy), MA 2 and MA 3 presented below graph the difference between model estimated and actual QCEW data from January 2007 to September 2023. St. Tammany Parish is not reported. Over the period January 2007 to March 2024, the r2 correlation for MA1 = 0.96; the r2 correlation for MA2 = 0.94 and the r2 correlation for MA3 = 0.96.

TABLE MA 1

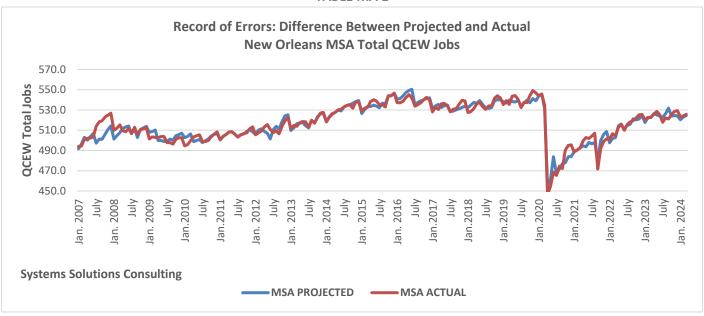


Table MA 2

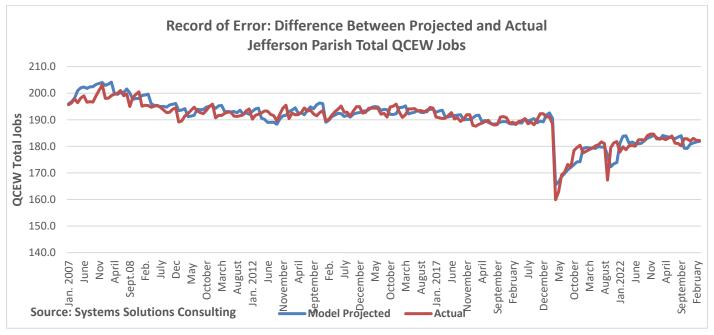
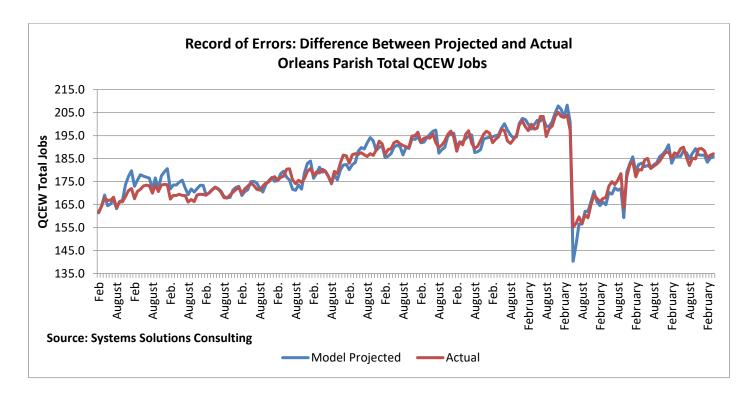


Table MA 3



DATA APPENDIX

| | CES | CES | QCEW | QCEW | QCEW |
|-----------|-----------|------|---------|-----------|-------------|
| | Louisiana | MSA | Orleans | Jefferson | St. Tammany |
| Aug. 2005 | 100 | 100 | 100 | 100 | 100 |
| Jun.2006 | 92.7 | 80.6 | 63.7 | 90.1 | 103.8 |
| Jan. 2007 | 97.2 | 83.8 | 65.9 | 91.3 | 108.2 |
| Dec.2007 | 99.1 | 88.4 | 71.4 | 94.8 | 111.9 |
| Jan. 2008 | 98.9 | 86.7 | 69.7 | 92.4 | 108.6 |
| Dec.2008 | 99.4 | 88.7 | 72.1 | 93.6 | 110 |
| Jan. 2009 | 98.9 | 86.7 | 69.6 | 91 | 109.6 |
| Dec. 2009 | 96.2 | 87.1 | 70.4 | 90.8 | 110.1 |
| Jan. 2010 | 96 | 85.6 | 70.3 | 88.3 | 108.3 |
| Dec.2010 | 96.8 | 88 | 71.6 | 91.4 | 111.5 |
| Jan. 2011 | 97 | 86.7 | 70.6 | 89 | 111 |
| Dec.2011 | 97.9 | 89.2 | 74.2 | 90.6 | 114.7 |
| Jan. 2012 | 98.1 | 87.4 | 70.6 | 88.8 | 114.1 |
| Dec.2012 | 99.1 | 90.1 | 74.2 | 91.2 | 118.3 |
| Jan. 2013 | 99.3 | 89.5 | 74 | 88.9 | 115.7 |
| Dec.2013 | 100.5 | 91.8 | 77.4 | 90.3 | 120.2 |
| Jan. 2014 | 100.8 | 90.2 | 76 | 88.5 | 118.9 |
| Dec.2014 | 102.7 | 94.1 | 79.5 | 90.9 | 125.1 |
| Jan. 2015 | 102.5 | 92.6 | 77.6 | 89.8 | 122.7 |
| Dec.2015 | 101.9 | 94.9 | 81.6 | 91.4 | 128.1 |
| Jan.2016 | 1016 | 93.2 | 79.9 | 90 | 127.5 |
| Dec.2016 | 100.8 | 94 | 80.8 | 90.7 | 130 |
| Jan.2017 | 100.8 | 92.8 | 78.2 | 89.1 | 128.2 |
| Dec.2017 | 101.2 | 94.3 | 81.5 | 89.5 | 131.1 |
| Jan. 2018 | 101.1 | 93.1 | 79.7 | 87.7 | 127 |
| Dec.2018 | 102 | 94.9 | 82.6 | 88.3 | 132.5 |
| Jan.2019 | 102 | 94.3 | 81.9 | 88 | 130.6 |
| Dec. 2019 | 101.8 | 96.3 | 84.5 | 89.7 | 133.8 |
| Jan. 2020 | 101.9 | 95.6 | 84.3 | 89.2 | 132.2 |
| Dec. 2020 | 94.6 | 87.1 | 70.4 | 84.2 | 129.1 |
| Dec.2021 | 97.9 | 90.4 | 76.3 | 84.8 | 134.1 |
| Dec. 2022 | 99.5 | 92.5 | 78 | 86.1 | 139 |
| Dec. 2023 | 99.8 | 92 | 77.5 | 83.6 | 139.7 |
| July 2024 | 100.4 | 91.4 | 78.1 | 85.0 | 140.5 |

Note: Louisiana's index is seasonally adjusted. All others are non-seasonally adjusted.

CES means Current Employment Survey produced by the Louisiana Workforce Commission and BLS.

QCEW means a Quarterly Census of Employment and Wages. The current *historical series* is up to March 2024. April 2024 to July 2024 reflect estimates based upon the August 2024 update of statistical models.

September 2024

| | Leisure and Hospitality Index | Professional and Business Services Index | Education and Health Services Index |
|-----------|-------------------------------|--|-------------------------------------|
| Aug. 2005 | 100 | 100 | 100 |
| Dec. 2005 | 54.2 | 82.8 | 66 |
| Jan. 2006 | 55.3 | 82.2 | 68.5 |
| Dec. 2006 | 75 | 91.4 | 77.5 |
| Jan.2007 | 74.2 | 91.1 | 79.4 |
| Dec. 2007 | 79.1 | 95.2 | 86.4 |
| Jan. 2008 | 78.5 | 90.8 | 85.9 |
| Dec.2008 | 78.6 | 93.4 | 91 |
| Jan. 2009 | 77.4 | 90.4 | 91.5 |
| Dec. 2009 | 78.7 | 92.2 | 95.8 |
| Jan. 2010 | 78.8 | 89.1 | 95.7 |
| Dec. 2010 | 84.2 | 92.5 | 97.3 |
| Jan.2011 | 82.4 | 90.3 | 95.7 |
| Dec. 2011 | 88.5 | 94.1 | 100.9 |
| Jan.2012 | 88.1 | 91.3 | 98.8 |
| Dec. 2012 | 91.4 | 94.2 | 102.5 |
| Jan.2013 | 90.6 | 94.6 | 104.2 |
| Dec. 2013 | 93.7 | 100 | 108.9 |
| Jan. 2014 | 93.5 | 98.1 | 108.3 |
| Dec. 2014 | 97.1 | 100.1 | 112.3 |
| Jan.2015 | 97.4 | 99.7 | 114 |
| Dec. 2015 | 101 | 101.2 | 120.7 |
| Jan.2016 | 100.1 | 99.6 | 119.9 |
| Dec. 2016 | 102.1 | 100 | 124.4 |
| Jan. 2017 | 100.9 | 100.1 | 122.2 |
| Jan. 2018 | 103.4 | 99.6 | 121 |
| Dec, 2018 | 105.2 | 101.1 | 126.2 |
| Jan. 2019 | 106.5 | 101.3 | 125.6 |
| Dec. 2019 | 109.0 | 105.4 | 128.5 |
| Jan. 2020 | 108.4 | 103.6 | 129.4 |
| Dec. 2020 | 73.7 | 94.5 | 124.8 |
| Jan. 2021 | 73.0 | 96.2 | 128.0 |
| Dec. 2021 | 87.3 | 104.4 | 124.9 |
| Jan. 2022 | 84.5 | 101.6 | 127.5 |
| Dec.2022 | 92.7 | 102.8 | 133.3 |
| Jan. 2023 | 92.9 | 102.6 | 132.2 |
| Dec. 2023 | 94.5 | 100.0 | 132.6 |
| July 2024 | 90.7 | 101.7 | 133.3 |

Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics

NON-FARM BENCHMARK EMPLOYMENT REVISIONS

Source: Bureau of Labor Statistics, U.S. Department of Commerce; Revisions are posted in March of each year. Not Seasonally adjusted

Louisiana

| | 2019 | | 2019 2020 2021 | | | 20 | 22 | 2023 | | |
|----------------|----------|---------|----------------|---------|----------|---------|----------|---------|----------|---------|
| | Original | Revised | Original | Revised | Original | Revised | Original | Revised | Original | Revised |
| Jan | 1962.2 | 1978.4 | 1970.3 | 1977.7 | 1815.9 | 1835.6 | 1883.2 | 1889.5 | 1927.8 | 1936.8 |
| Feb | 1973.1 | 1992.3 | 1988.3 | 1988.6 | 1826.7 | 1843.3 | 1901.9 | 1907.4 | 1939.5 | 1948.5 |
| Mar | 1982.1 | 1994.1 | 1959.6 | 1968.5 | 1831.9 | 1857.3 | 1905.7 | 1905.4 | 1948.9 | 1954.5 |
| Apr | 1987.7 | 2002.5 | 1728.9 | 1715.7 | 1835.9 | 1869.6 | 1911.5 | 1914.7 | 1959.5 | 1957.2 |
| May | 1995.1 | 2003.5 | 1764.1 | 1739.2 | 1838.7 | 1876.3 | 1916.9 | 1918.9 | 1963.5 | 1962.4 |
| Jun | 1989.6 | 1991.2 | 1819.5 | 1770.0 | 1841.6 | 1867.1 | 1908.5 | 1902.7 | 1954.7 | 1951.9 |
| Jul | 1972.6 | 1966.5 | 1822.3 | 1773.9 | 1838.1 | 1868.9 | 1912.4 | 1908.5 | 1946.9 | 1931.5 |
| Aug | 1979.3 | 1985.8 | 1842.5 | 1799.1 | 1840.6 | 1876.7 | 1921.6 | 1921.3 | 1960.6 | 1946.4 |
| Sep | 1989.9 | 1987.2 | 1853.4 | 1797.9 | 1815.6 | 1832.8 | 1932.8 | 1927.1 | 1975.9 | 1955.7 |
| Oct | 2000.5 | 2003.9 | 1884.5 | 1827.1 | 1868.2 | 1890.3 | 1943.5 | 1942.8 | 1989.3 | 1967.4 |
| Nov | 2012.2 | 2015.9 | 1908.0 | 1843.9 | 1884.5 | 1903.8 | 1954.3 | 1951.8 | 1989.3 | 1967.3 |
| Dec | 1999.3 | 2001.8 | 1911.7 | 1846.1 | 1889.0 | 1910.5 | 1958.7 | 1952.5 | 1989.4 | 1964.1 |
| Annual Average | 1987.0 | 1993.6 | 1871.1 | 1837.3 | 1843.9 | 1869.4 | 1920.9 | 1920.2 | 1962.1 | 1953.6 |

New Orleans MSA

| | | | | INCW | nicalis ivisa | • | | | | |
|----------------|----------|----------------|----------|---------|---------------|---------|----------|---------|----------|---------|
| | 20 | 2019 2020 2021 | | 21 | 20 | 22 | 20 | 23 | | |
| | Original | Revised | Original | Revised | Original | Revised | Original | Revised | Original | Revised |
| Jan | 581.0 | 579.6 | 584.1 | 587.4 | 521.4 | 529.8 | 546.1 | 545.8 | 559.9 | 563.2 |
| Feb | 579.4 | 584.9 | 586.3 | 590.6 | 523.9 | 533.4 | 550.9 | 552.7 | 563.9 | 566.6 |
| Mar | 582.6 | 580.7 | 570.5 | 578.8 | 521.9 | 535.3 | 551.9 | 551.2 | 564.7 | 566.4 |
| Apr | 587.0 | 587.7 | 479.6 | 484.3 | 525.4 | 540.8 | 549.5 | 555.2 | 568.7 | 569.1 |
| May | 586.5 | 588.4 | 486.9 | 492.4 | 524.3 | 544.4 | 550.3 | 557.6 | 567.2 | 571.8 |
| Jun | 588.4 | 585.9 | 511.3 | 506.4 | 529.0 | 542.6 | 548.9 | 553.8 | 566.1 | 568.4 |
| Jul | 581.6 | 576.9 | 509.5 | 506.4 | 527.4 | 542.9 | 554.2 | 552.3 | 563.5 | 558.8 |
| Aug | 585.1 | 582.6 | 515.0 | 515.2 | 528.6 | 546.2 | 555.6 | 555.6 | 567.3 | 562.2 |
| Sep | 588.4 | 582.0 | 521.1 | 515.1 | 508.8 | 510.7 | 561.5 | 555.7 | 573.4 | 562.9 |
| Oct | 592.8 | 589.3 | 529.5 | 521.9 | 533.2 | 540.1 | 566.4 | 562.7 | 578.4 | 565.5 |
| Nov | 599.9 | 594.4 | 540.2 | 528.8 | 538.8 | 547.2 | 568.9 | 563.8 | 577.5 | 566.0 |
| Dec | 586.6 | 591.7 | 542.8 | 529.0 | 541.8 | 550.3 | 573 | 567.7 | 568.2 | 565.6 |
| Annual Average | 586.6 | 585.3 | 531.4 | 529.7 | 527.0 | 538.6 | 556.4 | 556.2 | 568.2 | 565.5 |