

The New Orleans Index at Eight

August 2013

MEASURING GREATER NEW ORLEANS' PROGRESS TOWARD PROSPERITY

creative cap

diversity

networks pe

perspectives

cooperative

mobility

markets

openness

cohesive

opportunity

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visionary

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collaboration growth

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1980

progress

clusters

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upwards

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2000

2010

potential middle-class

interaction

inviting SOCIAL assets acceptance

1990

entrepreneurship
future shared strength
innovation resilience
tolerance maximize
culture inclusion

2020

2030

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Principal authors

Allison Plyer, Executive Director and Chief Demographer

Elaine Ortiz, Senior Research Associate

Ben Horwitz, Research Associate

George Hobor, Senior Research Fellow

Editorial assistance

Vicki Mack and Susan Sellers

Cover Design

Jakob Rosenzweig (Thalweg Studio)

Acknowledgments

The Data Center wishes to thank Baptist Community Ministries, blue moon fund, Foundation for Louisiana, Greater New Orleans Foundation, JPMorgan Chase Foundation, and Stirling Properties for their support of *The New Orleans Index at Eight*. Additional gratitude goes to United Way of Southeast Louisiana, RosaMary Foundation, Metropolitan Opportunities Fund, Methodist Health Systems Foundation, Institute for Mental Hygiene, John S. and James L. Knight Foundation, and Walton Family Foundation for their support of the ongoing work of the Data Center.

The authors are also grateful to Walter Brooks, Executive Director of the Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, and St. Tammany Parishes, who provided special compilations of data on bike pathways. Additional thanks go to Ann Carpenter, Todd Greene, Karen Leone de Nie, and Nancy Montoya of the Federal Reserve Bank of Atlanta, who provided special compilations of historical crime data. And the authors thank Brady Couvillion of the USGS National Wetlands Research Center, Coastal Restoration Field Station, who created special compilations of coastal land loss data.

As an original partner, the Metropolitan Policy Program at the Brookings Institution remains influential in the construction of *The New Orleans Index*. Their work continues to serve as a model for accessible and effective research reports. The authors wish to express individual thanks and gratitude to Audrey Singer at Brookings who provided important insights on analyses. In addition, thanks go to the many people who facilitated access to and provided feedback and editorial contributions on specific indicators, including Richard Campanella, Sharon Courtney, Mark Davis, Karen DeSalvo, Lynn Dupont, Vennetta Hayes, Ann Commagere Hijuelos, Jo-anna Jones, Stephen Roberts, Daniel Schwartz, Susan Sellers, Debra Vaughan, and Jon Wool.

Steering Committee

Many people served on the steering committee for *The New Orleans Index at Eight*, providing valuable advice and comments on the indicators selected and the report's findings and implications. For their contributions, we wish to acknowledge:

Mary Ambrose Bob Brown Santiago Burgos Richard Campanella Bob Collins Sharon Courtney Flozell Daniels, Jr.

Mark Davis

Karen DeSalvo Melissa Ehlinger Peter Fos Paul Harang Doug Harris Byron Harrell Michael Hecht Tricia Jones Brett Kemker Walter Kimbrough Mathilde Laisne Deborah Lea Rod Miller Gloria Moultrie Andre Perry

James Perry

Albert Ruesga Lewis Stirling Lizette Terral Michael Williamson Jon Wool

About The New Orleans Index at Eight

Following Hurricane Katrina and the levee failures, the Brookings Institution Metropolitan Policy Program began publishing *The Katrina Index* in December 2005 to track the recovery of the New Orleans metro with indicators measuring population, economy, housing, and infrastructure. In 2007, the Greater New Orleans Community Data Center began to co-publish the Index with the Brookings Institution with an expanded number of indicators. Together, the Data Center and Brookings renamed the report *The New Orleans Index*. The Index's value as a regularly updated, one-stop shop of Katrina recovery indicators made it the go-to resource for national and local media, decisionmakers across all levels of government, researchers, and leaders in the private sector and nonprofit community.

The New Orleans Index at Five, published for the occasion of the fifth anniversary of Katrina in August 2010, moved past disaster recovery to assess the remaking of a great American city and region. This report relied on 20 indicators to examine progress toward metropolitan prosperity organized by economy, inclusion, quality of life, and sustainability. In addition, The New Orleans Index at Five systematically documented major post-Katrina reforms with the inclusion of seven essays contributed by leading local scholars.

For the occasion of the sixth anniversary of Katrina, the Brookings Institution Press released an edited volume entitled *Resilience and Opportunity: Lessons from the U.S. Gulf Coast after Katrina and Rita.* This volume combined the essays published as part of *The New Orleans Index at Five* collection along with additional essays covering a larger number of post-Katrina reform efforts, including Mississippi reforms.

The New Orleans Index at Eight provides the most up-to-date data on New Orleans' transition from recovery to transformation. This Index is intended to be part of an ongoing series of reports that measure progress and prosperity in the greater New Orleans area with indicators selected from reliable data sources that are regularly updated to allow for tracking going forward.

The New Orleans Index at Eight examines trends in the federally-defined 7-parish New Orleans metropolitan statistical area. For some economic indicators, we also consider the greater New Orleans 10-parish region often used in local economic development efforts. (See Reference Maps on pages 10-11). For several indicators of inclusion and quality of life, the Index examines trends for the city of New Orleans as compared to the rest of the metro area to assess the historical and recent contrast between the city of New Orleans and the more suburban surrounding parishes.

For the vast majority of indicators, we compare the New Orleans metro area to the United States. For many economic indicators, the New Orleans metro is also compared to a group of aspirational metros and a group of "weak city" metros to provide two different benchmarks of New Orleans' progress toward prosperity. The 57 "weak city" metros were selected from a 2007 Brookings Institution report entitled "Restoring Prosperity: The State Role in Revitalizing America's Older Industrial Cities." In this report, Brookings identifies New Orleans among a group of older industrial cities that experienced slow or negative economic growth from 1990 to 2000. The aspirational metros are Southern metros with populations of greater than 1,000,000 that have experienced better than 10 percent job growth since 2000. These metros were selected to align with post-Katrina expectations for a stronger and more resilient New Orleans area economy.

Table of Contents

Executive Summary	6
Reference Maps: Geographies of Analysis	10
Economic Growth	12
Job Growth	13
Drivers of the Economy	16
Wages	18
Productivity	19
Entrepreneurship	20
Innovation	21
Job Sprawl	22
Educated Workforce	24
Inclusion	25
Median Household Income	26
Median Household Income by Race and Ethnicity	27
Educational Attainment by Race/Ethnicity and Sex	28
Employment Rates by Race/Ethnicity and Sex	30
Minority-Owned Businesses	32
Jail Incarceration Rates	33
Size of the City's Middle Class	34
Size of the City's Middle Class by Race and Ethnicity	35
Suburbanization of Poverty	36
Affordable Housing	38
Quality of Life	39
Arts and Culture	40
Youth Investment	41
Quality Public Education	42
Public Safety	44
Life Expectancy	46
Sustainability	47
Bike Pathways	
Commuting by Public Transit	
Air Quality	
Groundwater Salinity	
Coastal Wetlands	
Technical Notes on Data Sources	
Endnotes	59
About the Authors (back cover)	64

Executive Summary

It is nearly eight years since Katrina and the levee failures, and an important time to take stock of the region's progress. In two short years, at the 10th anniversary of Katrina, the nation will turn its attention to Southeast Louisiana to assess whether the massive federal and charitable assistance invested here has paid off.

There is no doubt progress has been made. Leaders and residents have undertaken an unprecedented number of reforms that, over time, may have transformative outcomes. In addition, the New Orleans metro has weathered the Great Recession impressively. The recession took hold locally in 2008, and the metro lost only 1 percent of its jobs before the economy rebounded. In contrast, the nation hemorrhaged jobs beginning in 2007 and lost 6 percent before its turnaround. By 2012, the New Orleans metro had fully recovered, and employment levels surpassed the 2008 peak by 1 percent. At the same time, the nation remained 3 percent behind its pre-recession employment level.

Yet the question lingers how much of New Orleans' success has been supported by one-time recovery investments that are tapering. New Orleanians and outside observers alike wonder: Has the metro truly broken from its historic path and taken up a new trajectory; and if yes, what are the unique elements of New Orleans' current — and future — success?

The answer to the first question involves an assessment of where the metro is positioned in the process of redefining itself. *The New Orleans Index at Eight* examines this question by comparing indicators for the New Orleans metro with that of a peer group of post-industrial metros with which New Orleans was identified pre-2000, and separately with a group of aspirational Southern metros that have experienced enviable economic growth since 2000. Has New Orleans joined the ranks of Nashville, Orlando, Raleigh, and Austin?

The answer to the second question about the metro's unique elements is more complex, but can provide a roadmap for the steps that need to be taken to solidify New Orleans' progress toward prosperity. It involves identifying the metro's strengths and how they can be packaged together in ways that yield a distinct new identity for the region — one that is not enabled by others but one that is forged from within. Answering this question also involves identifying New Orleans' weaknesses to assist leaders in addressing them in ways that work with the metro's strengths — to fully realize New Orleans' potential and affirm its position as an emerging leader among U.S. metropolitan areas.

The New Orleans Index at Eight analyzes over twenty indicators reaching back to 1980 to provide crucial information for formulating the answers. Our findings on economic trends, quality of life, inclusion, and sustainability are not just findings about today, but source material for shaping the future. These findings show:

The New Orleans metro is taking the first steps toward a new path, with signs of a more competitive economy and expanded amenities.

Economic Growth

 By 2012, the New Orleans metro had recouped all its recession-era losses and reached 1 percent above its 2008 job level, close to the aspirational metros which had reached 2 percent above their 2008 job level. In contrast, the nation and weaker post-industrial metros remained more than 2 percent below their 2008 job levels.

- The New Orleans regional economy continues to diversify by growing knowledge-based industries, such as higher education and insurance, while maintaining older industrial strengths. Industries known for occupational depth, such as heavy construction and engineering, expanded significantly and can support further diversification by supplying highly skilled professionals for more knowledge-intensive industries.
- Entrepreneurship in the New Orleans metro continues to expand reaching 501 business startups per 100,000 adults in the three-year period ending in 2012 a rate that exceeds the nation and aspirational metros by 56 and 33 percent respectively.

Inclusion

- While median household income in the New Orleans metro fell 8 percent from 1999 to 2011, it fell more sharply (11 percent) nationwide over the same time frame.
- As the metro's minority share of the population fell post-Katrina, our share of all businesses that are minority-owned continued to rise, maintaining our advantage over the rest of the nation at 27 versus 21 percent.

Quality of Life

- New Orleans has always been known as a distinct location for arts and culture and has built upon this reputation by growing the number of arts and culture nonprofits to 34 organizations per 100,000 residents — more than double the national rate of 13 per 100,000.
- The City of New Orleans spent \$10.1 million on recreational programs in 2012, exceeding pre-Katrina expenditures by 18 percent.

Sustainability

 Bicycle lanes and pathways are growing exponentially in New Orleans — now at 56.2 miles compared to the 10.7 miles that existed in 2004.

Yet on several economic, social, and environmental metrics, the New Orleans metro is not performing as well as the nation or aspirational metros.

Economic Growth

• The advantage in productivity that the New Orleans metro has enjoyed over the nation has steadily dwindled since 1980. Although 14 percent higher than the U.S. in 2011, productivity grew by only 24 percent since 1980 in comparison to national growth of 57 percent.

Inclusion

 Adult educational attainment, a key factor influencing success in today's economy, is not being advanced in the New Orleans metro at the same rate as in aspirational metros, especially for black men, who experienced no increase since 2000 in the percent obtaining bachelor's degrees.

- Today's service-based economy is experienced differently by race and gender.
 Employment for women has increased in the New Orleans metro across all racial and ethnic groups since 1980. In contrast, it has fallen for men, and black men have been most impacted. In 2011, only 53 percent of working age black men in the metro were employed compared to 61 percent in aspirational metros.
- The benefits of the metro's minority-owned businesses have not been fully realized with the share of all receipts accruing to minority-owned businesses stagnant at only 2 percent from 1997 to 2007, lower than the national average.
- Despite decreases post-Katrina, jail incarceration rates in Orleans Parish are higher than the rest of the New Orleans metro, and several times greater than the national rate as of 2011.
- The share of the metro's poor that lives in suburbs continues to expand, reaching 56 percent by 2011.

Quality of life

 Crime rates have declined to lower than pre-Katrina levels, but the city's 2011 crime rates remain significantly higher than the national averages for both violent and property crimes.

Sustainability

- In the three-year period ending in 2012, the New Orleans metro experienced nearly double the number of "unhealthy" air quality days as the aspirational metro of Houston, which made considerable improvements in its air quality while maintaining a similar industrial base to New Orleans.
- Six sampled sites within the New Orleans metro show increases in the concentration of chloride in the water since 1951, and as of 2008, three of these sites have converted from freshwater to saltwater an indicator of saltwater encroachment.

Conclusion

Despite all the shocks it has endured, New Orleans may be on a path toward long-term success. But to fulfill its potential, leaders must look to bolster current strengths and add to them by addressing persistent challenges.

The economy is a current strength of New Orleans. Diversification is happening with traditional industries (such as shipping and tourism) and newer knowledge-based industries (such as higher education, insurance agencies, and heavy construction and engineering) expanding despite the Great Recession. Entrepreneurial activity is taking off. For New Orleans to expand diversification, producers within older industries can tap new markets by rearranging their current products and expertise. In emerging industries, producers can aim to export specializations more broadly — even globally — to sustain success. Entrepreneurship can help achieve these goals.

Improvements in quality of life are being enjoyed across the metro. The presence of arts and culture organizations in the city has never been stronger. When coupled with entrepreneurship trends, it is clear the metro is a creative place. There is no doubt that

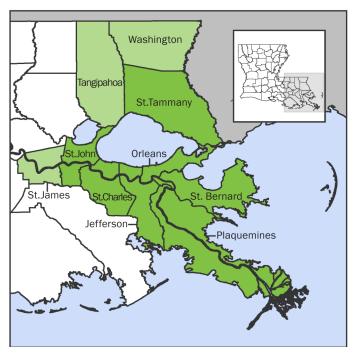
a commitment to improving amenities, such as recreational programs and education, is helping to solidify New Orleans' identity as a unique place.

Yet, preparation of the labor force is happening unevenly, and the benefits of employment are being accrued unevenly as well. To be sure, all the progress the New Orleans metro makes in other arenas will not be enough to signal to the world the emergence of a qualitatively different place post-Katrina if large segments of the population continue to be left behind. New Orleans must cultivate a culture that promotes openness, creative collaboration, and interaction across groups that becomes evident in its economic activity. The metro's deep industrial mix can help achieve this goal, as it is capable of absorbing workers across all skill levels. Labor force preparation should build the highest levels of human capital but also focus on vocational skills that can quickly lead to better paying careers. This is most effectively done in collaboration between industry clusters, educational institutions, and social service providers to ensure labor shortages are met while maximizing opportunities for local residents. Increased commerce with minorityowned businesses could spur expanded employment and training opportunities for African American residents in particular. Finally, the public education, health care, and criminal justice reforms underway have significant potential to raise standards of living and build a safer and more just community. Leaders and residents must sustain and build upon these reforms. To do so, they will need to continuously learn and adapt even in mid-course when needed. This will require trust, which is best fostered through transparency, accountability, and the use of data and objective research to inform decisionmaking.

At the end of the day, perhaps the most daunting issue New Orleans faces is coastal wetland loss. Creating a new New Orleans will mean little if it cannot be protected for the long-term. Fortunately, coastal restoration has the potential to both bolster economic diversification and provide employment for a diversity of workers. Restoration work, which will require labor of varying skills, can stimulate the adaptation of older industries and hone economic expertise for broader export. The pioneering collaboration underway between Southeast Louisiana's economic development leaders will be key to maximizing the benefits of restoration and positioning the region to be globally competitive in rapidly expanding sustainable industries. If approached creatively and with thought to long-term effects beyond just securing our coasts, restoration could become the defining event for New Orleans — instead of Katrina.

Reference Maps: Geographies of Analysis

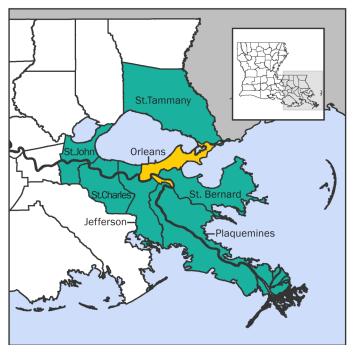
New Orleans metro and greater New Orleans 10-parish region



The New Orleans metro refers to the 7-parish New Orleans-Metairie-Kenner Metropolitan Statistical Area (MSA). An MSA is an area that includes an urban core with a population over 50,000 and adjacent counties/parishes with a high degree of social and economic integration with that core.

For some indicators, data is presented for the greater New Orleans 10-parish region, which is the area often used in local economic development efforts. The greater New Orleans region is defined as the 7-parish New Orleans metro (shown in dark green) plus the three parishes of St. James, Tangipahoa, and Washington (shown in light green).

Orleans Parish and the rest of the New Orleans metro

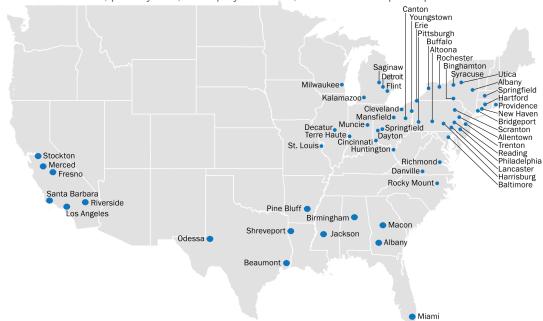


For some indicators in this report (including poverty rates and estimates, crime rates, jail incarceration rates, commuting by public transit, and households paying unaffordable housing costs), data for Orleans Parish is compared to the rest of the New Orleans metro to assess the historical and recent contrast between the city of New Orleans (which has the same boundaries as Orleans Parish) and the more suburban surrounding parishes.

Reference Maps: Geographies of Analysis, continued

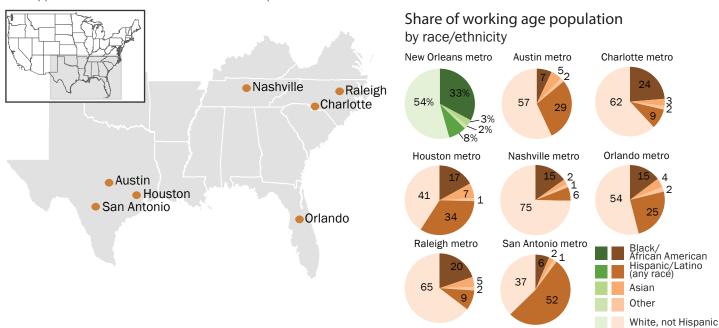
"Weak City" metros

For some indicators, the New Orleans metro is compared to a group of 57 "weak city" metros. These metros are from a 2007 Brookings Institution report in which New Orleans is identified among a group of 65 older industrial cities that experienced slow or negative economic growth from 1990 to 2000 as well as poorer residential well-being as measured by 2000 per capita income, median household income, poverty rate, unemployment rate, and labor force participation rate.²



Aspirational metros

For some indicators, the New Orleans metro is compared to a group of seven aspirational metros. The aspirational metros are Southern metros with populations of greater than 1,000,000 that have experienced better than 10 percent job growth since 2000. The racial/ethnic make-up of the working age population of these aspirational metros is provided below as context for the indicators that appear in the "Inclusion" section of this report.



Economic Growth

Quality economic growth boosts productivity, spurs innovation and entrepreneurship, and generates quality jobs and rising incomes.

- From 2008 to 2010, the New Orleans metro lost only 1 percent of jobs compared to 5 percent of jobs lost nationwide. By 2012, New Orleans had recouped all its recessionera losses and reached 1 percent above its 2008 job level, while the nation and "weak city" metros remained more than 2 percent below their 2008 job levels. The aspirational metros slightly outpaced the New Orleans metro and by 2012 reached 2 percent above their 2008 job level.
- Since the onset of the Great Recession, jobs in knowledge-based industries including
 higher education and insurance agencies have continued to gain ground in the greater
 New Orleans region. Heavy construction and engineering expanded significantly and
 could supply the highly skilled professionals needed to attract and develop more
 knowledge-intensive industries in the metro.
- After spiking 14 percent from 2004 to 2006, average wages declined 1 percent in the New Orleans metro through 2011. The current average wage of \$47,295 is 6 percent lower than the U.S. average a smaller gap than in 2004 when local average wages were 15 percent lower than the nation.
- Productivity in the New Orleans metro was 14 percent higher than the U.S. in 2011. However, the U.S. is catching up. Since 1980, metro area productivity has risen by just 24 percent compared to 57 percent nationally.
- The New Orleans metro's rate of business startups continues to grow, reaching 501 startups per 100,000 adults during the most recent three-year period ending in 2012

 a level which is 56 percent higher than the national average, and an impressive 33 percent higher than the aspirational metros.
- Job losses due to Hurricane Katrina and the levee failures accelerated the shifting of jobs to suburban parishes. Jefferson Parish was the top job center in 2011 with 38 percent of metro area jobs.
- The New Orleans metro lagged the nation in the growth of the share of its adult population with bachelor's degrees with a gain of 3 percent from 2000 to 2011 compared to 4 percent nationally, but it did keep up with the nation in producing adults with some college education or an associate's degree, which grew 6 percent from 2000 to 2011.

Job Growth

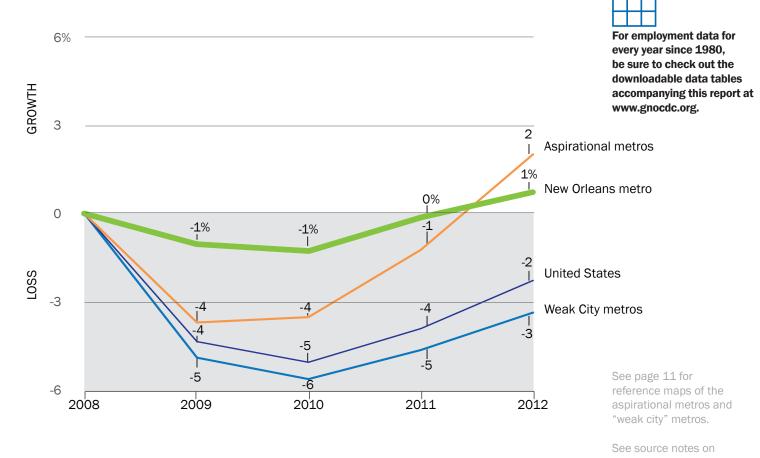
Why is this important? Job growth is commonly used to assess the pace of economic growth in a metro area. The Bureau of Labor Statistics measures nonfarm jobs, which is the number of full-time and part-time positions on company payrolls, including civilian government agencies. This definition excludes self-employed, unpaid, and household workers. Job growth is important in order to raise living standards, provide opportunities for an expanding labor force, and increase the tax base.

How is the New Orleans metro area doing?

The New Orleans metro is now 1 percent above its 2008 job level, while the aspirational metros are 2 percent above their 2008 job level. The New Orleans' economy underperformed the nation from the 1980's oil bust until Katrina struck and the metro lost nearly a quarter of all jobs. Starting in 2006, the metro was rapidly recovering jobs and reached a peak level in 2008 when the Great Recession stalled the post-Katrina recovery. From 2008 to 2010, jobs declined by 1 percent in the New Orleans metro, a good performance by almost any comparison. "Weak city" metros, the nation, and aspirational metros had job losses of 6 percent, 5 percent, and 4 percent, respectively. As job growth resumed through 2012, the New Orleans metro reached 1 percent above its 2008 job peak while aspirational metros reached 2 percent above their peak levels, also achieved in 2008.

Job loss and recovery since the onset of the Great Recession





page 54 for technical details.

Source: U.S. Bureau of Labor Statistics.

Job Growth, continued

How is the greater New Orleans 10-parish region doing?

The construction industry had more jobs in 2011 than pre-Katrina, but all other industries had fewer jobs. Greater New Orleans was recovering from Hurricane Katrina when the region was hit by the Great Recession in 2008 and the Deepwater Horizon oil spill in 2010. While most sectors have gained jobs since 2010, four industries — manufacturing, oil and gas, government, and administrative and waste services — have shed jobs. Nonetheless, government still represents the largest share of employment in the region at 17 percent, followed by wholesale and retail trade at 15 percent, leisure and hospitality at 13 percent, and professional services at 13 percent.

See page 10 for a reference map of the New Orleans 10-parish region.

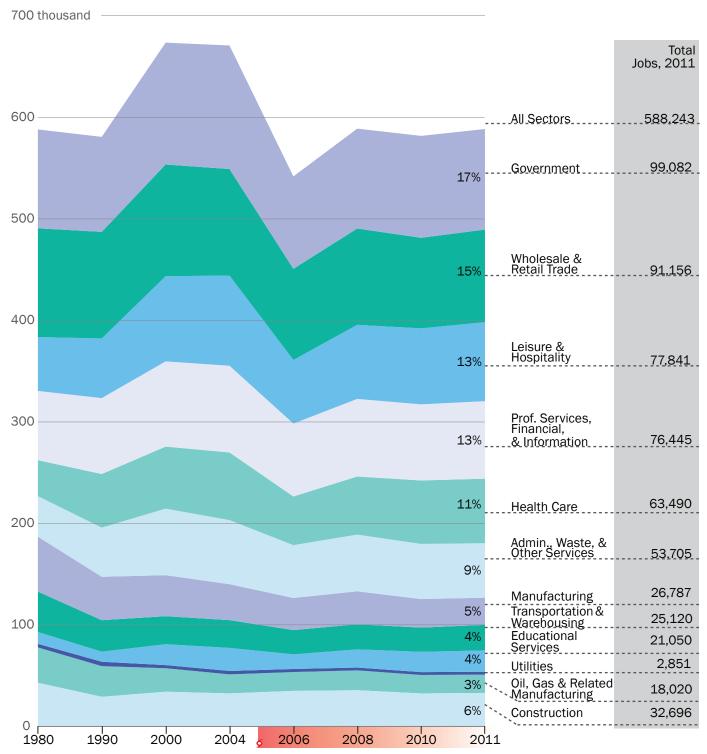
See source notes on page 54 for technical details.

Source: Moody's Analytics (U.S. Bureau of Labor Statistics: CES, QCEW).

Job Growth, continued

Share of nonfarm jobs by sector

New Orleans 10-parish region



Drivers of the Economy

About regional "export" jobs

In the New Orleans 10-parish region, one-third of jobs are "export" oriented - serving customers outside the region - and two-thirds of jobs serve local customers. Thus, each "export" industry job supports, on average, two local jobs. In addition, "export" industries pay higher average wages than







To learn more about New Orleans' regional "export" specializations, see Economic **Synergies across Southeast** Louisiana at www.gnocdc.org.

Why is this important? The "export" of products and services to other regions is the chief driver of regional growth and development. The sale of goods and services for local consumption is, on the other hand, more a consequence of the region's overall development than a driver of it.5 Economists generally agree that an increase (or decrease) in the number of "export" jobs actually causes an increase (or decrease) in the number of local-serving jobs.

Every regional economy has a number of "export" jobs. However, the degree to which regional economies specialize in different "export" industries varies greatly. We define specializations as industries with a large number of "export" jobs and a high concentration of total jobs relative to the United States. Quantifying and tracking these industries over time requires a more sophisticated analysis than is typically available in regional economic reports, but doing so allows for a clearer understanding of the strengths and vulnerabilities of the New Orleans area economy.

How is the greater New Orleans 10-parish region doing?

Since 1980, greater New Orleans has experienced notable growth in knowledgebased industries including higher education, legal services, insurance agencies, and motion picture. Although the greater New Orleans 10-parish region is still largely dependent on legacy industries that have declined significantly since the 1980s. including tourism, oil and gas, and shipping, the region has made important — albeit slow - shifts to a more diverse economy.

Tourism is the largest specialization in greater New Orleans, even after Hurricane Katrina wiped out more than 20,000 jobs. Employment is rebounding but the tourism sector pays only about \$32,000 annually, considerably less than even local-serving jobs. The next largest driver industry is oil and gas, which was shedding jobs rapidly before Katrina. Although this industry was largely spared by Katrina, employment in oil and gas continued its downward trend with the onset of the Great Recession. Since 2008, the oil and gas industry has lost nearly 1,500 jobs. Shipping, on the other hand, has remained relatively stable through both Katrina and the recession. Indeed, since 2008, the shipping industry has added more than 500 jobs.

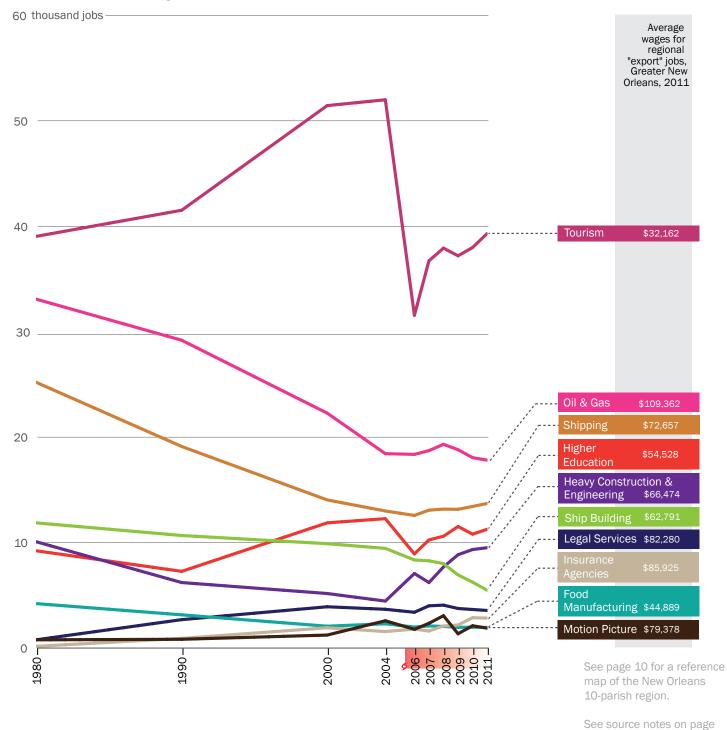
Higher education shed about 3,300 jobs when the levees failed in 2005, but has regained most of those jobs and has continued to grow jobs since 2008. By 2011, higher education had only 1,000 fewer jobs than in 2004. Legal services, insurance agencies, and motion picture represent emerging regional "export" industries, such as law firms with expertise in the oil and gas industry. Since 2004, "export" jobs in insurance agencies and back-office insurance services have increased by about 1,200 jobs. And law firms have largely held their own since 2004 — declining by just 3 percent, or 100 jobs. Employment in the motion picture industry is variable but has hovered around 2,000 jobs over the last decade.

Employment in heavy construction and engineering has doubled since 2004 due to post-Katrina rebuilding activity and could represent the foundation for new economic transformations in the region. These industries require a highly skilled labor force, which if retained and developed, will be an asset for existing employers, a draw for outside investment, and a potential source of local innovation.

Drivers of the Economy, continued

Regional "export" jobs for the 10 largest "export" specializations

New Orleans 10-parish region



Statistics: CES, QCEW).

54 for technical details.

Source: Moody's Analytics (U.S. Bureau of Labor

Wages

Why is this important? Wage levels and wage growth are important because they measure the ability of a metro economy to secure a high and rising standard of living for its residents.

How is the New Orleans metro area doing?

The New Orleans metro average wage declined 1 percent from 2006 to 2011 such that the metro average wage of \$47,295 is now 6 percent lower than the U.S. average. New Orleans' wages fell so far behind the U.S during the 1980's and 1990's, that the metro is still playing catch up. Between 1980 and 2000, wages increased only 3 percent in the metro compared to 28 percent in the U.S. From 2000 to 2004, wage growth accelerated 7 percent (compared to 2 percent nationally), as knowledge-based industries began to grow in New Orleans. From 2004 to 2006, the metro enjoyed a 14 percent wage increase compared to just 2 percent in the U.S. Yet despite that impressive wage gain — which to some extent reflects job losses in low-wage industries such as tourism rather than higher wages in new or existing jobs — 2006 average wages in the metro were still 4 percent lower than the U.S. average. Since 2006, wages have declined 1 percent in the metro while increasing 1 percent in the U.S. as a result, the New Orleans metro average wage of \$47,295 was 6 percent lower than the U.S. average in 2011.

Average annual wages

2011 inflation-adjusted dollars



See source notes on page 54 for technical details.

Source: Regional Economic Information System, U.S. Bureau of Economic Analysis, U.S. Department of Commerce.

1980

1990

'04**o**

2000

Productivity

Why is this important? Growth in productivity, or the total value of goods and services per worker in a region, is fundamental to the long-term improvement of living standards for a community's workers and businesses. Growth in productivity can be spurred by local ingenuity, where communities "take resources and rearrange them in ways that are more valuable." Gross metro product (GMP) per job is an indicator of productivity that measures the average value of goods and services produced by each job in the region. Although growth in GMP per job is important for a region's long-term improvement of living standards, it does not mean that everyone in the metropolitan area benefits equally, or even at all, from that growth.

How is the New Orleans metro area doing?

Productivity in the New Orleans metro was 14 percent higher than the U.S. in 2011. Historically, the level of productivity has been higher in the New Orleans metro than in the United States, although the difference has narrowed since 1980. The New Orleans metro's advantage is largely attributable to the region's lucrative oil and gas resources. Between 2004 and 2011, productivity in metro New Orleans increased by 10 percent, while it increased 9 percent nationally. However, looking back to 1980, the metro area's GMP per job has risen by just 24 percent compared to 57 percent nationally. Gross metro product per job spiked immediately after Katrina due in part to job losses in the low-wage tourism sector while jobs in the more lucrative oil and gas industry were mostly spared. Productivity declined from 2006 to 2008 as tourism and local-serving industries regained jobs, and then increased again as the Great Recession culled many less productive jobs from the economy.

Gross metro product (GMP) per job

2011 inflation-adjusted dollars



"Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker."

- Paul Krugman⁸

See source notes on page 54 for technical details.

Source: Moody's Analytics (U.S. Bureau of Labor Statistics: CES, QCEW; U.S. Bureau of Economic Analysis).

"Firm survival rates across time are remarkably stable. In the first two years, roughly a third of these companies will fail and, in five years, just under half (48 percent) will remain."

- Dane Stangler⁹

Data for eight of the 57 "weak city" metros defined on page 11 were not available.

See page 11 for reference maps of the aspirational metros and "weak city" metros.

See source notes on page 54 for technical details.

Source: Kauffman Index of Entrepreneurial Activity.

Entrepreneurship

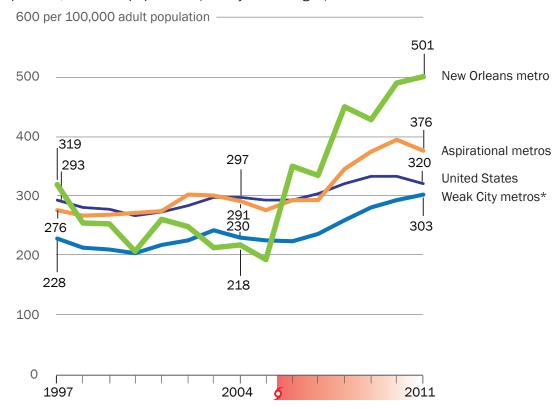
Why is this important? Entrepreneurship is a critical source of innovation and productivity in a regional and global economy. Entrepreneurship is also important for creating jobs and boosting incomes and wealth for individuals and their families, especially for immigrants and African Americans. While entrepreneurship includes cycles of business startups and failures, the ability of a region's entrepreneurs to identify market needs and gaps is a strong indicator of the creativity needed in today's innovation economy. This indicator measures adults starting businesses in the New Orleans region.

How is the New Orleans metro area doing?

The New Orleans metro's rate of business startups is 56 percent higher than the national average, and 33 percent higher than the aspirational metros. Pre-Katrina, entrepreneurship in the New Orleans metro lagged the nation just as it did in "weak city" metros in general. Post-Katrina, however, the rate of entrepreneurship spiked in the New Orleans metro and has outpaced the nation ever since. Residents of post-Katrina New Orleans — some previous residents and some new residents — are more likely to start a business than even residents in the aspirational metros. During the three-year period from 2010-12, about 501 out of every 100,000 adults started up businesses annually in the New Orleans metro, a rate 56 percent higher than the national average and 33 percent higher than the aspirational metros. Compared to pre-Katrina, the rate of entrepreneurship in the New Orleans metro has increased 129 percent.

Individuals starting up businesses

per 100,000 adult population (three-year averages)



Innovation

Why is this important? Funding from the National Institutes of Health (NIH) is an important source of support for the commercialization of scientific discoveries, particularly innovations in the fields of health and biotechnology. As such, it is a commonly used indicator of the research capacity that can be directed toward regional economic development in the biosciences industry.¹¹

How is the New Orleans metro area doing?

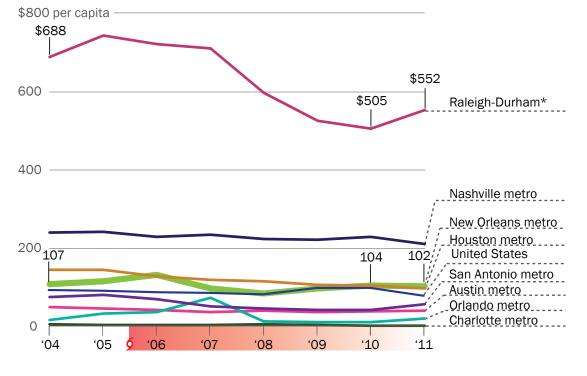
In 2010 and 2011, NIH funding to the New Orleans metro was just over \$100 per capita (or about \$121 million each year), placing New Orleans slightly above the U.S. average and in the company of most of the aspirational metros but well below Raleigh-Durham, the only established biosciences site in the group. While the NIH funding pattern post-Katrina mirrors the situation that existed prior to the storm, and seemingly signals a level playing field in the biosciences between New Orleans and the aspirational metros, competition is fierce in the biosciences marketplace, and bioscience firms tend to locate within a few regions with very strong biosciences sectors. In 2011, ten metros nationwide received half of all NIH funding and are recognized as the only primary biosciences sites in the country. Only one of these ten elite biosciences clusters is in the Southeast region of the United States – Raleigh-Durham. With \$552 in NIH funding per capita in 2011 (or about \$925 million), Raleigh-Durham received over five times the amount of NIH funding as the New Orleans metro. This gap demonstrates how concentrated the biosciences are within a few elite biosciences regions. Nearly all other regions, including our other aspirational metros, hover around the U.S. average.

"Innovation —
primarily through
the invention,
development, and
profusion of new
technologies — is
the fundamental
source of economic
progress, and
inventive activity
is strongly
associated with
economic growth in
metropolitan areas
and nationally."

- Jonathan Rothwell¹⁰

National Institutes of Health funding

per capita, 2011 inflation-adjusted dollars



*Raleigh-Durham is the combined statistical area including the Raleigh metro and Durham-Chapel Hill metro.

See source notes on page 54 for technical details.

Sources: National Institutes of Health, U.S. Census Bureau Population Estimates Program.

Job Sprawl

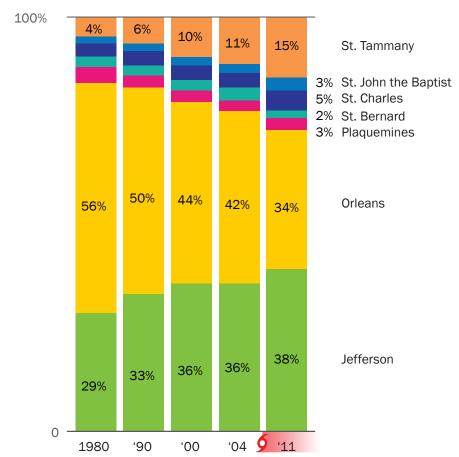
Why is this important? The geographic distribution of jobs in a metro area is important because it influences productivity, sustainability, and inclusion. In short, the literature shows that low-density economic development away from the urban core can undermine worker productivity due to increased commute times and hurt overall productivity that comes from the innovation created by the close clustering of like firms and workers. The share of jobs by parish measures job sprawl over time from the urban core to suburban parishes.

How is the New Orleans metro area doing?

Job losses due to Hurricane Katrina and the levee failures catapulted Jefferson Parish ahead of Orleans to become the top job center in the metro with 38 percent of metro area jobs in 2011. In 1980, the majority of metro area jobs — 56 percent — were in Orleans Parish. Yet by 2000, that percentage was down to 44 percent due to the growth of jobs in Jefferson and St. Tammany parishes during the 1980s and 1990s. After Katrina, Jefferson Parish surpassed Orleans to become the largest job center in the metro, and St. Tammany increased its share of jobs by 4 percentage points. As of 2011, Jefferson accounted for 38 percent of metro jobs compared to 34 percent for Orleans Parish and 15 percent for St. Tammany Parish.

Share of jobs by parish

New Orleans metro



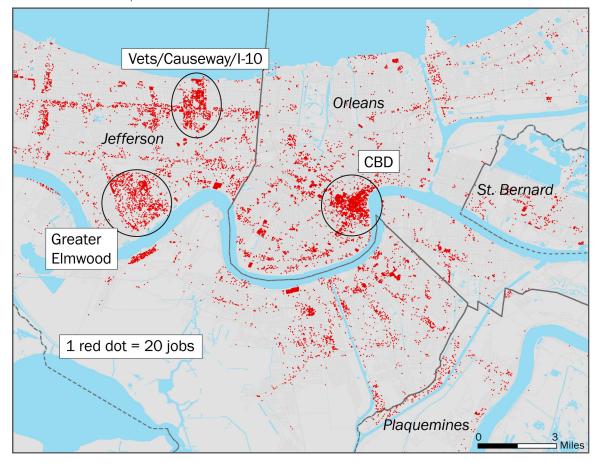
See source notes on page 54 for technical details.

Sources: U.S. Bureau of Labor Statistics and Moody's Analytics (U.S. Bureau of Labor Statistics: CES, QCEW).

Job Sprawl, continued

Distribution of jobs

New Orleans metro, 2011



See source notes on page 54 for technical details.

Source: U.S. Census Bureau, OnTheMap Data, Longitudinal-Employer Household Dynamics Program, 2011.

Educated Workforce

"Since 1980, the industrial drivers of our regional economy have shifted from those requiring less education to those requiring more education."

Why is this important? There are many reasons why an educated workforce is critical to the long-term economic success of a city and metro area. First, educated cities add jobs and population faster than comparable ones with lower education levels. Second, the quality of the region's labor force predicts job growth and overall economic health better than any other factor. Firms looking to relocate or expand routinely put workforce skills at the top of their location criteria. High-skill industries with high potential for growth especially require regions with highly educated workforces. Third, wages increase for workers for each additional year of education they accumulate and that wage premium is widening over time. Between 1973 and 2011, national wages for workers with a college degree rose, while wages for less educated workers stagnated or dropped. Finally, skilled cities are more resilient to economic shocks because they have the skills and capacity to adapt to change. The prevalence of adults with a college degree is the most meaningful indicator of an educated workforce.

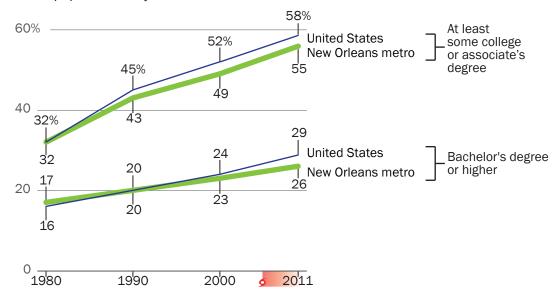
Susan Sellers, Elaine
 Ortiz, and Allison Plyer
 Strengthening our
 Workforce from Within:
 Adult Education's Role
 in Furthering Economic
 Growth in Greater New
 Orleans¹⁷

How is the New Orleans metro area doing?

The share of New Orleans metro adults with at least some college or associate's degree increased 6 percentage points from 2000 to 2011, the same rate of increase as in the nation, but gains in adults with a bachelor's degree lagged national gains by one percentage point. In 1980, 32 percent of adults in both the metro and the U.S. had at least some college or an associate's degree. The share of New Orleans metro adults with at least some college education increased to 49 percent by 2000, but the rate increased even faster nationally, to 52 percent. Since 2000, the share of these adults has increased locally at the same pace as nationally such that 55 percent of metro area adults had at least some college education in 2011 compared to 58 percent in the U.S. An important subset of this population is the share who has completed a bachelor's degree or higher. Despite an influx of young professionals to the New Orleans metro since 2000, the gap in bachelor's degree attainment has widened between the nation and metro area. As of 2011, 29 percent of adults nationwide have a bachelor's degree compared to only 26 percent of the metro population 25 years and older.

Educational attainment

for the population 25 years and older



See source notes on page 55 for technical details.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2011.

Inclusion

- The New Orleans metro demonstrated greater resiliency through the Great Recession than the nation as a whole, experiencing a decline in median household income of 8 percent compared to 11 percent for the U.S. from 1999 to 2011. White and Hispanic household income declined less than and is now on par with national peers. The incomes of black households in the metro also declined less than their national peers but, nonetheless, remained 15 percent lower than the U.S. by 2011.
- On the whole, the distribution of city households across national income quintiles has been rather stationary over time in New Orleans, but there has been movement by race, with whites experiencing an 8 percent increase in middle and upper class households and African Americans realizing a 4 percent decline.
- With higher rates than the nation in 2011 29 percent compared to 16 percent –
 poverty continues to be a significant challenge for the city, but it is also a main concern
 for the suburbs, where the majority of the metro's poor population (56 percent)
 currently resides.
- Because education is a critical factor for success in today's economy, New Orleans is
 in a disadvantaged position with gains in educational attainment falling behind the
 gains experienced by aspirational metros. The challenge is particularly sharp for black
 men, who experienced no increase since 2000 in the percentage obtaining bachelor's
 degrees.
- The shift towards service-based industries has produced divergent employment trends for men and women in the New Orleans metro with the former experiencing a downward trajectory and the latter enjoying modest gains. While the rates vary by race and ethnicity, New Orleans has performed similar to weaker metro areas while falling short of the employment rates achieved in aspirational metros.
- The percent of minority-owned businesses in the New Orleans metro continued to grow from 2002 to 2007, despite post-Katrina decreases in the minority share of the population. However, benefits to entrepreneurship have not been fully realized with the share of all receipts accruing to minority-owned businesses holding at only 2 percent from 1997 to 2007.

An inclusive community is one that expands educational and employment opportunities, reduces poverty, and fosters a strong and diverse middle class.

Median Household Income

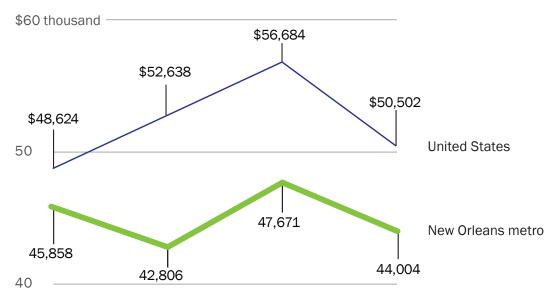
Why is this important? Household income is a basic measure of the extent to which a household can provide for itself and build wealth. Household income growth is an important measure of increasing family well-being but is also key to driving overall economic growth, boosting tax bases, and supporting local businesses.

How is the New Orleans metro area doing?

While the Great Recession pushed household income down 11 percent nationwide between 1999 and 2011, the median income in the New Orleans metro fell 8 percent to \$44,004. The New Orleans metro has historically had lower incomes than the nation, although the extent of the gap has fluctuated. The median household income in the New Orleans metro was only 6 percent lower than the national average in 1979 but fell to 19 percent lower after the oil bust of the 1980s. In the 1990s, incomes grew both locally and nationally, and the metro's median household income reached \$47,671 as of 1999 — about 16 percent lower than the U.S. average. The recession that began locally in 2008 has wiped out early post-Katrina income gains in the metro. The 2011 median household income in the New Orleans metro was \$44,004, an 8 percent drop compared to 1999. Nationwide, incomes fell 11 percent such that the gap between the U.S. and the New Orleans metro has narrowed to 13 percent.

Median household income

2011 inflation-adjusted dollars



See source notes on page 55 for technical details.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2011.



Median Household Income by Race and Ethnicity

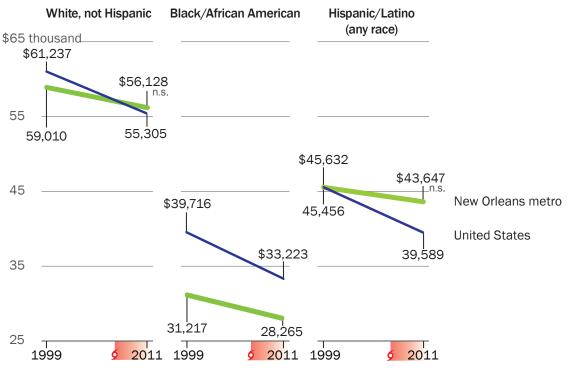
Why is this important? Household income growth is key to driving overall economic growth, boosting tax bases, and supporting local businesses. Household income by race and ethnicity is important in demonstrating the extent to which income gains and economic growth are broadly shared, and becomes more critical to long-term economic prosperity as a region becomes "majority minority."

How is the New Orleans metro area doing?

African American households in the New Orleans metro earned 50 percent less than white households in 2011 compared to a national disparity of only 40 percent. While the Great Recession pushed household income down only 8 percent in the New Orleans metro between 1999 and 2011 compared to an 11 percent drop nationwide (see page 26), the losses have been most severe for African American households. From 1999 to 2011, the median income for white households fell 5 percent while the median income for black households fell 9 percent such that the gap between black household income and white household income in the New Orleans metro grew to 50 percent in 2011. Meanwhile, median income among the metro's Hispanic households has not changed significantly since 1999, and was 22 percent lower than white household income in 2011 compared to a national disparity of 28 percent. While white and Hispanic households in the New Orleans metro earn incomes that are on par with their national peers, the median income for black households in the New Orleans metro, at only \$28,265, is 15 percent lower than for black households nationwide.

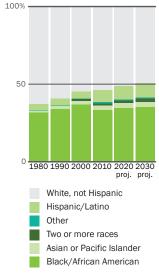
Median household income by race/ethnicity

2011 inflation-adjusted dollars



About growing diversity

While the nation is projected to become "majority minority" by 2043, the New Orleans metro will reach this milestone more quickly. If we assume no net inmigration and simply factor in age-specific death and birth rates, we can calculate that the metro will be "majority minority" by 2030 — sooner if we experience significant in-migration.





To learn how demographic changes may impact long-term economic prosperity, see Building an Inclusive, High-Skilled Workforce for New Orleans Next Economy at www.gnocdc.org.

See source notes on page 55 for technical details and notes on statistical testing.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2011.

Educational Attainment by Race/Ethnicity and Sex

Why is this important? As summarized earlier, educational attainment is critical to a region's economic success. Educated cities add jobs and population faster than comparable ones with lower education levels, and firms looking to relocate or expand routinely put workforce skills at the top of their location criteria. Importantly, skilled cities are more resilient to economic shocks because they have the skills and capacity to adapt to change. However, overall educational attainment hides how different segments of the community are faring. Economic success is dependent upon the ability of all racial and ethnic groups to be performing at their utmost potential and participating fully in the economy.

How is the New Orleans metro area doing?

In the New Orleans metro, smaller shares of white and black adults, regardless of gender, have bachelor's degrees than in the aspirational metros. While white men and white women in the New Orleans metro have acquired bachelor's degrees at a rate on par with their national peers, black males and black females lag significantly behind national milestones. However, compared to the aspirational metros, educational attainment levels for white adults in the New Orleans metro are not competitive. Only 34 percent of white men and 31 percent of white women in the New Orleans metro have a bachelor's degree, rates that are on par with "weak city" metros rather than with the aspirational metros, where 41 percent of white men and 38 percent of white women have bachelor's degrees. Among black women in the New Orleans metro, 17 percent have a bachelor's degree, which is a lower share than their peers in "weak city" metros (19 percent) and in aspirational metros (24 percent). Black men in the New Orleans metro have the lowest educational achievement rates, with only 11 percent earning bachelor's degrees compared to 15 percent of black men in "weak city" metros and 22 percent of black men in aspirational metros. Moreover, while aspirational metros have seen the share of black men with a bachelor's degree increase from 13 percent in 1990 to 22 percent in 2011, the share of black men in the New Orleans metro with a bachelor's degree has been completely stagnant at 11 percent since 1990. A significantly larger share of Hispanic adults in the New Orleans metro have a bachelor's degree than their peers in aspirational or "weak city" metros. However, the share of the total population in the New Orleans metro that is Hispanic is significantly smaller than the national average, 20 such that their greater educational attainment does not significantly boost overall regional educational attainment levels.

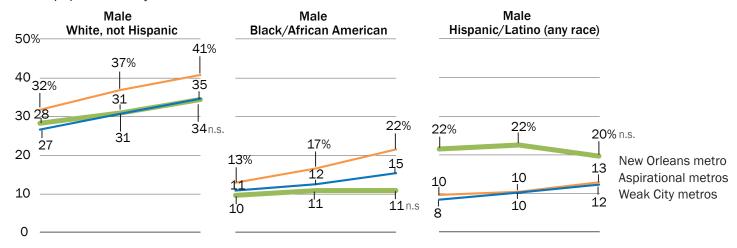


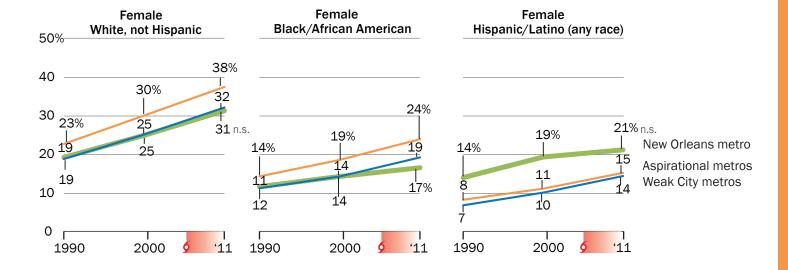
For educational attainment data for the United States, be sure to check out the downloadable data tables accompanying this report at www.gnocdc.org.

Educational Attainment by Race/Ethnicity and Sex, continued

Bachelor's degree or higher by race/ethnicity and sex

for the population 25 years and older





See page 11 for reference maps of the aspirational metros and "weak city" metros.

See source notes on page 55 for technical details and notes on statistical testing.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2011.

Employment Rates by Race/Ethnicity and Sex

Why is this important? Employment rates indicate the percent of the working age population that has employment. Employment rates are a more comprehensive measure of labor market conditions than official "unemployment" rates because they not only reveal the share of the population that are unemployed but also those who are no longer in the labor force at all – many of whom are "discouraged workers." Employment rates by race and gender suggest the extent to which structural economic changes have benefited different groups.

How is the New Orleans metro area doing?

While employment rates across the U.S. and comparison metros have fallen for white men and black men since 1980s, the effect on black men has been more severe in the New Orleans metro where barely half (53 percent) of working age black men were employed in 2011 compared to 61 percent of black men in aspirational metros and 75 percent of white men locally. As the national economy has shed jobs in male-dominated industries such as manufacturing over the last several decades, and grown jobs in female-dominated industries such as health care and education, employment rates for men have fallen while employment rates for women have increased nationwide.²² In the New Orleans metro, the share of working age African American men with a job declined during the oil bust from 64 percent in 1980 to 55 percent in the 1990. As poor labor market conditions for men persisted into the 1990s and 2000s, employment rates remained low at 53 percent in 2011. While the 2011 employment rate for black men in the New Orleans metro at 53 percent is statistically not different from "weak city" metros, it is much lower than in aspirational metros, which enjoy 61 percent employment among working age African American men. In contrast, white men in the New Orleans metro experience employment rates (75 percent) that are on par with aspirational metros and higher than "weak city" metros (73 percent).

Women, in contrast, have experienced increasing employment rates across all racial and ethnic groups since 1980. Working age African American women in the New Orleans metro have seen their employment rates increase from 48 percent in 1980 to 59 percent in 2011 — and now experience employment at higher rates than African American men (53 percent). Still, employment rates for black women in the New Orleans metro are lower than their peers in aspirational metros, where 63 percent of working age black women are employed. White women in the New Orleans metro have an employment rate on par with their peers in aspirational metros (65 percent) but slightly lower than in "weak city" metros (67 percent).

Working age Hispanic males and females experienced a boost in employment rates from 2000 to 2011 in the New Orleans metro, aspirational metros, and "weak city" metros — possibly due to the Great Recession which significantly slowed immigration.²³



For employment rate data for the United States, be sure to check out the downloadable data tables accompanying this report at www.gnocdc.org.

See page 11 for reference maps of the aspirational metros and "weak city" metros.

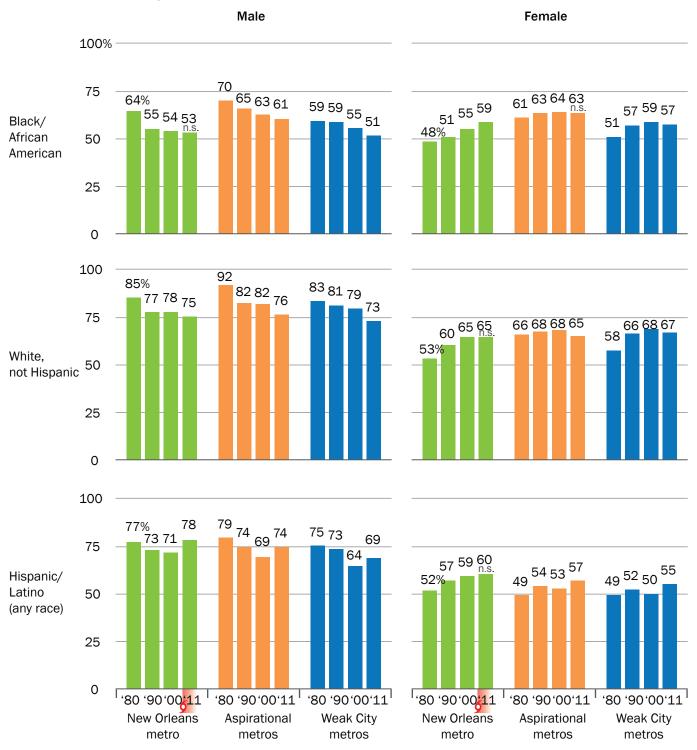
See source notes on page 55 for technical details, including notes on statistical testing.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2011.

Employment Rates by Race/Ethnicity and Sex, continued

Employment rates by race/ethnicity and sex

for the population 16-64 years old



Minority-Owned Businesses

Why is this important? Minority-owned businesses offer various benefits to the communities within which they are located. They are more likely than other employers to hire minorities, especially low-income African Americans.²⁴ They tend to invest in their local communities and foster additional economic growth.²⁵ Also, minority-owned businesses can be key sites where information about jobs is exchanged and informal financial assistance is provided.²⁶ Receipts are an important indicator of the scale of positive impact that minority-owned businesses can have in their communities.

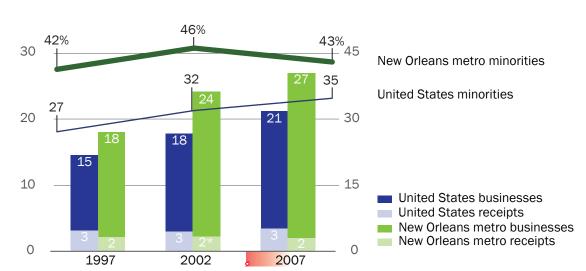
How is the New Orleans metro area doing?

With 27 percent of all businesses being minority-owned in 2007, the New Orleans metro had a larger share of minority-owned businesses relative to its minority population than the nation as a whole. Yet, at a steady 2 percent of all receipts, the returns to these businesses have consistently fallen below the national average. In 1997, minority-owned businesses composed 18 percent of all businesses in the New Orleans metro, jumping to 24 percent in 2002 and then 27 percent in 2007. Comparatively, the U.S. had shares of 15 and 18 percent in 1997 and 2002 respectively, before reaching 21 percent by 2007. Before Katrina, the metro's advantage was accounted for by its larger minority share of the population than the nation, but following Katrina the metro lost minority population. The ratio of minority-owned businesses relative to minority population post-Katrina exceeded that of the nation and provided the metro with a definite advantage. Yet, despite the positive trend in self-employment, the percent of all receipts going to minority-owned businesses have remained stagnant at 2 percent for the New Orleans metro. Receipts remained stagnant for the U.S. as well but at a slightly higher 3 percent.

Minority-owned businesses and receipts

relative to minority share of the population





Note: Receipts data is estimated for Hispanics in 2002.

See source notes on page 56 for technical details.

Sources: U.S. Census Bureau, Survey of Business Owners & Population Estimates Program.

Jail Incarceration Rates

Why is this important? In an era of constrained public finances, incarceration represents an expensive response to arrest. Moreover, incarcerating people who pose little to no threat can result in making them a greater risk to public safety after release. In addition, incarceration has enduring economic effects by stifling employment and suppressing labor force participation. Many employers will not hire job candidates who have an arrest record — regardless of whether they were ultimately convicted of a crime. Finally, research has shown that the economic effects in turn introduce instability within families that often harms the developmental outcomes of children.

"Large volumes of arrests for petty offenses likely contribute to African American men's low labor force participation rates."

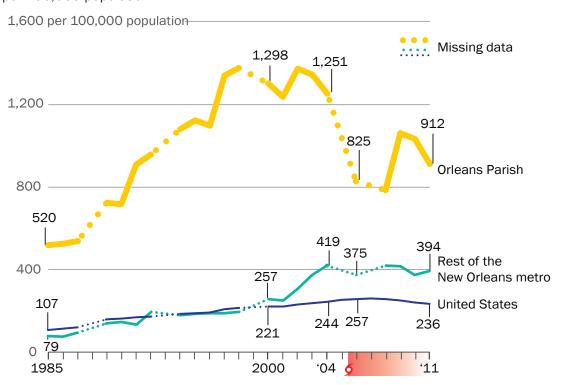
- Petrice Sams-Abiodun and Gregory Rattler, Jr. 32

How is the New Orleans metro area doing?

In Orleans Parish, the jail incarceration rate has decreased significantly post-Katrina from 1,251 per 100,000 population in 2004 to 912 per 100,000 in 2011, but is still significantly higher than the rest of the New Orleans metro and nearly four times the national rate. From the mid-1980s through the 1990s, the jail incarceration rate in Orleans Parish more than doubled from 520 persons per 100,000 in 1985 to 1,298 in 2000. At the same time, the jail incarceration rate in the rest of the metro eclipsed the national rate but remained far below Orleans Parish. Post-Katrina, the jail incarceration rate in Orleans Parish spiked in 2009 and is now on a downward trajectory, although it remains considerably higher than the rest of the New Orleans metro and the United States. Fully one-third of those incarcerated in Orleans Parish were state or federal prisoners in 2011. If these prisoners were excluded from this measure, the jail incarceration rate in Orleans Parish would still be 580 per 100,000 population in 2011.

Persons held in jail

per 100,000 population



See source notes on page 56 for technical details.

Sources: Bureau of Justice Statistics: Annual Survey of Jails; Prisoners Series; U.S. Census Bureau: Population Estimates Program.

Size of the City's Middle Class

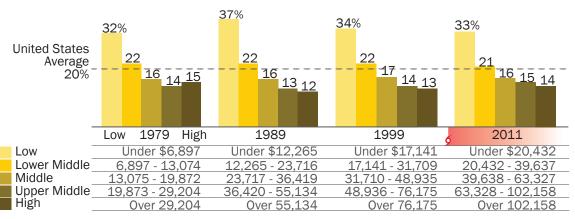
Why is this important? Poverty within U.S. cities grew substantially in the last half of the 20th century. Reversing this trend and increasing the size of a city's middle class is important because it can increase the local tax base, decrease the fiscal costs associated with poverty, and fuel the local economy through the growth of consumers with greater purchasing power. Moreover, research has shown that the economies of large cities and their surrounding suburbs are linked and that income increases in the urban core actually benefit the entire metro. S A simple measure like median household income (on page 26) indicates the place where the exact middle of the income distribution falls — where 50 percent of households earn less and 50 percent of households earn more. A more sophisticated analysis is needed to examine the balance of households across the national income spectrum (divided into five equal categories, or "quintiles"). This allows a focus specifically on the size of the middle class and whether it represents a growing share of total households. Differences in the distribution of white and non-white households across the income spectrum may reveal disparities that can hamper community cohesiveness and all residents from contributing to regional prosperity.

How is New Orleans doing?

The share of city households that are middle and upper class has increased slightly since 1999 to 46 percent, but a disproportionate share of households remains low income. Historically, the share of New Orleans households that occupy the bottom two tiers of the national income distribution has been high. In 1979, it was 54 percent (the same as it was in 2011). The situation worsened by 1989, when 59 percent of households were in the bottom income brackets occupied by only 40 percent of national households. By 1999, slightly more New Orleans households had moved into the middle and upper class such that 56 percent of households were in the bottom two quintiles and 44 percent were in the top three quintiles. From 1999 to 2011, the situation slightly improved again as the share of middle and high income households grew to 46 percent. Overall the city's household income distribution in 2011 looks much like it did in 1979, with 33 percent of households in the lowest income quintile (earning less than \$20,432 annually) and only 14 percent in the highest income quintile (earning more than \$102,158).

Proportion of households by national income quintiles





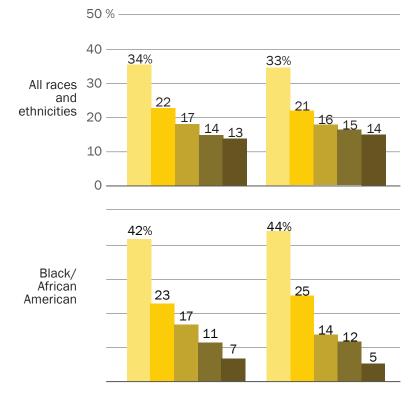
See source notes on page 56 for technical details.

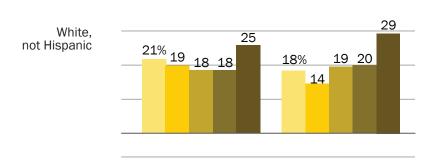
Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2011; IPUMS USA; and HUD Fair Market Rents.

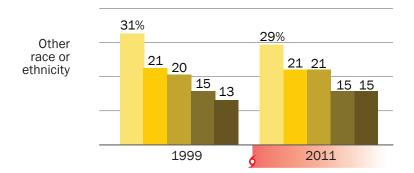
Size of the City's Middle Class by Race and Ethnicity

Proportion of households by national income quintiles

by race/ethnicity, Orleans Parish







How is New Orleans doing?

Since 1999, the share of the city's black households who are middle and upper class has fallen from 35 percent to 31 percent while the share of the city's white households who are middle and upper class has jumped from 60 percent to 68 percent. In 1999, 60 percent of white households in New Orleans were in the top three income quintiles, exactly proportional to the national household distribution. But household incomes for whites in New Orleans have improved relative to households nationally, such that 68 percent of white households were in the middle and upper income quintiles in 2011. In contrast, African American households in New Orleans have lost ground such that only 31 percent of black households were middle and upper class in 2011 compared to 35 percent in 1999.

As of 2011, a full 44 percent of African American households in the city were in the lowest national income quintile (earning less than \$20,432 annually) compared to only 18 percent of New Orleans' white households. And at the other end of the income spectrum, only 5 percent of African American households had incomes in the highest quintile (earning over \$102,158), while 29 percent of white households did. Among households of other races and ethnicities (including Hispanic and Asian households), 29 percent earned less than \$20,432 annually and 15 percent earned more than \$102,158 — marking a slight improvement since 1999.

See source notes on page 56 for technical details.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2011; IPUMS USA; and HUD Fair Market Rents.

Suburbanization of Poverty

Why is this important? Changes in the poverty rate not only indicate the overall strength of a region's economy but also show whether economic prosperity is benefitting those on the lowest rungs of the economic ladder. The geography of poverty is important because regional policymakers and social service providers need to provide social safety nets, transportation options, and job opportunities where they are most needed. This indicator defines poverty based on household income, composition, and size.

How is the New Orleans metro area doing?

The city's 2011 poverty rate of 29 percent is statistically unchanged since 1999, while poverty in suburban parishes and the U.S. has risen. The suburban parishes are now home to the majority of the poor in the New Orleans metro area. Poverty rates in Orleans Parish have historically been much higher than in surrounding parishes and the nation — and still are. In 2011, the city poverty rate was 29 percent compared to 15 percent in suburban parishes. Yet, since 1979, the poor population has been increasing faster in the suburbs than in the city. From 1979 to 1999, the share of the metro area poor population living in suburban parishes increased from 30 to 46 percent. Hurricane Katrina — and economic hardship since the Great Recession — accelerated the suburbanization of poverty. In 2011, parishes surrounding the city were home to the majority of the metro's impoverished population (56 percent) and an estimated 127,277 poor residents compared to 100,709 poor residents in the city. Measured as a percentage of total population, the city's 2011 poverty rate of 29 percent was statistically unchanged since 1999, while the suburban poverty rate increased from 13 percent in 1999 to 15 percent in 2011. The U.S. poverty rate also increased from 12 percent to 16 percent from 1999 to 2011.

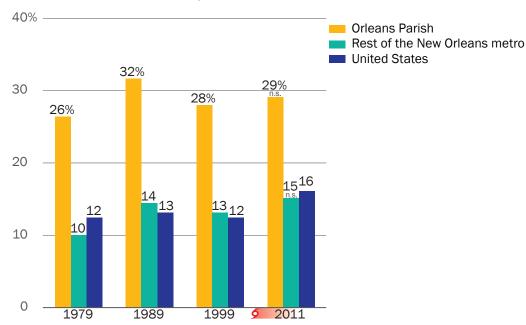
"Today, suburbs house a larger and faster-growing poor population than either cities or rural areas. More types of people and places are being touched by economic hardship than in the past, including those that may have once seemed immune to such challenges."

Elizabeth Kneebone and Alan Berube
 Confronting Suburban Poverty in America³⁷

Suburbanization of Poverty, continued

Poverty rate

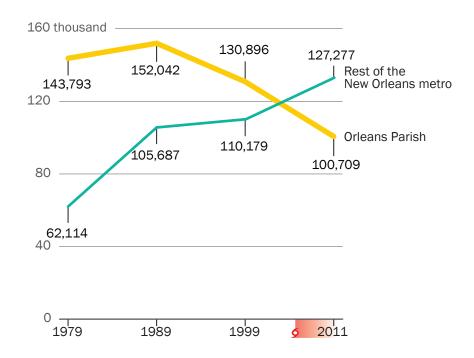
for population for whom poverty status is determined



n.s. = The change between 1999 and 2011 is not statistically significant for Orleans Parish. The difference between the rest of the New Orleans metro and the United States is not significant in 2011.

Population living in poverty

for population for whom poverty status is determined



See source notes on page 56 for technical details.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2011.

"Community developers and neighborhood leaders' continued work for the next decade will be critical to the longterm prosperity of

- Kalima Rose Resilience and Opportunity: Lessons from the U.S. Gulf Coast after Katrina and Rita³⁸

New Orleans."

n.s. = For renters, thechange between 2004 and 2011 is not statistically significant for the rest of the New Orleans metro. Also, the difference between the rest of the New Orleans metro, and both the United States and Orleans Parish, is not significant in 2011. For homeowners, the change between 2004 and 2011 is not significant for Orleans or for the rest of the New Orleans metro.

See source notes on page 57 for technical details.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2004 and 2011.

Affordable Housing

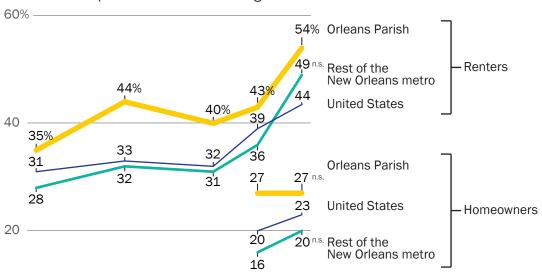
Why is this important? Housing is a large monthly expense for nearly every American household, and the ability to afford stable housing can significantly impact a family's well-being. A common measure of affordability community-wide is the percent of households paying more than 30 percent of their pre-tax income on all housing costs. Many households spend more than 30 percent of their income on housing, and experts have argued that the commonly accepted threshold of 30 percent should be increased. This indicator looks at households paying unaffordable housing costs of 35 percent or more of their pre-tax income.

How is the New Orleans metro area doing?

Since 2004, the share of renters in the city of New Orleans paying unaffordable housing costs has spiked from 43 percent to 54 percent. City renters have historically struggled to afford housing costs compared to their national peers. As incomes declined during the 1980's oil bust, the share of renters paying at least 35 percent of their household income on housing — a threshold considered unaffordable — increased. As incomes increased during the 1990s, that share declined. Since Katrina and the onset of the Great Recession, higher rents compounded by lower household incomes have contributed to a spike in the share of city renters paying unaffordable housing costs. As of 2011, a full 54 percent of city renters were spending more than 35 percent of their household income on housing and utilities compared to 44 percent of renters nationally. New Orleans homeowners also struggle more than their national peers to afford housing costs. In the city, 27 percent of homeowners spend more than 35 percent of pre-tax household income on their mortgage, taxes, utilities, and insurance compared to only 23 percent of homeowners nationwide.

Households paying unaffordable housing costs

35% or more of pre-tax income on housing





Quality of Life

- A post-Katrina surge in the number of nonprofit organizations in arts and culture bolstered New Orleans' standing as a leader in creativity. With 34 organizations per 100,000 residents in 2011, the city has more than double the national rate of 13 per 100,000.
- Jefferson and St. John the Baptist have made significant improvements post-Katrina in the share of students attending public schools that meet state standards of quality. However, in 2012, only 21 percent and 11 percent of students in these parishes, respectively, were enrolled in the highest quality schools that earned an "A" or "B" on their most recent school performance score.
- In the city of New Orleans and suburban parishes, crime rates have declined to lower than pre-Katrina. However, the city's 2011 crime rates remain significantly higher than the national average, while the violent crime rate in suburban parishes has fallen below the national average.
- City of New Orleans expenditures on recreational programs for youth have fully rebounded from lows experienced immediately after Katrina, and at \$10.1 million spent in 2012, have surpassed pre-Katrina levels by 18 percent.
- Life expectancy has increased at a faster rate than the nation in the New Orleans metro, but New Orleanians born in 2010 can expect to live only 76.4 years compared to 78.5 years for the average American. Life expectancy in all New Orleans metro parishes is between one and six years lower than the national average, with the shortest life expectancy in St. Bernard Parish (72.8 years) and the longest in St. Tammany Parish (77.7 years).

A high quality of life for residents and businesses often includes access to good amenities, like health care, arts and culture, high quality schools and out-of-school activities, and safe streets.

Arts and Culture

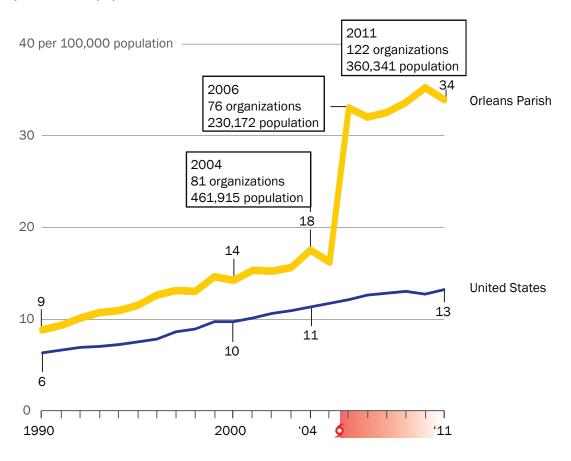
Why is this important? For New Orleanians, arts and culture are among the city's most important assets and critical to the quality of life enjoyed here. Indeed, the culture of New Orleans is so vibrant, it is the basis for an entire "cultural economy" that attracts millions of visitors each year. Arts and culture is difficult to measure, but one indicator often used is arts and culture nonprofits filing form 990s with the IRS per 100,000 residents.

How is New Orleans doing?

There were 122 arts and culture organizations in New Orleans in 2011, an increase of 51 percent since 2004 even as the New Orleans population decreased 22 percent. New Orleans' unique culture has long given the city an edge compared to the nation in terms of the number of large arts and culture nonprofits per 100,000 residents. Since 2004, that edge has increased significantly as the city added 41 new arts and culture organizations, an increase of 51 percent. However, from 2010 to 2011, the number of arts and culture nonprofits increased at a slower rate than population growth, and thus the rate per 100,000 residents dipped slightly. Nonetheless, New Orleans had 122 arts and culture nonprofits in 2011, or 34 per 100,000 residents — more than twice the national rate of 13 per 100,000.

Registered arts and culture nonprofit organizations

per 100,000 population, Orleans Parish



See source notes on page 57 for technical details.

Sources: National Center for Charitable Statistics and U.S. Census Bureau.

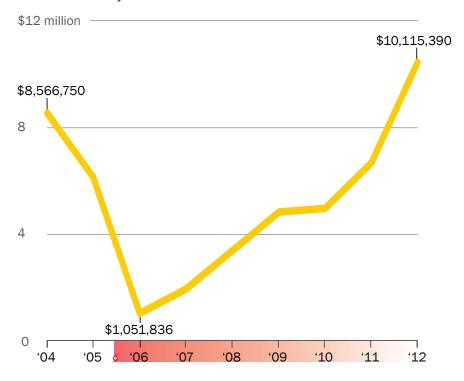
Youth Investment

Why is this important? High-quality youth development programs can reduce juvenile delinquency, improve children's educational performance, lessen health care costs related to childhood obesity, and increase the economic productivity of young people when they become adults. ⁴⁰ In the city of New Orleans, where the percentage of youth "disconnected" from school and employment is high, out-of-school programming is critical for providing youth with access to adult mentoring and skill building opportunities. ⁴¹ Parks and recreation departments play an important role in youth programming. This indicator measures the financial investment of the City of New Orleans in recreational programs for youth and the wider community.

How is New Orleans doing?

In 2012, the City of New Orleans spent \$10.1 million for recreational programs, an 18 percent increase since 2004. Prior to Katrina, in 2004, the City of New Orleans spent \$8.6 million (in 2012 inflation-adjusted dollars) on recreation. But funding declined precipitously to \$1.1 million in the aftermath of Hurricane Katrina and the levee failures. The City's investment in recreational programs has since rebounded, and 2012 expenditures for the New Orleans Recreation Development Commission exceeded 2004 spending. In 2012, the City of New Orleans spent \$10.1 million on recreational programs, an 18 percent increase compared to 2004.

Actual expenditures for the New Orleans Recreation Development Commission 2012 inflation-adjusted dollars



"For more than 100 years, we have understood the link between out-of-school time opportunities, delinquency, and crime."

-Peter A. Witt and Linda L. Caldwell⁴²

See source notes on page 57 for technical details.

Source: City of New Orleans.

Quality Public Education

Why is this important? Quality K-12 public education is important to workforce development and increased individual opportunities, and access to good public schools is also a key factor for firms and families in choosing to locate to, or stay in a particular community. In 2002, the Louisiana Department of Education began assessing the quality of public schools based on test scores, attendance, and dropout rates. This indicator measures the percentage of students attending schools that meet or fail to meet state standards, thus providing a snapshot of the supply of quality schools in each parish. In 2010, the Louisiana Department of Education also began to assign letter grades to schools based on school performance scores.

How is the New Orleans metro area doing?

The share of public school students who attend "academically satisfactory" schools has increased post-Katrina. However, in fall 2012, only 11 percent and 21 percent of students in St. John and Jefferson parish, respectively, attended schools that earned an "A" or "B" based on their most recent school performance score. Public schools educate the majority of school-age children in the New Orleans metro. However, many families send their children to private and parochial schools. During the 2011-12 school year, 24 percent of all school children in the metro were enrolled in private schools.

During the 2012-13 school year, Jefferson Parish was the metro's largest public school district with about 46,000 students. In that same year, 90 percent of Jefferson Parish students were enrolled in an "academically satisfactory" school that met state standards of quality, an increase from about 80 percent of students pre-Katrina. However, that share peaked in Jefferson Parish in 2010-11 at 97 percent, and has declined two consecutive school years, which may be accounted for in part by rising standards at the state level. Moreover, during 2012-13, a full 36 percent of Jefferson Parish students attended schools that earned a "D" average — indicating the school barely met state standards — and another 33 percent attended a "C" school. Thus, only 21 percent of Jefferson Parish public school students attended the highest quality schools that earned an "A" or "B" based on their most recent school performance score.

The Orleans Parish public school district was nearly as large as Jefferson with about 43,000 students during the 2012-13 school year (including enrollment in the parish's many charter and Recovery School District schools). In that year, 63 percent of Orleans Parish students were enrolled in a school that met state standards — a major improvement compared to 30 percent of students pre-Katrina. As in Jefferson Parish, the share of Orleans Parish students in "academically satisfactory" schools has declined slightly since its post-Katrina peak of 68 percent during the 2011-12 school year — indicating the difficulty of maintaining upward momentum as state standards rise. During the most recent 2012-13 school year, 21 percent of Orleans Parish students attended a "D" school and 12 percent attended a "C" school. Thus, 30 percent of all students were enrolled in high quality schools that earned an "A" or "B" based on school performance scores.

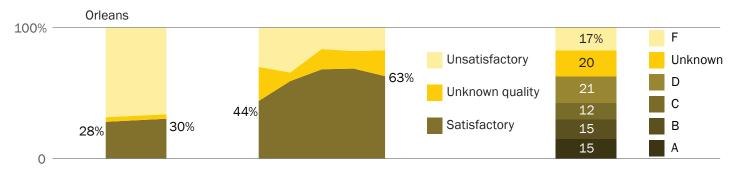
In Plaquemines, St. Bernard, St. Charles, and St. Tammany, 98 percent of students attended schools that met state standards in 2012 — nearly the same share as pre-Katrina. Furthermore, 74 percent of students were in schools that earned an "A" or "B." In St. John the Baptist, 97 percent of students attended "academically satisfactory" schools in 2012, a significant improvement compared to only 76 percent in 2003. However, only 11 percent of St. John students attended an "A" or "B" school.

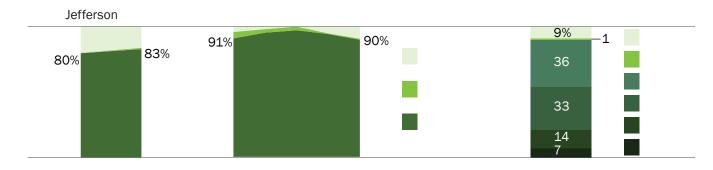
- "While progress has been made in collecting and reporting more accurate graduation rate data and setting targets for progress, kinks in calculation methods and the underlying definitions must be addressed to ensure better measurement and real accountability."
 - Robert Balfanz, John M. Bridgeland, Mary Bruce, and Joanna Hornig Fox⁴³

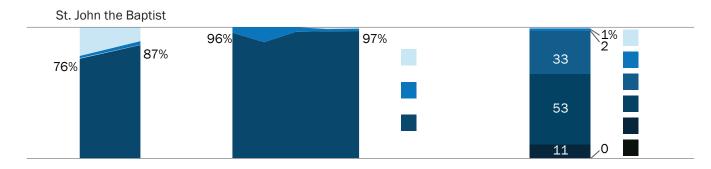
Quality Public Education, continued

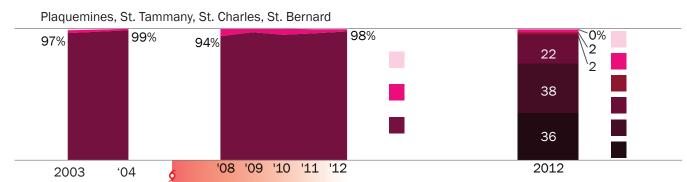
Enrollment by school performance

by parish, as of fall for each year.









See source notes on page 57 for technical details.

Source: Louisiana Department of Education.

Public Safety

Why is this important? Safe communities encourage private sector investments and support a higher overall quality of life in the form of stable, healthier neighborhoods. In contrast, the presence of crime undermines a community's sense of security and decreases quality of life. In general, property crime tends to be more commonplace, whereas violent crime tends to directly affect a smaller population. The FBI's rate of violent and property crimes is the standard indicator of how safe a community is from crime, and allows for comparison to the nation as a whole.

How is the New Orleans metro area doing?

Violent and property crime rates in the city of New Orleans are lower than pre-Katrina but still significantly higher than the national average. Since the 1990s, crime rates have dropped across the United States and they have dropped even more dramatically in the New Orleans area. In 2011, violent crime rates in the metro's suburban parishes fell 6 percent below the national average, while property crime remained 7 percent above the national average. In the city of New Orleans, property and violent crime rates for 2011 are lower than pre-Katrina levels but 39 percent and 105 percent higher than national rates.

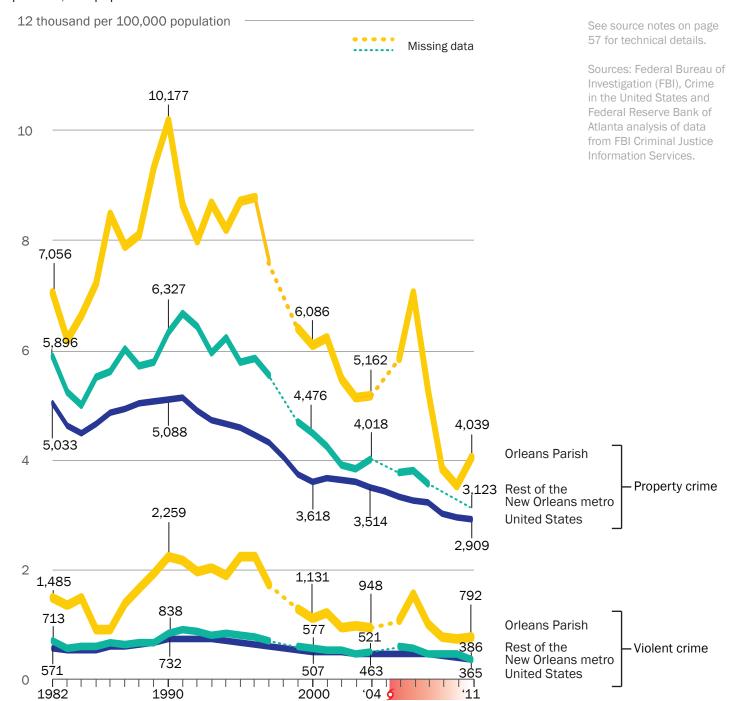
"While the chaos wrought by the storm provided a unique opportunity to reinvent a troubled criminal justice system, doing so would require a major change in the professional culture in which New Orleans' criminal justice agencies operated."

Nadiene Van Dyke, Jon Wool, & Luceia LeDoux
 Resilience and Opportunity: Lessons from the U.S. Gulf Coast after Katrina and Rita⁴⁷

Public Safety, continued

Violent and property crime rates

per 100,000 population



Life Expectancy

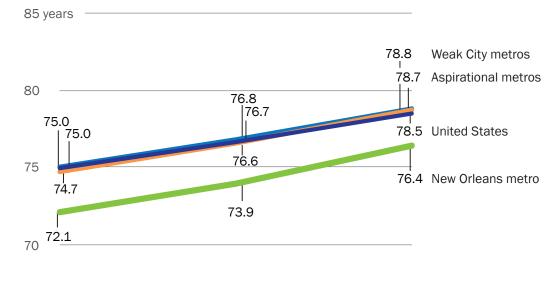
Why is this important? Life expectancy is the average number of years one can expect to live if the conditions prevailing at birth are maintained over time. Research has shown that economic factors, mainly low incomes, low employment rates, and low shares of the population with health insurance, have a strong negative effect on life expectancy.⁴⁸ Life expectancy is a standard indicator of overall community health and an important measure of quality of life for cities and regions.

How is the New Orleans metro area doing?

From 1990 to 2010, life expectancy in the New Orleans metro increased from 72.1 years to 76.4 years, improving at a faster rate than the nation and narrowing the gap between the U.S. and metro. In the United States, life expectancy rose from 75.0 years to 78.5 years between 1990 and 2010, an increase of three and one-half years. Life expectancy trends in both aspirational metros and "weak city" metros closely resemble the nation. Although life expectancy has increased locally at a faster rate than the nation, the average individual born in the New Orleans metro in 2010 can expect to live only 76.4 years, which is two years fewer than the average American. In fact, all seven parishes in the New Orleans metro have shorter life expectancies than the nation. St. Bernard has the shortest life expectancy at 72.8 years and St. Tammany Parish has the longest at 77.7 years. Life expectancy in the New Orleans metro is shorter than in both aspirational metros (which have stronger economies) and "weak city" metros (which have higher shares of the population with health insurance — a beneficial legacy of once thriving manufacturing economies).

Life expectancy at birth

in years





For life expectancy data for

metro, be sure to check out

the downloadable data tables

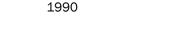
accompanying this report at

www.gnocdc.org.

each parish in the New Orleans

See source notes on page 58 for technical details.

Source: Institute for Health Metrics and Evaluation.



65

metros

2010

2000

Sustainability

- The share of workers in the city of New Orleans using public transit to get to work has increased from 5.3 percent in 2006 to 7.8 percent in 2011, a rate higher than the nation but still significantly lower than pre-Katrina.
- Post-Katrina, the number of "unhealthy" air quality days in the New Orleans metro is higher than in the Houston metro, the latter of which has made considerable improvements in air quality.
- The miles of bikeways in New Orleans have increased over 400 percent from 10.7 miles in 2004 to 56.2 miles in 2012.
- During a 78-year period, the New Orleans region lost 948 square miles of coastal wetlands, which is nearly 30 percent of the wetlands that protect the New Orleans area from hurricane storm surge.
- Six sampled sites within the New Orleans metro show increases in the concentration of chloride in the water since 1951, and as of 2008, three of these sites have converted from freshwater to saltwater an indicator of saltwater encroachment.

A sustainable metropolitan area is one that conserves natural resources, maintains environmental quality, and takes a comprehensive approach toward reducing the impact of disasters.

"Bicycling and walking are low cost, healthy alternatives to driving and are an integral part of developing a sustainable, multimodal transportation network in New Orleans."

 Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, and St.
 Tammany Parishes⁵²

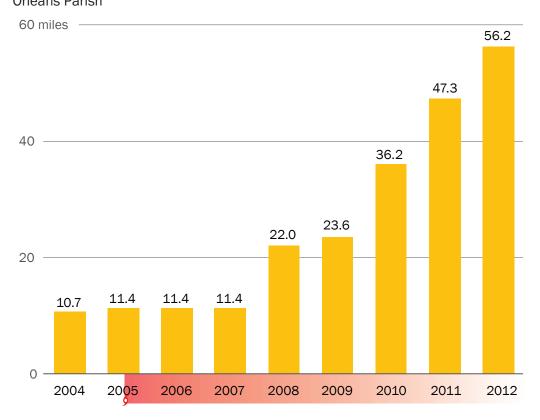
Bike Pathways

Why is this important? Nearly half of all trips in the United States are less than three miles in length for which bicycling can provide an affordable, healthy, and environmentally friendly transportation option.⁴⁹ Bicycle use has surged in communities that have invested in bicycle infrastructure,⁵⁰ largely because improved bicycle infrastructure helps improve safety conditions and outcomes for cyclists.⁵¹

How is New Orleans doing?

The miles of bikeways in New Orleans have increased over 400 percent from 10.7 miles in 2004 to 56.2 miles in 2012. The notable increase in bike facilities started in earnest in 2008 as the miles of bikeways nearly doubled from 11.4 to 22.0 miles from 2007 to 2008. The miles of bikeways doubled once more from 23.6 miles in 2009 to 47.3 miles in 2011, followed by an additional nine miles of bikeways bringing the total miles of bikeways to 56.2 in 2012. These bikeways are spread across the city and include dedicated bike lanes, shared lanes with vehicles, and off-street trails. The increased miles of bikeways have facilitated a 54 percent increase in the estimated daily traffic of bicycles across the city.⁵³

Miles of bikeways Orleans Parish



Source: Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, and St. Tammany Parishes.

Commuting by Public Transit

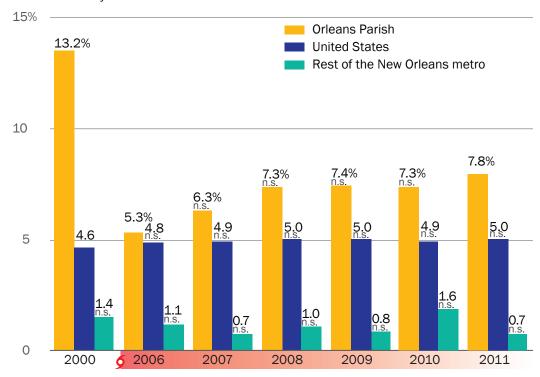
Why is this important? The use of public transportation to get to work reduces congestion and harmful emissions, and in many cases saves workers money relative to commuting via car. Moreover, a high-quality public transit network can increase labor market flexibility across a metro area, and support the clustering of businesses, which in turn enhances innovation and ultimately productivity. But as metro regions expand and jobs move into the suburbs, public transit authorities are faced with the challenge of providing service to multiple job centers. ⁵⁴ Although a growing percent of workers commuting via public transit may have multiple benefits for a region, it is important to recognize that many factors influence personal transportation choices including access to vehicles, congestion, and availability of alternative modes of transit. ⁵⁵

How is the New Orleans metro area doing?

The share of workers in the city of New Orleans using public transit to get to work has increased from 5.3 percent in 2006 to 7.8 percent in 2011 but is still significantly lower than pre-Katrina. In 2000, the share of workers in New Orleans who commuted by public transit was 13.2 percent — significantly higher than the 4.6 percent rate for the nation and the 1.4 percent rate in the rest of the metro. But in the aftermath of Hurricane Katrina and the levee failures, city commuters' use of public transit fell by more than half to 5.3 percent, a rate on par with the national average. Between 2006 and 2011, city commuting increased to 7.8 percent as transit service rebounded from low levels immediately after Katrina. However, the share of city and metro area commuters is still significantly lower than in 2000, and workers in the rest of the metro are much less likely than the average American worker to commute to work using public transit.

Share of commuters using public transit

for workers 16 years and older



n.s. = For Orleans Parish, there are no statistical differences between 2006 and later years. except for between 2006 and 2011. For the rest of the New Orleans metro. there are no statistical differences between years, except for between 2000 and 2007, and between 2000 and 2011. For the U.S., differences between years are not statistically significant for 2006-07, 2008-09, 2008 to 2011. 2009-10, and 2009 to 2011. The difference between Orleans Parish and the U.S. is not statistically significant in 2006 and 2007.

See source notes on page 58 for technical details.

Sources: U.S. Census Bureau, Decennial Census & American Community Survey 2006-2011.

Air Quality

Why is this important? Poor air quality can injure health, harm the environment, and cause property damage. In addition, noncompliance with federal air quality standards can reduce economic activity due to permitting restrictions. The U.S. Environmental Protection Agency's Air Quality Index (AQI) tracks the concentration of ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. Values higher than 100 are considered to be unhealthy, first, for certain sensitive groups of people, then, for everyone as AQI values get higher. Percent of days in a year that have "unhealthy" AQI values is a useful indicator of air quality for a region.

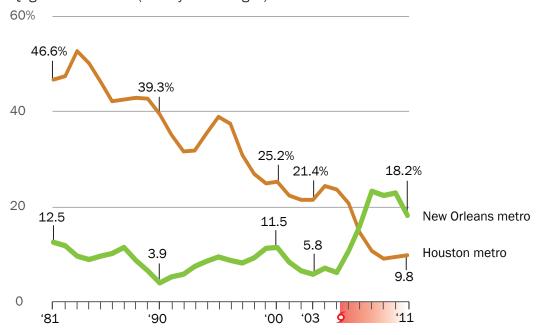
- "Leading industries began to see it was in their economic benefit to not only comply [with air quality standards] but to get ahead of the curve."
- Texas Commission on Environmental Quality

How is the New Orleans metro area doing?

Post-Katrina, the number of "unhealthy" air quality days in the New Orleans metro is higher than in the Houston metro, the latter of which has made considerable improvements in air quality. Using the most recent scientific standards, the Houston metro had "unhealthy" air more than 50 percent of the year during the early 1980s, but "unhealthy" levels dropped to about 10 percent of all days during the three-year period from 2010-12. The improvements reflect Houston's efforts to comply with federal air quality standards by reducing emissions from petrochemical refineries and motor vehicles. In the New Orleans metro, "unhealthy" air days were only measured about 10 percent of the year during the 1980s, 1990s, and early 2000's. However, the share of days registering as "unhealthy" has doubled to about 20 percent in recent years. Sulfur dioxide emissions captured by monitors installed in St. Bernard Parish after Katrina are the reason for the increase. During the most recent three-year period from 2010-12, air quality has slightly improved in the New Orleans metro such that about 18 percent of all days registered as "unhealthy" air. Houston, in comparison, registered "unhealthy" air quality about 10 percent of all days during 2010-12.

Percent of days with "unhealthy" air quality

AQI greater than 100 (three-year averages)



See source notes on page 58 for technical details.

Source: U.S. EPA Air Quality System Air Quality Index Report.

Groundwater Salinity

Why is this important? Salinity measures the chloride concentration in the groundwater. Freshwater becomes saltwater when the concentration of chloride is greater than 250 milligrams per liter. Increasing groundwater salinity in southern Louisiana is an indicator of subsiding soils, eroding coasts scored by man-made canals, and rising seas on the one side, and municipal drainage and a levee-restrained Mississippi River on the other. The result is that salt water is now intruding inland, both on the surface and under the surface, and increasingly overpowering the weak freshwater flow that, under natural circumstances, would have pushed it back. Tracking groundwater salinity is important as a gauge of coastal land loss in the face of rising sea levels. It is also important because, while most human activity in the parishes downriver from Baton Rouge and south of Lake Pontchartrain derives freshwater from the Mississippi River and its distributaries, some municipalities, industries, agriculture, and homeowners also rely on groundwater tapped via wells.

How is the region doing?

Freshwater across the New Orleans metro has been converting to saltwater for over half a century, and measurements as far back as 1951 reveal the increasing salinity of aquifers in the New Orleans metro. Scientists have detected considerable increases over time in the concentration of chloride in water sampled near wells used for drinking water and industry in the New Orleans metro. Indeed, while five of the six sample sites were freshwater in 1951 with a chloride concentration under 250 milligrams per liter, as of sampling from 2008, four of the six wells are now saltwater, with the two remaining freshwater wells experiencing increases in the chloride concentration as well. The increase in salinity has been most profound in western Jefferson Parish as well as near Bridge City in Jefferson Parish, indicating saltwater encroachment in these historically freshwater areas.⁶¹

Salinity of groundwater at select sampling sites

Chloride, dissolved, in milligrams per liter



Coastal Wetlands

Why is this important? The vitality of the coastal landscape is tied directly to New Orleans' livelihood and economic survival. The wetlands provide essential ecological functions to the metro — buffering the region from hurricane flooding and serving as spawning, breeding, and foraging grounds for a wide diversity of fish and wildlife.

Coastal wetlands absorb storm energy by reducing wave action and amplitude of storm surge. They are often cited as cities' primary line of defense against hurricanes. In fact, it is estimated that in total, coastal wetlands provide \$23 billion dollars in storm protection services to the United States annually. Man-made defenses such as levees and floodwalls are insufficient without the natural lines of defense provided by features such as healthy marshes, natural ridges, cypress swamps, and barrier islands. Man-made defense such as healthy marshes, natural ridges, cypress swamps, and barrier islands.

Additionally, the metro area's three largest economic drivers (tourism, oil and gas, and shipping) and the fishing industry (especially in parishes outside the city) rely on a robust coastal landscape to protect their infrastructure, assets, and resources.

How is the region doing?

Between 1932 and 2010, the New Orleans region lost 948 square miles of coastal wetlands, which is nearly 30 percent of the wetlands that protect the New Orleans area from hurricane storm surge. Coastal wetlands in the Breton Sound, Barataria Basin, Mississippi River Delta Basin, and Pontchartrain Basin are the primary line of defense against hurricanes for New Orleans area residents. However, 78 years of recorded measurements reveal that nearly 30 percent of these protective wetlands have been lost — due in part to flood control projects on the Mississippi River that have starved the wetlands of sediment deposits and fresh water. Hurricanes and the construction of navigational canals by the oil and gas industry have also damaged wetlands. The slight increase in coastal wetlands from 2009 to 2010 may indicate recovery from recent hurricanes. However, it is too soon to determine if these gains are permanent or environmental variability.

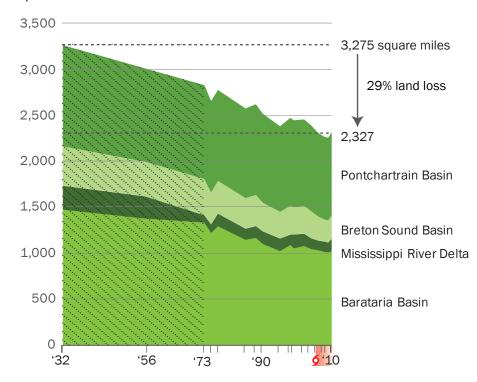
"The fate and fortune of New Orleans and the communities around it is tied to that of the coast. That aspect of direct and immediate dependence on an ecosystem sets New Orleans apart from most other places, where the connections are less clear or at least less immediate."

Mark Davis
 Resilience and Opportunity: Lessons from the U.S. Gulf Coast after
 Katrina and Rita⁶⁴

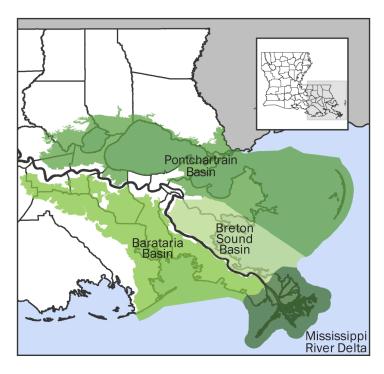
Coastal Wetlands, continued

$78\ \text{years}$ of land loss in the Mississippi deltaic plain





Reference map of the coastal basins protecting the New Orleans metro



Note: 1932 and 1956 land area data are derived from a different source of imagery than later years. Thus, there are issues of comparability with these time frames.

See source notes on page 58 for technical details.

Source: Brady Couvillion, John Barras, Gregory Steyer, William Sleavin, Michelle Fischer, Holly Beck, Nadine Trahan, Brad Griffin, and David Heckman, "Land area change in coastal Louisiana from 1932 to 2010," U.S. Geological Survey Scientific Investigations Map 3164, (2011).

Technical Notes on Data Sources

JOB GROWTH

The Bureau of Labor Statistics measures nonfarm jobs, which is the number of full-time and part-time positions on company payrolls, including civilian government agencies. This definition excludes self-employed, unpaid, and household workers. Job growth is important in order to raise living standards, provide opportunities for an expanding labor force, and increase the tax base. Health Care includes NAICS 62. Oil, Gas, and Related Manufacturing includes NAICS Supersector 1011 and select chemical and rubber products manufacturing (which are therefore excluded from the Manufacturing sector). Prof. Services, Financial, and Information includes NAICS 51-55. Admin., Waste, and Other Services includes NAICS 56 and 81.

DRIVERS OF THE ECONOMY

Data from the U.S. Bureau of Labor Statistics measures nonfarm jobs. Numbers reflect estimates of the "export" component of legal services, insurance agencies, heavy construction and engineering, and tourism. For example, total employment in heavy construction and engineering was 21,700 in 2011, of which 9,500 are estimated to be "export" jobs. Data on commercial fishing jobs are not available but seafood packaging jobs are included in food manufacturing. Average annual wages are weighted based on employment in 2011 and therefore do not apply to earlier years even if you adjust for inflation. Wages include commissions, tips, and bonuses. Wages may be skewed upward by the presence of a few high-wage workers or downward by the presence of many part-time workers. However, American Community Survey 2011 data for the New Orleans metro indicates that full-time year-round wages for many tourism-related occupations are well below \$32,162, such as personal care and service at \$23,515.

WAGES

Wages are in 2011 inflation-adjusted dollars using the CPI-U-RS. Wage and salary disbursements consist of the monetary remuneration of employees, including the compensation of corporate officers; commissions, tips, and bonuses; and receipts in kind.

PRODUCTIVITY

Gross product is in 2011 inflation-adjusted dollars using the Moody's Analytics implicit price deflator. Data from the U.S. Bureau of Labor Statistics measures nonfarm jobs.

ENTREPRENEURSHIP

Data represent the percent of the adult population that start a business each year. Entrepreneurs are included who own incorporated or unincorporated businesses, and who are employers or non-employers. The business must be the individual's main job with fifteen or more usual hours worked per week. Data for eight of 57 "weak city" metros were not available: Albany, GA; Altoona, PA; Danville, VA; Muncie, IN; Odessa, TX; Pine Bluff, AR; Rocky Mount, NC; and Terre Haute, IN.

INNOVATION

Data includes projects funded by the American Recovery and Reinvestment Act of 2009. Funded projects include research grants, training, research and development contracts, research management and support, Cancer Control funds, construction, and building and facility support. Data is in 2011 inflation-adjusted dollars using the CPI-U-RS. Population data for all geographies were obtained from Census Bureau Population Estimates Program, 2000–2010 Intercensal Estimates, except New Orleans metro. For the metro, Intercensal Estimates were used from 2006–2009 and 2011. Vintage 2009 Estimate data were used for 2004 and 2005, and 2012 Population Estimates Program data were used for 2011.

JOB SPRAWL

Data from the U.S. Bureau of Labor Statistics measures nonfarm jobs. The source for the map of 2011 jobs is information filed by employers with the State of Louisiana for the purpose of administering unemployment insurance taxes. The state, in turn, supplies this data to the U.S. Census Bureau, where it is aggregated to census blocks and broken down by three wage levels, three employee-age levels, and twenty economic sectors. State unemployment insurance programs have relatively comprehensive coverage in the United States labor force. Approximately 96 percent of the wage and salary civilian labor force and 98 percent of nonagricultural employment are covered by state unemployment insurance laws, and so are reflected in the data. The prime exclusions to coverage are self-employed individuals, agriculture workers, U.S. Armed Forces military personnel, and work-study students. Self-employment in the fishing industry, which is critical to the economies of Plaquemines and other coastal parishes, is heavily undercounted due to these limitations. One

additional limitation of this dataset is that some jobs, in particular government-sector jobs, may be reported at a central administrative office rather than where the compensated activity actually occurs.

EDUCATED WORKFORCE

Data reflect the U.S. Office of Management and Budget definition for the New Orleans metro at the time of each survey and thus vary slightly over time. For the New Orleans metro and the U.S., changes between 2000 and 2011 are significant at the 95% confidence interval for both measures of educational attainment. For 2011, differences between the U.S. and New Orleans metro are also significant for both measures of educational attainment.

MEDIAN HOUSEHOLD INCOME

The 2011 ACS data reflect incomes during 2010-2011. The 1979, 1989, and 1999 Decennial Census data represent the calendar year. All income is in 2011 inflation-adjusted dollars using the CPI-U-RS. Data reflect the U.S. Office of Management and Budget definition for the New Orleans metro at the time of each survey, and thus vary slightly over time. Changes between 1999 and 2011 are significant at the 95% confidence interval for the New Orleans metro and the U.S. For 2011, differences between the United States and the New Orleans metro are significant at the 95% confidence interval.

MEDIAN HOUSEHOLD INCOME BY RACE AND ETHNICITY

The 2011 ACS data reflect incomes during 2010-2011. The 1999 Decennial Census data represent the calendar year. All income is in 2011 inflation-adjusted dollars using the CPI-U-RS. Data reflect the U.S. Office of Management and Budget definition for the New Orleans metro at the time of each survey and thus vary slightly over time. Race/ethnicity is based on U.S. Census Bureau definitions. Hispanic status is defined as an ethnicity and people who identify as Hispanic or Latino may be of any race. "White, not Hispanic" and "Black/ African American" refer to individuals who report only one race. However, "Black/ African American" may include people who also identify their ethnicity as Hispanic. Changes between 1999 and 2011 are significant at the 95% confidence interval for all races/ethnicities in the United States and for "white, not Hispanic" and Black/ African American in the New Orleans metro (but not for Hispanic/ Latino). In 2011, differences between all races/ethnicities are significant at the 95% confidence interval for the United States and New Orleans metro are significant at the 95% confidence interval for Black/ African American (but not for "white, not Hispanic" nor Hispanic/ Latino).

EDUCATIONAL ATTAINMENT BY RACE/ETHNICITY AND SEX

Data reflect the U.S. Office of Management and Budget definition for the New Orleans metro at the time of each survey and thus vary slightly over time. Race/ethnicity is based on U.S. Census Bureau definitions. Hispanic status is defined as an ethnicity and people who identify as Hispanic or Latino may be of any race. "White, not Hispanic" and "Black/ African American" refer to individuals who report only one race. However, "Black/ African American" may include people who also identify their ethnicity as Hispanic. Changes between 2000 and 2011 are significant at the 95% confidence interval for all races/ethnicities and genders in the aspirational metros and the "weak city" metros. Changes between 2000 and 2011 are significant at the 95% confidence interval for all races/ethnicities and genders in the New Orleans metro, except Black/ African American men and Hispanic/Latino (men and women). For 2011, differences between all races/ ethnicities are significant at the 95% confidence interval, except for between Black/African American women and Hispanic/Latino women in the New Orleans metro. For 2011, differences between the aspirational metros and the New Orleans metro are significant at the 95% confidence interval for all races/ethnicities and genders. For 2011, differences between "weak city" metros and the New Orleans metro are significant at the 95% confidence interval for Black/African American and Hispanic/ Latino (men and women) but not for "white, not Hispanic" (men and women). For 2011, differences between men and women are significant at the 95% confidence interval for the aspirational metros, the "weak city" metros, and for the New Orleans metro, except for Hispanic/ Latino for the New Orleans metro.

EMPLOYMENT RATES BY RACE/ETHNICITY AND SEX

Data reflect the U.S. Office of Management and Budget definition for the New Orleans metro at the time of each survey and thus vary slightly over time. Race/ethnicity is based on U.S. Census Bureau definitions. Hispanic status is defined as an ethnicity and people who identify as Hispanic or Latino may be of any race. "White, not Hispanic" and "Black/ African American" refer to individuals who report only one race. However, "Black/ African American" may include people who also identify their ethnicity as Hispanic. For women in the New Orleans metro, changes between 2000 and 2011 are significant at the 95% confidence interval for Black/ African American but not for "white, not Hispanic" and Hispanic/ Latino. For men in the New Orleans

metro, changes between 2000 and 2011 are significant at the 95% confidence interval for "white, not Hispanic" and Hispanic/Latino but not for Black/ African American. For women in the aspirational metros, changes between 2000 and 2011 are significant at the 95% confidence interval for all races/ethnicities, except Black/ African American. For women in the "weak city" metros, changes between 2000 and 2011 are significant at the 95% confidence interval for all races/ethnicities. For men in the aspirational metros, changes between 2000 and 2011 are significant at the 95% confidence interval for all races/ethnicities. For men in the "weak city" metros, changes between 2000 and 2011 are significant at the 95% confidence interval for all races/ethnicities.

For men, differences between all races/ethnicities are significant at the 95% confidence interval for the aspirational metros. For men, differences between all races/ethnicities are significant at the 95% confidence interval for the New Orleans metro, except for between "white, not Hispanic" and Hispanic/ Latino. For men, differences between all races/ethnicities are significant at the 95% confidence interval for the "weak city" metros except for between Hispanic/Latino. For women, differences between all races/ethnicities are significant at the 95% confidence interval for the United States and the "weak city" metros. For women, differences between all races/ethnicities are significant at the 95% confidence interval for the New Orleans metro, except for between "white, not Hispanic" and Hispanic/Latino and between Black/African American and Hispanic/Latino. For women, differences between all races/ethnicities are significant at the 95% confidence interval for the aspirational metros except for between Black/African American.

For men, differences between the "weak city" metros and the New Orleans metro are significant at the 95% confidence interval for "white, not Hispanic" and Hispanic/Latino but not for Black/ African American. For men, differences between the aspirational metros and the New Orleans metro are significant at the 95% confidence interval for Black/ African American but not for "white, not Hispanic" or Hispanic/Latino. For women, differences between the United States and New Orleans metro are not significant at the 95% confidence interval for any race/ethnicity. For women, differences between the aspirational metros and New Orleans metro are significant at the 95% confidence interval for Black/ African American but not for "white, not Hispanic" or Hispanic/Latino. For women, differences between the "weak city" metros and the New Orleans metro are significant at the 95% confidence interval for "white, not Hispanic" but not for Black/ African American or Hispanic/Latino.

MINORITY-OWNED BUSINESSES

The number of minority-owned business and receipts includes businesses with and without paid employees. Receipts data for the New Orleans metro is estimated for 2002 because data was unavailable for Hispanics.

JAIL INCARCERATION RATES

Data are based on an annual survey of the local jail population and represent the average daily jail population. Persons in jail include individuals being temporarily held pending trial or other resolution of their case, locally sentenced inmates, as well as state inmates housed locally. For all parishes in the New Orleans metro, data was not collected for 1988, 1993, 1999, 2005, and 2007. Since 2004, the jail population of Plaquemines and St. Bernard Parish has been estimated at zero.

SIZE OF THE CITY'S MIDDLE CLASS

The 2011 ACS data reflect incomes during 2010-2011. The 1979, 1989, and 1999 Decennial Census data represent the calendar year. National income quintiles were adjusted to reflect cost of living differences using Fair Market Rents. Households in tabulated data tables were distributed across the adjusted national income quintiles using linear interpolation. Data was not available for "Black/ African American, not Hispanic."

SUBURBANIZATION OF POVERTY

The 2011 ACS data reflect incomes during 2010-2011. The 1979, 1989, and 1999 Decennial Census data represent the calendar year. Data reflect the U.S. Office of Management and Budget definition for the New Orleans metro at the time of each survey, and thus vary slightly over time. Poverty Rates: Change between 1999 and 2011 is significant at the 95% confidence interval for the United States and the rest of the New Orleans metro (but not for Orleans Parish). For 2011, differences between Orleans Parish and the rest of New Orleans metro are significant at the 95% confidence interval, as are differences between Orleans Parish and the United States. However, there is no significant difference in the poverty rate between the United States and the rest of New Orleans metro. Poverty Estimates: Change between 1999 and 2011 is significant at the 95% confidence interval for Orleans Parish and the rest of New Orleans metro. For 2011, differences between Orleans Parish and the rest of New Orleans metro are significant at the 95% confidence interval.

AFFORDABLE HOUSING

This affordable housing indicator includes occupied units where housing costs as a percentage of household income were computed. The Decennial Census universe is slightly different from the ACS because the former excludes single-family houses on 10 acres or more. Data reflect the U.S. Office of Management and Budget definition for the New Orleans metro at the time of each survey and thus vary over time. The ACS data reflect income and rents during a two-year period. The Decennial Census data represent the calendar year. For renters, changes between 2004 and 2011 are significant at the 95% confidence interval for the United States and Orleans Parish. For renters in 2011, differences between Orleans Parish and the United States are significant at the 95% confidence interval. However, differences between the rest of the New Orleans metro and other geographies are not significant. For homeowners, changes between 2004 and 2011 are significant at the 95% confidence interval for only the United States. For homeowners in 2011, differences between the United States, Orleans Parish, and the rest of New Orleans metro are significant at the 95% confidence interval.

ARTS AND CULTURE

This data source includes public charities 501 (c)(3) organizations with gross receipts over \$25,000 that filed annual information reports (Form 990s) with the IRS. Tax-exempt organizations with more than \$5,000 in annual gross receipts must register with the IRS, but they do not have to file the annual information report until they reach annual gross receipts of \$25,000. Religious congregations, denominations, and organizations controlled by religious denominations have automatic Section 501(c)(3) status and are not required to register or file.

YOUTH INVESTMENT

Data is in 2012 inflation-adjusted dollars using the CPI-U-RS. Effective in 2011, the New Orleans Recreation Development Commission (NORDC) was established, thus replacing the New Orleans Recreation Department (NORD) with an independent commission of public and private sector leaders.

QUALITY PUBLIC EDUCATION

In Fall 2003 through Fall 2010, "Academically Satisfactory" schools must have a baseline school performance score of 60 or above (which coincided with earning between one and five stars from the state). In Fall 2011, "Academically Satisfactory" schools must have a baseline school performance score of 65 or above (which coincides with a letter grade of A, B, C, or D) to reflect increases in state performance requirements. In Fall 2012, "Academically Satisfactory" schools must have a baseline school performance score of 75 or above (which coincides with a letter grade of A, B, C, or D) to reflect increases in state performance requirements. Baseline school performance scores are calculated based on school performance over a two-year period. Schools of "unknown quality" include enrollment at schools that do not have a School Performance Score because the school is new, is an alternative school, or is a pre-school or kindergarten program. In addition, schools of "unknown quality" for 2012 include schools that are led by operators, who took over the governance of existing failing schools and agreed to maintain all previous grade levels and former students. Data reflect all students attending public schools in Orleans Parish including schools run directly by and chartered by the Orleans Parish School Board, schools run directly by the Recovery School District and charter schools overseen by the Recovery School District, and schools chartered by the State Board of Elementary and Secondary Education, In addition, Milestone SABIS Academy is counted in the Orleans Parish school performance scores for the 2012-13 school year despite the fact that the school had temporarily moved to a Jefferson Parish location. However, data does not reflect students that received vouchers and attended a private school.

PUBLIC SAFETY

Data reflect known offenses (not arrests or convictions). Violent crime includes murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault. Property crime includes burglary, larcenytheft, and motor vehicle theft. The FBI uses population estimates that are lagged by one year and based on provisional estimates. This is a particular problem post-Katrina, causing distortedly low 2006 crime rates for Orleans Parish. For this reason we recalculate the 2006 crime rates for Orleans Parish and the metropolitan area based on the Census Bureau's 2006 population estimates (vintage 2009). Data for 1995-2008 includes estimates by the FBI when agencies fail to report. Data for 1982-1994 does not include estimates for missing data. Thus, St. Bernard crime and population is excluded for years 1982-1994, and St. John crime and population is excluded for years 1982-1985, and 1987. The FBI strongly cautions users against making direct comparisons of crime rates between cities. The rest of the New Orleans metro includes St. James Parish for the years 1995-2002. The FBI did not publish 1998 and 2005 crime data for the New Orleans metro. Consequently, the property crime rate for the rest of the New Orleans metro area could not be calculated.

LIFE EXPECTANCY

Life expectancy is defined as the average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the age-specific death rates prevailing at the time of his or her birth.

COMMUTING BY PUBLIC TRANSIT

Data reflect the U.S. Office of Management and Budget definition for the New Orleans metro at the time of each survey, and thus vary slightly over time. Tests of significance were computed at the 95% confidence interval. For Orleans Parish, the difference between 2000 and 2006 is statistically significant as it is between 2000 and all subsequent years. However, there are no statistical differences between or among 2006 and later years, except between 2006 and 2011. For the rest of the New Orleans metro, the difference between 2000 and 2007, as well as 2000 and 2011, is statistically significant, but there are no statistical differences between or among any other years. For the U.S., differences between and among all years are statistically significant except 2006-2007, 2008-2009, 2008 to 2011, 2009-2010, and 2009 to 2011. The differences between all geographies are statistically significant except between Orleans Parish and the U.S. in 2006 and 2007.

AIR QUALITY

The pollutants used to calculate AQI are: CO, NO2, O3, SO2, PM2.5, and PM10. Days with AQI less than 100 include categories "good" and "moderate." Days with AQI greater than 100 include categories "unhealthy for sensitive groups," "unhealthy," every unhealthy," and "hazardous." Because weather conditions can strongly influence the AQI, change over time is evaluated by comparing 3-year averages. The federal standard for ozone and sulfur dioxide has recently been strengthened and, as a result, although air quality may improve, AQI days over 100 may not decrease.

GROUNDWATER SALINITY

The six sample sites have at least 5 recorded measurements for salinity, are near wells used for drinking water or industrial uses, and are in or near historical freshwater areas. A chloride concentration greater than 250 mg/L was used as an indicator of the presence of saltwater.

COASTAL WETLANDS

The 1932 and 1956 dataset and the 1973-2010 dataset do not have the same spatial resolution, nor the same source imagery, and interpretation of the data should proceed only with the knowledge that there are issues of comparability between these two time frames. Portions outside of the area of coverage in Pontchartrain Basin in 1932 and 1956 are assumed not to have undergone change with regard to land and water categories between 1932 and 1973 (Refer to USGS SIM 3164 to view the boundaries of data coverage). This assumption is necessary to compare areas for the entire basin and is based on the assumption that those areas which were not covered in the 1932 and 1956 data are typically forested wetlands in the upper portions of the basin. Forested wetlands in this portion of the basin have historically been very stable with regard to change among land and water categories.

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Executive Summary

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- ⁵ To the extent that production for local consumption can replace the need for imports, this economic activity also increases total production, sales, and income of firms within the region. For general information on "export" industries and regional economics, see Hoover, E.M., & Giarratani, F. (1999). How regions develop. In An *Introduction to Regional Economics*. Retrieved June 21, 2010, from http://www.rri.wvu.edu/WebBook/Giarratani/chaptereleven.htm#11.3.
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THE DATA CENTER is the most trusted resource for data about greater New Orleans and Southeast Louisiana. For the past 15 years, the Data Center has been an objective partner in bringing reliable, thoroughly researched data to conversations about building a more prosperous, inclusive, and sustainable region.



Allison Plyer, Executive Director, allisonp@gnocdc.org

Dr. Plyer is a demographer and prolific author on post-Katrina demographics, population estimates, and recovery. Dr. Plyer is co-editor of *Resilience and Opportunity: Lessons from the U.S. Gulf Coast after Katrina and Rita*, published by the Brookings Institution Press and contributor to publications by the National Academies Press. She received her Doctorate in Science from Tulane University, an MBA from the Kellogg School of Management at Northwestern University, and a BA in Spanish and religious studies from Vanderbilt University.



Elaine Ortiz, Senior Research Associate, elaineo@gnocdc.org

Ms. Ortiz has expertise in economic and labor market research. She is lead author of "Economic Synergies across Southeast Louisiana" and co-author of "Strengthening our Workforce from Within," as well as co-author of the chapter "Building Data Capacity to Foster Resilient Communities" in *Resilience and Opportunity: Lessons from the U.S. Gulf Coast after Katrina and Rita*, published by the Brookings Institution Press. She has a MS in urban and regional planning from the University of Iowa and a BA in economics from Hanover College.



Ben Horwitz, Research Associate, benjaminh@gnocdc.org

Mr. Horwitz has expertise in geographic information systems, database management, large-scale data analysis, and policy analysis. He is author of "Geographies of Poverty," for which he developed an innovative methodology to improve spatial displays of data from the American Community Survey. He earned his MS in Public Policy and Management from Heinz College at Carnegie Mellon University and his BA in international studies from American University.



George Hobor, Senior Research Fellow, georgeh@gnocdc.org

Dr. Hobor is a regional economist and accomplished author on the revitalization of distressed metros. His work includes, "Surviving the Era of Deindustrialization: The New Economic Geography of the Urban Rust Belt," which details how cities transformed their economies to recover from the regional flight of manufacturing. Dr. Hobor has a PhD from the University of Arizona and an MA in political science from the Maxwell School of Citizenship and Public Affairs at Syracuse University.