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Executive Summary

The recovery of greater New Orleans represents one of the great urban achievements of our era. After decades of slow economic, political and social decline, hurricane Katrina seemed a kind of coup de grâce, smothering the last embers of the region’s vitality. In the fall of 2005 it was entirely logical to see New Orleans as just a potential exemplar of failed urbanization, much as we might see in Detroit¹, Cleveland, and a host of other once great cities – for example Naples, Lisbon, Antwerp and Osaka – that have tumbled from their once great importance.²

Yet in New Orleans’ case, disaster engendered not continued decline, but the revival of the entire region, its economy, and social and political institutions. Like Chicago after the great fire of 1871, San Francisco in the wake of the 1906 earthquake and fire, or New York following 9-11, New Orleans has rebounded in ways that have defied expectations.

Critical to making New Orleans a resilient city has been the transformation of the civic culture. This has much to do with the commitment of New Orleanians to their city – like Chicagoans, New Yorkers and San Franciscans in the past. “A city,” notes urban historian Kevin Lynch, “is hard to kill if it possesses unique cultural appeal, geographic assets and people who are determined to save the city they love.”³

New Orleans resiliency since Katrina constitutes much more than improved levees or better evacuation procedures; more than new brick and mortar applied to what had been an aging, deteriorating region. New Orleans has made enormous progress in cleaning up its famously corrupt political system, and also made huge strides in improving its educational infrastructure. Once considered one of the worst places to do business, the region, and the state of Louisiana, has undergone a marked improvement to its reputation. It has emerged as a good place for commerce – something of a “Cinderella” in economic development terms.⁴ Allison Plyer of the Greater New Orleans Community Data Center put it, “Greater New Orleans is in some ways rebuilding better than before”.⁵

Our analysis shows this progress in a host of indicators. Once a below-average job producer, the region has expanded its employment since the 2007 recession far faster than the national average. It recovered all the jobs lost in the recession by 2012 – and then some – while the nation remained three percent below its pre-recession level. Entrepreneurial activity also has grown faster than the national average by a wide margin.⁶

More important still, the region finally began to reverse a demographic decline that, for a generation or more, saw young, educated people and families depart for other locales to seek out a better life. The concentration of 25 to 35 year olds has increased far more quickly in the region than it has in the nation as a whole. Indeed since 2007, New Orleans region has experienced the fastest growth in educated population in the nation.⁷

Many economic trends favor the region’s continued ascendency. These include the still nascent US energy boom, which represents arguably the greatest shift in global economic power since the end of the Cold War and the rise of China; the massive flow of investment, domestic and foreign, into lower-cost locales and most particularly into the Third Coast, the burgeoning region around the Gulf
of Mexico; and finally the expansion of US trade with Latin America and the Caribbean basin.

To these powerful forces we can also add demographic and social factors that work to the region’s advantage. One key is a relatively low cost of living, which, in effect, gives area residents and businesses a leg up on their East and West coast rivals. This is critical in attracting net migration from those regions, with their storehouse of educated residents and skilled workers. Another force is the breadth of skills that can be easily found in the region, including higher paid skilled professionals experienced in transportation and material moving, installation, maintenance and repair, construction, manufacturing and energy.

A future scenario can be constructed where greater New Orleans emerges as one of the brightest spots in the North American economy. Not only does the region have natural advantages in terms of energy resources and transportation, it can claim primary sources of higher-wage employment. It also possesses a cultural cachet that attracts educated workers, but in a cost and regulatory environment that appeals to business investors.

This is most notable in the growth of the region’s rapidly evolving information industry, including software, videogames and an expanding film/television industry. Over the past five years, New Orleans has come to enjoy a locational concentration equal to that of New York, and has emerged as a major player in this sector.

**Challenges Ahead: Economic, Social and Environmental**

As the region moves further from the immediate post-Katrina crisis, the great momentum of the last five years is clearly slowing down. Job creation remains positive, but has gradually fallen towards national norms. Indeed, since 2010, after years of running ahead, the region’s job growth rate actually trailed the national average. This could be simply a sign that, after recovering more slowly, the rest of the country is now catching up. But the slowdown relative to other cities should be taken seriously, as it could represent a loss of critical momentum.

**“Concert Of Economic Forces” That Can Make Recovery Permanent**

To overcome its legacy of poverty and inequality, the New Orleans region needs to focus not on just one sector but on five critical ones. In a highly competitive national and global economy, regions need to work on their unique strengths, establishing advantages that can lead to more, and better, job creation. Most particularly, the region needs to develop a broad, but still highly selective, base of industries that can create the higher-wage jobs necessary for the uplift not of a few New Orleanians, but for the many.

1. The first, and most evident, is the region’s cultural legacy, which serves as a major source of jobs for local people as well as a lure for talented people from elsewhere. This, of course, includes the still very important tourism industry, but also encompasses generally higher-wage professions in film, television, video game software and even medical research.

The growth in information sector employment, something relatively new to the region, represents a clear breakthrough. It allows the region to take advantage of its essential cultural assets, by
attracting companies and highly skilled workers. Although it is unlikely that the New Orleans region will ever become as tech-dependent as, say, Silicon Valley – which may prove a good thing, given that industry’s volatility – New Orleans can look forward to a sustained increase in high-paying, and high-visibility, employment. Perhaps most critically, it has an excellent opportunity to make itself the cultural capital of the Third Coast, the burgeoning region around the Gulf, something the region desperately needs and a role that New Orleans is uniquely positioned to fulfill.

Yet although these industries are important, they alone cannot sustain a long-term, broad recovery. Wages in the tourism industry and the arts tend to be low – one reason for the city’s persistently poor income distribution in the past – and higher-wage jobs, except in engineering services and entertainment, remain below national norms in total jobs and will take many years to reach true critical mass. Perhaps most critically, these industries alone cannot produce enough high-wage skilled jobs for the region’s working class population.⁹

2. The river system. Its location at the shipping terminus of the Mississippi River, across the regions the region’s ports – New Orleans, South Louisiana, St. Bernard, Manchac, Plaquemines and Grand Isle Port – is the historic reason for the region’s existence and one of the key factors in its future success. The region needs to work to compete successfully with its Third Coast rivals, notably Houston, as well as Mobile and Tampa. Growing trade with the Caribbean and the completion of the Panama Canal expansion project increase the opportunities for expanded logistics and cargo handling. In addition, the river provides an ideal spur to new industrial production, such as the Nucor Steel plant in St. James Parish, which some see as the precursor of a new zone, akin to Germany’s Ruhr Valley, that could emerge between New Orleans and Baton Rouge.

Given the devastation of the region’s unique ecological environment, the river presents unique challenges to be addressed. At the same time, the river offers the region new opportunities to develop yet another nascent sector: environmental remediation. The RESTORE Act funds will bring billions to the Gulf help alleviate the region’s own environmental issues, but could also support the unique expertise and skills related to the profound challenges of maintaining coastal regions. This can be seen already in the over $210 million that has flowed to expert Louisiana companies as a result of Hurricane Sandy.¹⁰

3. The energy revolution. Perhaps no sector has more potential to generate higher wage jobs across the region, particularly for working class residents, than the current energy revolution. This is rapidly shifting economic power to North America, and it’s a shift for which the region has a front row seat. Louisiana and the greater New Orleans area boast enormous oil and gas reserves, but the region has not kept up with Houston or even smaller cities in terms of energy-related jobs. Yet there has been continued growth in many upstream services, such as petro-industrial development and exploration, even if headquarters employment has dropped. With the resolution of the BP disaster, it is hoped that the region will recover more employment in this high-wage sector.

4. Environmental remediation. This is both a major challenge and an opportunity for economic development. Simply put, there is no long-term future for the region if the environment that sup-
ports it collapses. Katrina, after all, was not the first ecological disaster to hit the region, and it won’t be the last. Finding ways to restore coastal wetlands and manage the river and other water resources in a sustainable manner not only preserves the environment that New Orleanians cherish, but could also create significant business opportunities down the road; More than 4% of Dutch GDP is related to water management, and more than 50% of that is related to international projects and the export of water expertise and services.\textsuperscript{11}

The region has already received $1.3 billion from various BP criminal settlements that will be applied to river diversion and barrier island restoration projects. Over $600 million is already budgeted for projects being let in 2014 alone, signifying great potential to expand the region’s expertise and capacity in this sector.\textsuperscript{12}

5. The construction of infrastructure. New industries require new or improved roads, better freight and harbor access, reliable, inexpensive electricity, and improved air service. The region is moving ahead on many of these fronts, from the expansion of the airport to major port improvements and the development of a new biomedical district along the Canal Street corridor. A region that has historically lagged in forward-looking improvements is showing clear signs of determination to catch up with competitors in the country and around the world.\textsuperscript{13}

Yet all these efforts must be done in conjunction with a long-term commitment to preserve the very environment that New Orleanians treasure. This is the ultimate challenge to sustaining and expanding regional prosperity in the era ahead.

This concert of economic forces is critical to driving down poverty rates and raising incomes across class and racial lines. This can only be realized if there is a conscious effort to promote broad-based, sustainable growth in a diversity of industries. This requires placing a greater emphasis, among other things, on higher education, particularly on engineering and the biosciences, and, perhaps even more, on community colleges, technical schools and certificate training. The area may now be attracting more college-educated workers, but it still lags behind the national average, reflecting a legacy of out-migration of skilled workers over the past few decades.\textsuperscript{14}
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Chapter One: New Orleans’ Rise and Decline

“Human prosperity,” wrote the Greek historian Herodotus, “never abides long in the same place.” We have in our own lifetimes seen many great cities fall into relative decline – Detroit, Cleveland, Liverpool, Osaka, Athens – while others, such as Shanghai, Boston and New York have resurged from long periods of decay, and still others, such as Houston, Singapore, San Jose and Dubai have emerged from obscurity to world-wide significance.

All great cities, like New Orleans, have legacies that make them appealing as tourist destinations or as places to explore lifestyle options. But there is a big difference between becoming a “museum city” and retaining the kind of economic dynamism that comes from a strong economy, positive net migration and entrepreneurial development.

In this respect, New Orleans must above all be seen as a region, as opposed to just a city. Most of the population and the preponderance of the region’s jobs are located outside Orleans Parish, and many critical parts of the economy – notably manufacturing, energy and logistics – are concentrated in the suburban parishes. In fact, Jefferson Parish alone accounts for nearly four in ten jobs in the region while Orleans, which accounted for 56% in 1980, now is home to barely one in three jobs. The best chance for a sustained recovery lies in working as a region that spans ten parishes, offering different lifestyle options and geographies.

To some, it may be tempting to focus on the historic aspects of the region, notably its architecture, food, music and unique folkways. Yet this approach would almost certainly deprive future New Orleanians, and particularly those who have been historically left behind, with little prospect of a substantially better life. A great city needs to preserve and build on its legacy, and to plan for future growth, or it dooms many of its people to permanent impoverishment.

The River: New Orleans’ Raison d’etre and Existential Challenge

From its inception, New Orleans has been defined by its geography, notably its position towards the mouth of the Mississippi. Even today the port generates some forty percent of all revenues for the city of New Orleans. The Mississippi is no ordinary river: its valley is larger than that created by the Yellow River in China, double that of the Nile, and fifteen times that of the Rhine. As John Barry, the author of the definitive work on the great 1927 flood, says, the river “pulses like the artery of the American heartland,” extending the river and its tributaries to forty-one percent of the continental United States, and all or part of forty-one states.

The port system created by the river remains the key asset of the region. The Port of South Louisiana, defined as the stretch of river between New Orleans and Baton Rouge, is the largest port in the United States, and the fifth largest in the world, as measured by raw tonnage. For bulk cargo, such as raw materials and agricultural products, the Port of South Louisiana is the largest in the world. In 2003, according to the Army Corps of Engineers (using 2003 statistics), The Port of New Orleans ranked fifth largest, Baton Rouge ranked tenth; Plaquemines, just south of Baton Rouge, was the eleventh largest as of 2005.
In 2003, the Port of New Orleans alone was responsible for more than 107,000 jobs, $2 billion in earnings, and $13 billion in spending. Overall, the ports, which had been devastated by Katrina, have in recent years shown robust growth. Statewide, according to one recent study, the combined ports have an even greater economic footprint, through linkages to such industries as agriculture, energy, manufacturing and warehousing. According to a 2012 study by LSU’s James Richardson, they link to as many as 400,000 jobs. The river plays a particularly important role for expanding industrial firms such as TCI, located near the Port of New Orleans, since it offers access to large domestic and overseas markets. “We don’t have a big enough local market,” noted Christian Jensen, TCI’s President. “But the river gives us access to the world.”

Table: Jobs Impact of the Shipping Industry in Greater New Orleans

<table>
<thead>
<tr>
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<td>All Other Support Activities for Transportation</td>
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<td><strong>Total</strong></td>
<td></td>
<td><strong>14,463</strong></td>
<td></td>
<td><strong>$66,523</strong></td>
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</tr>
</tbody>
</table>

Source: QCEW Employees, Non-QCEW Employees & Self-Employed - EMSI 2013.3 Class of Worker

From the earliest days, the port tied the region to the economies of the Caribbean, a connection, as we will note later, becoming increasingly critical today. One reason the American government was so eager to seize the area and its putative capital, New Orleans, was because it wanted to gain access to this trade. “New Orleans,” wrote President Jefferson who purchased Louisiana in 1803,
“will be forever, as it is now, the mighty mart of merchandise from more than a thousand rivers. No such position for the accumulation of wealth and power [has] ever existed.”

Following almost a century of “systematic neglect” from its French and Spanish masters, the transfer of ownership to the ascendant young Republic changed New Orleans; in some ways, today’s resurgence similarly reflects the benefits of a new kind of energy, one not associated with a regime change but with a critical change of attitude.

In the early American period, the introduction of steamboats, and the rapid development of the Mississippi Basin tied the city to its traditional markets in the Gulf, as well as to newer ones evolving in the interior. The city’s population surged from 12,000 in 1806 to over 46,000 by 1830 to 116,000 twenty years later, making it the fifth-largest city in the nation and the largest in the South. Historian and geographer Richard Campanella notes that New Orleans “…blossomed from an orphaned outpost of two descendant Old World Powers, into a strategically sited port city of an ascendant, business-oriented expanding New World nation.”

Yet this prosperity would be a tenuous one, hostage to the very river system that brought the city into prominence. Long before recent development, the crooked and unpredictable Mississippi River often flooded. Native Americans, faced with the threat of inundation, noted historian Lawrence Powell, consistently moved their settlements. The river also bedeviled the earliest Spanish and French settlements as they confronted its difficult nature, and its associated marshes, swamps and loose soil.

In the time of French settlement the city suffered through a devastating flood in 1782 that turned the area into “a forested lake”. Then, it survived over a dozen floods in the 19th Century, all the way to the great Mississippi flood of 1927, which took the homes of a million people along the river. Finally, the devastating disaster of Katrina hit.

The region’s geography, notes Campanella, was “anathema to human settlement”; New Orleans “as an urban system has since become one of the world’s engineering challenges”. It has been a challenge that has been intermittently contained, allowing for settlement and the development of commerce, but often at the expense of making the region even more vulnerable to natural forces. A city that at times felt safe behind its levees all too often found that comfort all too fleeting. “Floods are ‘acts of God’”, noted one geographer, “but flood losses are largely acts of man.”

**The Legacy of Inequality**

The other existential issue facing the region lies in its extraordinary levels of inequality. The extent of poverty in the region has always been considerable, a fact that became all too evident in the aftermath of Katrina. The social unrest evident at the Superdome, as its population swelled to 45,000 people, was reminiscent, notes Campanella, of “scenes stereotypical of Haiti or Bangladesh… played out in downtown New Orleans.”
At that time, the region – and particularly the city of New Orleans – suffered one of the highest levels of poverty in the country: in 2007 the incomes of almost half of all households stood under $35,000. This poverty has been all the more wrenching given the considerable wealth in the region. The greater New Orleans region has always had engines of wealth creation – from the plantations to trade, energy and real estate – and the wealthy have tended to stay in the region even after disasters, kept in place by charms not so often associated with Detroit, Cleveland or Newark.

[Graph showing household income distribution in New Orleans MSA, with data from U.S. Census American Community Survey, 2012]

[Table showing share of households with more than $200,000 annual income in 2012, with data from U.S. Census American Community Survey, 2012]
Yet this admixture of prosperity and poverty presents a fundamental challenge. Indeed, among the nation’s metropolitan regions, the New Orleans area – again most notably Orleans Parish – suffers not only one of the nation’s highest poverty rates, but also some of the worst inequality in the US. Even before Katrina, the city already had over 26,000 blighted properties, a number that doubled after the storm. This number has been since reduced, due largely to efforts by the city, which is well on target to reduce the number of blighted properties by 10,000 by this year’s end.\(^{30}\)

This physical improvement is a major achievement. But it has not changed the fundamental challenge of entrenched poverty and lack of opportunity. Indeed, as more evacuees have returned, poverty rates in the city and the metro area have returned to their 1999 levels.\(^{31}\)

Three key factors seem to account for the persistence of inequality and widespread poverty that reflect the unique nature and historical roots of the region. First, the impact of the natural environment, then, the nature of the economy and, finally, the racial scars of the past. In its early development, the plantation economy accelerated the evolution of what could be called a “slave society”. Africans enslaved and sent to Louisiana were essential for the very viability of the agricultural economy. In New Orleans, African Americans also constituted the essential workforce necessary to dredge the river and maintain the levee system. By 1763, African Americans accounted for roughly one-third of the city’s population, but this percentage was likely much higher in the surrounding countryside.\(^{32}\)

In the wake of the Louisiana Purchase, the Crescent City evolved into the largest slave-trading center in the nation. But New Orleans “differed in important ways from other “slave societies” of the antebellum South. Critically, African Americans worked beyond the fields, in the houses. Many developed skills necessary in the building of the city, such as carpentry and masonry. Other skilled professionals ranged from cigar-makers to barbers. Most critically, New Orleans evolved a strong community of free African Americans, 10,000 strong in 1850, a community that would prove essential, particularly in the era after emancipation.
This longstanding African American population – their skills, institutions and culture – has been and remains one of the region’s great assets, one that may prove critical in the era ahead. The region boasts three Historically Black Colleges and Universities – Xavier, Southern University, and Dillard University – and is the home of Faubourg Treme, considered the oldest black neighborhood in America, and the origin of the Southern Civil Rights Movement, besides being perhaps best known as the birthplace of jazz. Such assets will become, if anything, more critical by 2030 when people of color will constitute 52 percent of working adults in the region.

Historically, despite the presence of this dynamic African American population, the region’s development was hampered both by persistent racism and by the fact that the early New Orleans economy remained classically under-developed. It was largely based on the export of commodities – cotton, indigo, sugar – and had relatively low levels of industry. As a result, the city remained what historian Robert C. Reinders described as a “financial satrapy” of financiers and mercantile interests in New York and Liverpool, who made as much as forty percent profit on every dollar of exports.

So, even as agriculture-based wealth produced the largest concentration of millionaires in the nation, the overall social structure was more akin to that found in the highly-stratified Caribbean cities. One European observer in 1874 described the city as “incomplete, half-developed,” and more like Havana or Veracruz than the dynamic industrial urban regions of the Northeast or Midwest. Industry would eventually develop on a large scale only later, in the mid-twentieth century, spurred by the energy industry and the Second World War.

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>2013 Wages, Salaries, &amp; Proprietor Earnings</th>
<th>2013 Jobs</th>
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<td>Accommodation and Food Services</td>
<td>$19,818</td>
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<td>Other Services (except Public Administration)</td>
<td>$24,340</td>
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<td>Retail Trade</td>
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<td>Agriculture, Forestry, Fishing and Hunting</td>
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<td>Administrative and Support and Waste Management and Remediation Services</td>
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<td>Real Estate and Rental and Leasing</td>
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<td>Educational Services (Private)</td>
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<td>Arts, Entertainment, and Recreation</td>
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<td>Health Care and Social Assistance</td>
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<td>Total</td>
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<td>Construction</td>
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<td>3,125</td>
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<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
<td>$122,348</td>
<td>8,421</td>
</tr>
</tbody>
</table>

Greater New Orleans Region: Pay by Industry Sector, 2013
Perhaps even more difficult will be overcoming the scar of racial prejudice. For much of the region’s history, the large African American population – even after Emancipation and the Civil Rights Movement – has lived a largely parallel existence. Even today the gap between white and African American incomes remains well above the national average, as do poverty rates. In 2000, for example, according to the US Census Bureau, African American per capita income in Orleans Parish was listed as around $11,000, three thousand dollars below the national average; white per capita income was nearly $32,000, eight thousand dollars above the national average.\textsuperscript{37} By 2005, New Orleans suffered the highest rate of poverty in the southeast – almost 28% overall, and 67% among African Americans. Rates were about half that in other regional cities.\textsuperscript{38}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{MedianHouseholdIncome.png}
\caption{Median Household Income by Race, 2012}
\end{figure}

As Katrina demonstrated all too well, poverty in New Orleans is deeply intertwined with the geographic challenges of the region. Most of the predominately African-American neighborhoods were located in the low-lying areas of the city, while, with some exceptions, more affluent, usually white neighborhoods were on higher ground. When the storm hit and levees broke, poor and heavily minority neighborhoods bore the brunt of the devastation. Many of these neighborhoods remain, to this day, largely deserted, even as large parts of the rest of the region clearly have recovered. Some have suggested that proposals to move the region’s entire population to “higher ground” were a device to eliminate the largely poor, and heavily black, populations from the city.\textsuperscript{39}

**Self-inflicted Wounds**

These historic challenges were worsened by the political and economic culture that developed over the past century. From early on, the region developed a reputation for both good times and a lack of good governance, a “marvelous collection of sleaziness and peeling paint,” as Joel Garreau described it in his 1981 book, *Nine Nations of North America*.\textsuperscript{40}
Yet despite its reputation for decay and squalor, New Orleans generally has been less socially regressive than much of the South – something that may prove critical to its future success. Minority communities, including middle class African Americans, gays, and Jews, have often felt more at home in the Crescent City than in more prototypical southern locales. This differentiation persisted even though the area also exhibited many negative characteristics of southern cities, such as persistent under-development and a high incidence of crime.  

Arguably, the critical weakness lay in the city’s often elegantly-appointed and comfortable upper echelon. For much of the past century, the region’s business leadership lacked the kind of competitive spirit that drove Northern and Midwestern cities, and later Sunbelt metropolises, such as Atlanta, Charlotte, Houston and Dallas. As noted by the great Arab historian Ibn Khaldun, “…luxury destroys the character”; powerful, wealthy, settled elites tend to lose out to less celebrated competitors from elsewhere. New Orleans might have been more diverse, tolerant, and fun than its competitors, but economically it also lagged behind and, until recently, the business community was somewhat complicit, albeit unintentionally, in this decline.

In part due to these shortcomings, the New Orleans region missed out on much of the great era of Sunbelt growth from 1960 to 2000. Employment growth spiked during the oil boom of the 1970s, but slowed dramatically afterwards and failed to gain much momentum. At a time when Charlotte emerged as a financial capital, and Atlanta a corporate one, the New Orleans region remained relatively stagnant. Even today, greater New Orleans is home to only one Fortune 500 company, compared to 25 in the Houston area and 18 in Dallas, as well as 9 in Charlotte and some 13 in Atlanta.

Even more tragically, New Orleans also became a place where many of the most employable migrated elsewhere, notably to California as well as other parts of the South. In the last few decades before Katrina, New Orleans suffered considerable outmigration, even as most of its southern competitors welcomed newcomers from around the country, often in huge numbers.
At the same time, until Katrina, the region experienced very little in the way of immigration from abroad. The waves of primarily Asian and Hispanic immigration that transformed northeastern metropolitan areas and southeastern cities did not occur in greater New Orleans. In terms of immigration rates, in fact, the region still remains well behind that of not only the great northeastern and western cities, but also of most of its primary southern competitors.
The region’s famously corrupt politics – by 2005 Louisiana ranked third in the number of elected officials per capita convicted of crimes – exacerbated these problems. At the time the storm hit, the city’s schools were ranked among the worst in the nation, and its police widely seen as corrupt and ineffective, with some fifty officers going to prison in the twelve years prior to the storm. Most critical, mechanisms for flood prevention languished, in part due to federal cutbacks – a 2004 request for $100 million for levees was cut by Congress and the Bush Administration to a mere $42 million – but also because of an environmental lawsuit and a generation of neglect by local officials.

The dangers were widely appreciated, but little was done to protect the region, even as hundreds of millions were spent on convention centers, stadia and other entertainment-oriented projects. The fact that other low-lying areas, notably the Netherlands, had managed to devise systems to protect themselves was not lost on some observers. Blame for not taking steps to curb flooding is widely shared – as one writer put it, “there are too many villains to name” – as local politicians cut back on critical preventative maintenance. The ultimate result was that when the storm hit, these shortcomings were placed on tragic display for all the world.
Chapter Two: The Katrina Effect - The Remarkable New Orleans Comeback

In the immediate aftermath of the storm, many commentators, both left and right, suggested the country should not, as Jack Shafer, writing in Slate, suggested, “refloat the sunken city”. Har
vard’s Ed Glaeser, a leading urban economist, floated his own idea, which was to spend less on rebuilding the city and more on giving “vouchers” to residents so they might settle elsewhere. “Should we rebuild New Orleans 10 feet below sea level, just so it can be wiped out again?” asked Columbia University geophysicist Klaus Jacob in the Washington Post.

Why New Orleans Came Back: A Second Creation?

Against the odds, and many predictions of demise, the New Orleans region has resurged, and could well be on the cusp of a new era of growth and civic improvement. To be sure, federal government assistance, sometimes late and not always totally effective, played a critical role – mostly for relief but with a substantial $145 billion allocated for rebuilding. But the credit for the most part goes to the local population, led in many areas by the business community, who, as a group, decided not to give up on the region. Instead of permitting New Orleans to become a dead city, or devolving into a museum setting, local business leaders chose to reinvent themselves, and their region.

The New Orleans area and its business community has now entered a phase similar to that experienced by San Francisco after the 1906 earthquake or Chicago following the fire in 1871. In both cases there were outbreaks of lawlessness and many other reasons to despair at the sight of so much mass destruction. But instead of abandoning their town, the local business and political leadership determined to remake their cities, not in the same mold, but in a far better one. “Everybody,” wrote one local writer a year after the destruction of San Francisco, ‘looks back at the era ‘before the earthquake’ as a period of insipidity.”

In the New Orleans region, we have seen the reformation of many institutions, from the levee boards, which were reformed in 2006, to the almost miraculous recovery of the Orleans school district since 2005, turning what had been widely considered a major weakness into a nationally-recognized, potentially game-changing success story. High school graduation rates soared to 78% in 2012, up from 52% before Katrina. The share of New Orleans students proficient in math, reading, science and social studies jumped to 58% in 2012 from 35% before the 2005 storm, state data shows. “None of this would have happened without Katrina,” suggests Loyola theologian and philosopher Michael Cowan. “It changed forever what had been an inertial environment. After Katrina, it was like operating in zero gravity. Katrina broke the pattern.”

Business’ involvement was also critical in pushing for substantial improvements in the overall business climate in both the city and the state. There has been an unprecedented rallying of businesses in organizations such as Greater New Orleans Inc. and the New Orleans Business Alliance. Critically, political and business leaders, who in the past often had less than cordial relations, have been able to work more co-operatively, as they do in other progressive regions such as Houston. Businesses
and government have worked closely together on such critical issues as retaining sports franchises and reforming flood insurance.\textsuperscript{54}

This business-led push has extended from both traditional infrastructure, such as ports, to encouraging the development of startups in the region.\textsuperscript{55} Particular emphasis has been given to promising fields such as digital media and healthcare, as well as encouraging higher graduation rates in local high schools and universities. In addition, there have been moves to improve skills education at local technical schools and community colleges.\textsuperscript{56}

Indeed, in 2012, according to Chief Executive Magazine, Louisiana has enjoyed the best improvement for business of any in the union. Ranked 45th in 2008, the state moved to 27th in 2011 and 13th in 2012, a remarkable jump of 32 spots.\textsuperscript{57} It also ranked second in tax costs for new operations, an important lure for incoming business. The New Orleans region, once considered a difficult locale for business, has ascended in at least one recent study from the bottom of the pack to the top third – the most dramatic improvement of any region in the country.\textsuperscript{58}

Most importantly, these reforms were spearheaded by both the business and the political class. Credit belongs to both the scion of a major Democratic Party dynasty, Mayor Mitch Landrieu, and to the child of Indian-American immigrants, Republican Governor Bobby Jindal. Their efforts have forged what historian David Nye has called “a second creation”. Essentially, this creation entails not a return to a state of nature pre-settlement, but an effort to “recoup the virtues of the first landscape” through corrective action.\textsuperscript{59}

**The Demographic Revival**

Nothing better reveals a region’s appeal than demography. Pre-Katrina, the history of the New Orleans region can be said to have been divided into three demographic periods: first, fast growth until the War Between the States, especially in the city but also the region; second, there was steady growth for much of the following century, with the city’s peak population in 1960 at 627,000, enabled mostly by expansion into low-lying parts of the city; third, a long decline in the city population, offset, in part, by suburbanization throughout the region. Orleans Parish’s population dropped by 23\% between 1960 and 2000, as primarily white, middle class households fled to surrounding jurisdictions, notably Jefferson, St. Bernard, and St. Tammany parishes.\textsuperscript{60} Overall, between 1950 and 2005, the percentage of the metropolitan area’s population contained in Orleans Parish dropped from 80\% to closer to 40\%.\textsuperscript{61}

Yet this steady suburbanization – while sustaining overall population – was not great enough to reverse the pattern of slow growth in the region. Other regions, notably Houston, Atlanta, Charlotte, Raleigh and Tampa have grown far more rapidly than the national average, while New Orleans actually lagged behind. Professionals in particular continued to migrate out at a rapid rate. This included many African-Americans professionals, at a time that many southern cities were attracting them in large numbers.\textsuperscript{62}
Not surprisingly, during the period after 1969, when most large southern cities were experiencing considerable in-migration, New Orleans was hemorrhaging people to other cities, including elsewhere in the South.

In sharp contrast to many other southern and western cities, New Orleans became essentially stagnant demographically, with few people coming into the region. As a result, its population was more “native” than virtually any in the country. For example, while in 2000 over 77% in the
City of New Orleans were natives, the percentage was 44.8% in San Jose, 40% in Denver, and 53% in Houston. As urban geographer Jim Russell, among others, have pointed out the real problem facing regions is not out-migration, but the lack of newcomers from the rest of the country or abroad, who might challenge local institutions and find new innovative uses for long-established places.64

**Katrina Changes New Orleans Demographics – Perhaps Permanently**

Initially, the ravages of Katrina drove the population down to levels not seen since a century earlier. At its lowest ebb, the city’s population dropped precipitously, although losses were far less severe in Jefferson Parish, and in some other suburban areas, particularly St. Tammany, which grew by 22% over the decade.65

The recovery of Orleans Parish was slower after the storm, but lately has been more robust, largely in the generally more affluent areas with higher elevations, notably the French Quarter and the Garden District. Recovery has been far less pronounced in lower-lying, poorer areas such as the Lower Ninth. Today the city appears to be leading the party, with the most rapid population growth in the region. Nonetheless, the city’s population still remains way below its pre-2005 level, not to mention its 1960 high point.
Although there may be now some slowing of the region’s population growth, the critical thing to remember is that this recovery did not have to happen at all. The region could have entered a long term demographic decline, as has been seen in many areas, such as Detroit, Cleveland and Buffalo. But instead the greater New Orleans region has experienced significant net in-migration and population growth. Improved economic conditions elsewhere in the country may be slowing the in-flows, but the overall regional population trajectory has been positive.
To be sure much of the population growth since 2007 reflects in large part the return of evacuees, particularly from relatively nearby places such as Baton Rouge and Houston. But it also reflects a critically important shift in demographic patterns, which shows strong migration from areas such as Greater New York and Southern California that – unlike Houston or Atlanta – were not primary locations for evacuees.

The change in the kind of people now coming to the region is worth noting. In the immediate aftermath of Katrina, notes geographer Campanella, there was initially a surge of what he referred to as YURPS, or Young Urban Rebuilding Professionals. After that came a growing population of well-educated professionals, who saw personal opportunity to be part of the region’s recovery. Campanella estimates this group at around 15-20,000. Overall, some 30,000 new people have moved into the city alone since the storm. These newcomers are widely credited not only with helping rebuild New Orleans and injecting needed human capital, but also with sparking an increase in the rate of start-up companies that is well above the national average.
In sharp contrast to older people, who still tend to hold some negative perceptions of the region, the image of greater New Orleans has become increasingly favorable among single, young professionals and among people from traditional centers of education such as Washington, D.C., Los Angeles, San Francisco, New York and Austin. Among these groups, according to a recent survey by Lakeside Research Partners, the favorability of the region stood as high as 70%.\textsuperscript{70,71}

The New Orleans area has also seen a rapid growth in immigration since the storm. Much of this was a direct result of the opportunities, primarily in construction, associated with the rebuilding. Particularly attracted were workers from Mexico and Central America, who have increasingly settled in outlying parts of Orleans Parish and, most of all, in Jefferson Parish. Hispanics have been particularly prominent, roughly doubling their share of the population in the region since 2000 to 8%.\textsuperscript{72}
What is driving these diverse people to greater New Orleans in recent years? Available jobs due to reconstruction certainly was the biggest driver, particularly for Latinos. But now that they have settled in the region, Latino and Asian immigrants also are providing new energy to the area, not only in construction jobs, but they are entrepreneurs who are opening stores and restaurants, and starting businesses in the tech industries.73

Another less-recognized feature may be cost of living. When adjusted for how expensive things are – particularly housing – workers in greater New Orleans get more for their wages than most people on the Atlantic and Pacific coasts. The median house price compared to median income ration in New Orleans is roughly one-half of what it is in New York, Los Angeles, San Francisco and San Jose.

Source: 10th Annual International Demographia Housing Affordability Survey: 2014
Cost of living compares particularly well with such popular tech environments as San Francisco/Silicon Valley, San Diego, Boston, Seattle and New York. “For $65,000 a year in San Francisco you get a shared apartment and no car,” suggests long-time tech entrepreneur Chris Reade. “Here, you get great restaurants and clubs, and you get to have a car and your own nice apartment. It’s a no-brainer.”

Unfinished Business

Yet if the return of evacuees, the in-migration of young educated people and immigrants constitute strong positives for the future, there still remains the serious, long-term issue of entrenched poverty. Indeed, today the percentage of poor people in the region, and even more so in the city, has returned to close to pre-Katrina highs. Roughly thirty percent of city residents are poor, compared to a 16% rate nationwide. The storm may have washed away many problems, and brought in its wake some very positive demographic trends, but it has not come close to solving the region’s fundamental crisis of widespread poverty and inequality. In addition, despite the region’s long and distinguished history of African-American enterprise, the black-owned share of business has long trailed the community’s percentage of the population.

Particularly troubling: The percentage of black men with college degrees has remained at a dismal 11% over the past decade, while in many other southern regions the percentage grew over 80% to roughly 22%. At the same time, the percentage of African American households earning over $40,000 annually has dropped considerably, while the white middle, upper middle, and affluent percentages all grew. This cannot be seen only as a “city problem”, since the majority of the region’s poor now live in the suburbs, where the poverty rate was 15%. Overall, African American youths in New Orleans suffer a “disconnection” rate – those out of work and out of school – of 16.3% compared to 12.7% nationally, a 30% differential.

Poverty Rates by Parish, 2012

<table>
<thead>
<tr>
<th>Parish</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orleans Parish, LA</td>
<td>28.7%</td>
</tr>
<tr>
<td>Tangipahoa Parish, LA</td>
<td>24.4%</td>
</tr>
<tr>
<td>Jefferson Parish, LA</td>
<td>15.9%</td>
</tr>
<tr>
<td>St. Tammany Parish, LA</td>
<td>13.6%</td>
</tr>
</tbody>
</table>

U.S. Census American Community Survey, 2012
Worse still, incarceration rates in Orleans Parish are almost four times as high as the national average. The rest of the region also suffers rates of incarceration considerably above the national average. Violent crime rates, although now in decline, remain above the national average, with much of the activity taking place in poor, heavily minority communities. If current trends continue, however, the murder rate could be the lowest since the onset of the new millennium, although still higher than all but a few cities. Equally revealing the city’s rate of violent crime is overall lower than in many other cities, including San Francisco, Miami and Houston as well as lower than traditionally troubled places like Detroit or Memphis. 

Despite these improvements, many people, notably long-time African American residents, often seem skeptical about the benefits of the new in-migration and the overall evolution of the regional economy. Many African Americans, notes city employee Lydia Cutrer, feel some have “trust issues after many broken promises, and feel like outsiders are taking over.” Or, as former New Orleanian Sherby Guillory, a health care worker and now a Houston resident put it acidly, “They want to build a shining city on a hill, but without the people.”

**The New Concert of Economic Forces**

Ultimately a region needs to set its priorities to address its most fundamental challenges. One convenient theory suggests a focus on New Orleans’ unique cultural legacy through the expansion of tourism, and on the information sector. Yet this theory – which comports with the notion of an ascendant “creative class” – offers very little for a large segment of the population in a city long plagued by great ethnic divides and economic chasms, as has been acknowledged by, among others, the creative class concept’s creator.

Instead, the region must look to a broader strategy, one that provides potential opportunities for middle and working class residents. This, notes urban analyst Richey Piiparinen, requires “refo-cusing the lens through which modern urban revitalization is viewed. The default setting is to com- pete for the scarce, educated elite. Instead, we should flip this script and require cities to give up on the idea that there is some audience that will save them. It is a city’s people who ultimately ruin or save themselves.”

**The Knowledge-Based Sectors**

New Orleans information sector nonetheless does add an important new instrument to the region’s overall economic concert. The growth of entertainment, video games and software has been rapid in recent years, and in many cases, faster than that seen in all but a handful of regions. This even includes economies such as Houston, Dallas, and Atlanta, which long ago passed New Orleans in many other industries. Overall, tech jobs in the New Orleans region, according to Moody Analytics, grew 19% since 2005, six times the national rate. Along with other information sector industries, these fields generally pay high wages.
### Engineers by Industry in Greater New Orleans

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural, Engineering, &amp; Related Services</td>
<td>2,238</td>
<td>25%</td>
<td>31.3%</td>
</tr>
<tr>
<td>Oil &amp; Gas Extraction</td>
<td>784</td>
<td>11%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Federal Government, Civilian</td>
<td>423</td>
<td>5%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Petroleum &amp; Coal Products Manufacturing</td>
<td>391</td>
<td>3%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Management of Companies &amp; Enterprises</td>
<td>239</td>
<td>5%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Support Activities for Mining</td>
<td>218</td>
<td>(9%)</td>
<td>3.0%</td>
</tr>
<tr>
<td>Basic Chemical Manufacturing</td>
<td>202</td>
<td>(25%)</td>
<td>2.8%</td>
</tr>
<tr>
<td>Ship &amp; Boat Building</td>
<td>175</td>
<td>(61%)</td>
<td>2.4%</td>
</tr>
<tr>
<td>Nonresidential Building Construction</td>
<td>168</td>
<td>26%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Local Government, Excluding Education &amp; Hospitals</td>
<td>153</td>
<td>1%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Electric Power Generation, Transmission &amp; Distribution</td>
<td>119</td>
<td>2%</td>
<td>1.7%</td>
</tr>
<tr>
<td>State Government, Excluding Education &amp; Hospitals</td>
<td>113</td>
<td>(20%)</td>
<td>1.6%</td>
</tr>
<tr>
<td>Management, Scientific, &amp; Technical Consulting Services</td>
<td>103</td>
<td>10%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Employment Services</td>
<td>98</td>
<td>(24%)</td>
<td>1.4%</td>
</tr>
<tr>
<td>Navigational, Measuring, Electromedical, &amp; Control Instruments Manufacturing</td>
<td>94</td>
<td>(13%)</td>
<td>1.3%</td>
</tr>
<tr>
<td>Other Heavy &amp; Civil Engineering Construction</td>
<td>83</td>
<td>48%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Resin, Synthetic Rubber, &amp; Artificial Synthetic Fibers &amp; Filaments Manufacturing</td>
<td>75</td>
<td>47%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Computer Systems Design &amp; Related Services</td>
<td>64</td>
<td>8%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

### A Profile of the Greater New Orleans Knowledge Industries

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Jobs</th>
<th>% Change</th>
<th>2013 Avg. Earnings Per Job</th>
<th>2012 Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Services</td>
<td>6,049</td>
<td>22%</td>
<td>$101,748</td>
<td>1.48</td>
</tr>
<tr>
<td>Motion Picture &amp; Video Production</td>
<td>2,417</td>
<td>32%</td>
<td>$52,324</td>
<td>2.25</td>
</tr>
<tr>
<td>Custom Computer Programming Services</td>
<td>1,803</td>
<td>7%</td>
<td>$80,506</td>
<td>0.53</td>
</tr>
<tr>
<td>Other Scientific &amp; Technical Consulting Services</td>
<td>957</td>
<td>14%</td>
<td>$68,809</td>
<td>0.93</td>
</tr>
<tr>
<td>Computer Systems Design Services</td>
<td>946</td>
<td>24%</td>
<td>$87,227</td>
<td>0.26</td>
</tr>
<tr>
<td>Environmental Consulting Services</td>
<td>369</td>
<td>(14%)</td>
<td>$61,817</td>
<td>0.88</td>
</tr>
<tr>
<td>R &amp; D in Physical, Engineering, &amp; Life Sc. (except Biotech)</td>
<td>211</td>
<td>4%</td>
<td>$87,874</td>
<td>0.11</td>
</tr>
<tr>
<td>Other Motion Picture &amp; Video Industries</td>
<td>198</td>
<td>87%</td>
<td>$61,339</td>
<td>12.88</td>
</tr>
<tr>
<td>Software Publishers</td>
<td>157</td>
<td>67%</td>
<td>$96,079</td>
<td>0.13</td>
</tr>
<tr>
<td>Internet Publishing &amp; Broadcasting &amp; Web Search Portals</td>
<td>126</td>
<td>83%</td>
<td>$69,806</td>
<td>0.22</td>
</tr>
<tr>
<td>Research &amp; Development in Biotechnology</td>
<td>52</td>
<td>(5%)</td>
<td>$110,884</td>
<td>0.85</td>
</tr>
<tr>
<td>Teleproduction &amp; Other Postproduction Services</td>
<td>81</td>
<td>268%</td>
<td>$42,291</td>
<td>0.08</td>
</tr>
<tr>
<td>Motion Picture &amp; Video Distribution</td>
<td>24</td>
<td>71%</td>
<td>$37,713</td>
<td>0.75</td>
</tr>
<tr>
<td>Industrial Design Services</td>
<td>23</td>
<td>109%</td>
<td>$39,016</td>
<td>0.29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13,412</td>
<td>21%</td>
<td><strong>$83,988</strong></td>
<td>0.71</td>
</tr>
</tbody>
</table>
The prospects for expansion of the knowledge industries are largely positive but hardly a sure thing. New Orleans offers many things – such as great universities and an exciting cultural environment – that are common to many emerging tech centers, but at a markedly lower cost to both companies and individuals. This follows the notion that the strongest economies are those with “blue” characteristics in terms of social attitudes and culture, but also benefit from the “red” state tax and regulatory environment. Information was one of the first sectors in the region to recover from Katrina, and Louisiana has enjoyed some of the fastest growth in television and movies in the nation, and now ranks third behind Los Angeles and New York as a production center.84

There is also movement in the digital space. General Electric is setting up a 300-person operation – with salaries between $60,000 and $100,000 annually – in New Orleans. Globalstar, a mobile technology firm, moved its headquarters to Covington, St. Tammany Parish in 2010.85 If these operations thrive, there may be potential for a whole new concentration of tech-related firms, as has occurred in Austin, Raleigh and other competitive southern cities.

As costs escalate in places like Silicon Valley and Hollywood, this shift could accelerate in coming years. At a time when entertainment production nationally has been down, Louisiana has seen the number of motion pictures on its locations triple from 33 per year in 2002-2007 to an average of 92 annually in 2008-2010. Since 2009, a total of 190 films have been shot in the state. Other parts of the industry, like sound recording and interactive media, have all grown rapidly.86
Critically this sector is now achieving critical mass. Over the past decade many states – Michigan, for example – have attracted productions with tax and other incentives. Louisiana has done this as well, but here it appears to have created a nascent but growing permanent presence. In part, this reflects the fact that New Orleans and Louisiana possess unique assets that attract creative workers; a Detroit, Atlanta or Dallas might make a convenient and cost-efficient place to make a film or television show, but they lack the essential cultural richness evident to anyone who has spent time in southeast Louisiana.

“This is different,” notes Los Angeles native and longtime Hollywood costumer Wingate Jones, who started Southern Costume Co. last year to cash in on serving local film productions. “It’s the combination of the food and the culture that appeals to people. It must have been a lot like what Hollywood was like in ‘20s and ‘30s. It’s entrepreneurial and growing like mad.”

Yet if the growth has been impressive, the region remains well behind the leaders in software from a location quotient perspective, where Los Angeles still dominates. New Orleans may be a rising tech and entertainment center, but it is critical to note that it has a long way to go. Its film and television industry may be expanding rapidly, but it still accounts for just 2600 jobs in the region, and is unlikely to be able to make up for losses in other high-wage sectors.
David Hague, who helped launch the New Orleans operations of Paris-based Gameloft (www.gameloft.com), suggests this growth will continue due to the relative attractiveness of the region. Job openings for the facility in 2011, which now employs some 150 people, brought a blizzard of 2500 applications. “Everywhere you look there is something inspiring either architecturally or historically; not to mention a thriving arts community,” he suggests. “When you combine all these aspects and project them forward you have the foundation to build a critical mass of employers in the industry that will keep the area competitive long-term.” 89

Yet to create a larger presence in the information industry, Hague and others suggest, there needs to be a greater pooling of technical talent. It can be “very challenging to recruit here,” notes Matt Wisdom, founder of Turbosquid, a local digital arts firm, particularly at the management level. There is not the kind of deep bench, he says, that firms in places like Silicon Valley, Seattle or Orange County, California might be able to turn to. 90

Overall, despite recent growth, there remains broad regional weakness in what are generally referred to as STEM (Science-Technology-Engineering-Math-related) jobs. For the most part, these jobs have been tied to more traditional industries, such as energy and manufacturing, which employ most research and development engineers and scientists. Particularly critical is the fate of NASA’s facility in Michoud, which long employed many engineers but has been lately impacted by cutbacks in the space program. 91
At present New Orleans ranks 39th out of 85 major metropolitan areas in terms of per capita engineers, with slightly over 12 engineers per 1000 working people. In contrast, first place Silicon Valley boasts 45, while second-ranked Houston counts 22. If New Orleans is to expand its overall tech economy, it will have to expand its emerging information sector and see significant growth in traditional industries with large engineering components.\(^92\)

**Culture and Tourism**

New Orleans’ cultural legacy has remained a strong asset. Tourism, notes the Greater New Orleans Community Data Center, remains the region’s “strong specialization” and employs over 40,000 people, up 10,000 since Katrina. As a source of employment and a way to sell the city to others, tourism remains an important part of the economy. In 2012 the number of visitors to the region grew three percent from the previous year, to a level not seen in almost a decade.\(^93\)
The closely-related arts sector has also expanded over this period. The region, due largely to growth after Katrina, has double the rate of arts and culture non-profits as the rest of the country. Arts employment is also up, as more visitors arrive, and is perhaps due as well to an expanding market provided by well-educated new migrants. The expansion of the arts and tourism sectors provides an excellent opportunity to enhance the New Orleans narrative, and position the region to become the cultural capital of the Third Coast.
Yet there are limits to what these sectors can do to address the fundamental issue of economic opportunity. After all, if the arts industry produced wealth on its own, New Orleans, long a leader in the field, would have developed a high wage economy. Generally speaking, arts employment does not pay well – hence the notion of “starving artists” – with an average salary of just $23,500, well below salaries in fields such as energy, manufacturing, information and trade. Tourism also pays relatively low wages, with average salaries in the region of roughly $32,000 annually. Yet it is important not to underestimate the impact of these industries, notably the New Orleans food scene, in creating significant entrepreneurial opportunities locally, while sending whiffs to rest of the country that can lure the food-oriented to the city.\textsuperscript{95}

**Why Energy And Manufacturing Remain Critical To Sustainable Growth**

For New Orleans, arguably the most critical economic issue lies in the expansion of higher wage industries. In 1980, at the peak of the energy boom, wages in New Orleans were actually slightly above the national average. As that boom declined into a bust, the city’s annual wages dropped over $2,300 by 1990. Although wages have since recovered, they remain consistently below the national average, with a gap of over $9,000 in 2000.

The post-Katrina resurgence – led in part by construction and the rise of the information sector – has narrowed this gap considerably, to $3,000. But there is evidence that this gap could widen again, particularly if the reconstruction-fueled construction sector slows. More tourism and arts jobs will not do much to reduce this gap, or create higher wage opportunities, which would have to come from elsewhere.\textsuperscript{96}

By far the greatest opportunity for creating large numbers of high-paying jobs for a wide array of skillsets, lies in the energy industry, and in manufacturing and the ports. Overall, according to Amy Myers Jaffe, Director of the Energy Forum at Rice University’s Baker Institute, US oil reserves now stand at over two trillion barrels; Canada has slightly more. Together, this constitutes more than three times the total estimated reserves of the Middle East and North Africa.\textsuperscript{97} Observers such as the New America Foundation’s Michael Lind, believe that new discoveries, particularly of natural gas, mean that we might actually be living in an era of “peak renewables,” and at the onset of a “very long age of fossil fuels.”\textsuperscript{98}

Some insist that in a post-industrial economy, producing things and developing commodities are detrimental to future growth. *The New York Times* columnist Thomas Friedman has written of the “curse” of raw-material wealth, and warned about the dangers of using raw-material development to spur growth.\textsuperscript{99} Yet these industries remain critical to higher wage employment. New Orleans enjoyed stronger average salaries in the late 1970s and early 1980s, when a major energy boom added 100,000 jobs\textsuperscript{100} and kept the region’s productivity growth well above the national average. In contrast, the expanded income disparity with the rest of the country coincided with the loss of roughly 10,000 energy industry positions between 1980 and 2000. In 2011, the gap between household income in the region and the nation was $6500 dollars, as opposed to less than $3000 in 1979.\textsuperscript{101}
### Greater New Orleans High-earnings Sectors

<table>
<thead>
<tr>
<th>Description</th>
<th>2013 Jobs</th>
<th>2013 Location Quotient</th>
<th>2013 Wages, Salaries, &amp; Proprietor Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil &amp; Gas Extraction</td>
<td>3,427</td>
<td>3.98</td>
<td>$171,052</td>
</tr>
<tr>
<td>Securities, Commodity Contracts, &amp; Other Financial Investments &amp; Related Activities</td>
<td>2,024</td>
<td>0.51</td>
<td>$119,559</td>
</tr>
<tr>
<td>Petroleum &amp; Coal Products Manufacturing</td>
<td>4,934</td>
<td>9.93</td>
<td>$118,683</td>
</tr>
<tr>
<td>Pipeline Transportation</td>
<td>405</td>
<td>2.08</td>
<td>$103,544</td>
</tr>
<tr>
<td>Chemical Manufacturing</td>
<td>5,135</td>
<td>1.46</td>
<td>$95,733</td>
</tr>
<tr>
<td>Mining (except Oil &amp; Gas)</td>
<td>582</td>
<td>0.61</td>
<td>$89,029</td>
</tr>
<tr>
<td>Support Activities for Mining</td>
<td>4,413</td>
<td>2.46</td>
<td>$88,924</td>
</tr>
<tr>
<td>Utilities</td>
<td>3,125</td>
<td>1.30</td>
<td>$88,244</td>
</tr>
<tr>
<td>Rail Transportation</td>
<td>898</td>
<td>0.86</td>
<td>$85,491</td>
</tr>
<tr>
<td>Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)</td>
<td>148</td>
<td>1.46</td>
<td>$81,546</td>
</tr>
<tr>
<td>Water Transportation</td>
<td>3,830</td>
<td>13.22</td>
<td>$80,565</td>
</tr>
<tr>
<td>Wholesale Electronic Markets &amp; Agents &amp; Brokers</td>
<td>4,245</td>
<td>1.08</td>
<td>$78,418</td>
</tr>
<tr>
<td>Performing Arts, Spectator Sports, &amp; Related Industries</td>
<td>4,170</td>
<td>1.24</td>
<td>$77,125</td>
</tr>
<tr>
<td>Insurance Carriers &amp; Related Activities</td>
<td>10,641</td>
<td>0.98</td>
<td>$74,067</td>
</tr>
<tr>
<td>Management of Companies &amp; Enterprises</td>
<td>8,061</td>
<td>0.91</td>
<td>$71,830</td>
</tr>
<tr>
<td>All Sectors</td>
<td>656,250</td>
<td></td>
<td>$44,155</td>
</tr>
</tbody>
</table>

Energy employment nationally has generally been on a roll. The New Orleans region, and indeed the entire state of Louisiana, is ideally suited to take advantage of this expansion. Hitherto, between 2008 and 2010, New Orleans lagged behind in energy jobs, in large part due to the moratorium after the BP disaster, while the industry grew nationally by 26 percent. Cutbacks and delays following the crisis hit many firms, including over 1700 small businesses in the area. These jobs pay, on average, over $100,000 annually, more than three times the rate for tourism and well above even such lucrative professions as law, motion pictures and construction. Many of those working in this industry are people with blue-collar skills, from rig-workers to truck drivers, who rarely enjoy such high pay.
Energy provides a critical opportunity for New Orleans. The United States is in the midst of a major energy boom, and has recaptured its historic role as the world’s top oil producer.\textsuperscript{105} Besides its offshore resources, Louisiana is also home to many of the country’s largest deposits of shale oil and gas, which could lead to expanding opportunities in exploration. Even as coastal drilling has faced moratoria and delays, on-shore production of natural gas has grown 34\% in the state, and is at levels not seen since the 1970s.\textsuperscript{106}
A Manufacturing Resurgence

In recent decades, manufacturing employment has declined in the region, as it has in so much of the country. Yet the prospects of a significant industrial recovery could be in the offering, with many firms looking to locate facilities here as opposed to China and other developing countries.\textsuperscript{107} In part, this opportunity is being driven by expansion of American fossil fuel production, which has sparked new investment and production in many parts of the country, but particularly in the southeast.\textsuperscript{108}

Manufacturing employment levels in the greater New Orleans region of late reveals a mixed story, with some sectors gaining and others losing. Overall, manufacturing employment is down nearly 5\% since 2010, during a time when manufacturing rebounded across the nation. The region’s decline, however, is caused by losses of 4,300 jobs in just three sectors: shipbuilding, guided missiles, and petrochemicals. On the other hand, outside of these three industries, employment is up 8\%, twice the national rate. This suggests there is greater potential for industrial growth than the initial numbers may seem to indicate.

![Chart: Manufacturing Employment, 2010-2013](chart.png)

EMSI 2013.3 Class of Worker - QCEW Employees, Non-QCEW Employees & Self-Employed

The manufacturing sector should expand, given the large-scale investment taking place, particularly in the oil and gas industries. Six of the twenty largest capital investments in the country are tied to oil and gas; the largest, from the South African company Sasol, is located in western Louisiana, and involves a $10 billion gas-to-liquids plant. The second-largest, a liquid natural gas plant, is also located in the state. Overall, in 2011, Louisiana increased capital investment more than any other state.\textsuperscript{109} According to a recent Boston Consulting Group report, rising wage rates in China, the advantage of proximity to the huge North American market, and technological advances all make domestic manufacturing increasingly attractive. This “reallocating of global manufacturing,” the report maintains, “is in its very early phases.” This, it concludes, will make some US states – such as Louisiana, South Carolina, Alabama, and Tennessee – “among the least expensive production sites in the industrialized world.”\textsuperscript{110}
These jobs should expand as the state enjoys some $50 billion in new industrial investments, including many new facilities in Jefferson, St. Charles, Iberville, St. John the Baptist and St. James parishes. Particularly promising is the Nucor Steel plant located in St. James Parish, which could see some $3 billion in investment and as many as 1000 full-time direct jobs. Other sectors, such as food manufacturing, have also gained employment, with several existing producers now in the midst of significant expansions.111

The Port Complex and the Rise of the Third Coast

This industrial resurgence is also tied to the region’s historic economic driver: the river. The ability to ship products from New Orleans and other regional ports is critical to the plans of many manufacturers, including Nucor and Laitram, a homegrown manufacturer of food-processing equipment.

Overall, the river-based economy is expanding quickly; Port of New Orleans container trade volume has almost doubled in the past five years. Both it and the Port of South Louisiana, the number one cargo port in the US by tonnage, are undergoing significant expansions.112 Trade employment remains critical to the region’s economy, and jobs tied to shipping pay an average wage of $72,000 annually. The recovery of jobs in this sector provides additional hope for producing the higher wage, skilled employment desperately needed by the region’s working class.
Top Shipping Centers of the Nation’s Largest Metro Areas
Employment Concentration of Shipping Cluster, 2013

<table>
<thead>
<tr>
<th>Location</th>
<th>2013 Jobs</th>
<th>% Change</th>
<th>2013 Avg. Earnings Per Job</th>
<th>2013 Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memphis, TN-MS-AR</td>
<td>3,649</td>
<td>(1%)</td>
<td>$76,662</td>
<td>3.14</td>
</tr>
<tr>
<td>Greater New Orleans</td>
<td>3,187</td>
<td>(6%)</td>
<td>$86,342</td>
<td>2.22</td>
</tr>
<tr>
<td>Riverside-San Bernardino-Ontario, CA</td>
<td>1,651</td>
<td>(4%)</td>
<td>$84,998</td>
<td>2.00</td>
</tr>
<tr>
<td>Columbus, OH</td>
<td>1,523</td>
<td>(6%)</td>
<td>$112,386</td>
<td>1.97</td>
</tr>
<tr>
<td>Louisville/Jefferson County, KY-IN</td>
<td>1,432</td>
<td>(8%)</td>
<td>$45,919</td>
<td>1.60</td>
</tr>
<tr>
<td>Jacksonville, Fl</td>
<td>925</td>
<td>(51%)</td>
<td>$83,751</td>
<td>1.52</td>
</tr>
<tr>
<td>Indianapolis-Carmel, IN</td>
<td>454</td>
<td>(2%)</td>
<td>$71,552</td>
<td>1.50</td>
</tr>
<tr>
<td>Orlando-Sanford, FL</td>
<td>&lt;10</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>14,463</td>
<td>2%</td>
<td>$82,967</td>
<td>2.98</td>
</tr>
</tbody>
</table>

Equally important, the new port growth could gain from a geopolitical shift along the Third Coast towards increased trade with the Caribbean Basin and Latin America. Over the last decade, for example, Third Coast trade with South America and Caribbean countries increased by 167%, far outpacing increases in the region’s trade with Europe and Asia. Indeed, since 2003, the value of exports from the Gulf ports has more than tripled; the region’s share of US exports over that period grew from roughly 10 to nearly 16% of the US total. Louisiana’s exports have grown faster than those of any major state, faster even than those of Texas. The state now ranks fourth, behind Texas, California and New York, in export trade.113

Table: Greater New Orleans Shipping Cluster by Parish

<table>
<thead>
<tr>
<th>Parish</th>
<th>2013 Jobs</th>
<th>% Change</th>
<th>2013 Avg. Earnings Per Job</th>
<th>2013 Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jefferson</td>
<td>3,649</td>
<td>(1%)</td>
<td>$76,662</td>
<td>2.27</td>
</tr>
<tr>
<td>Orleans</td>
<td>3,187</td>
<td>(6%)</td>
<td>$86,342</td>
<td>2.14</td>
</tr>
<tr>
<td>Plaquemines</td>
<td>1,651</td>
<td>(4%)</td>
<td>$84,998</td>
<td>13.09</td>
</tr>
<tr>
<td>St. Charles</td>
<td>1,523</td>
<td>13%</td>
<td>$112,386</td>
<td>7.57</td>
</tr>
<tr>
<td>Tangipahoa</td>
<td>1,432</td>
<td>8%</td>
<td>$45,919</td>
<td>3.99</td>
</tr>
<tr>
<td>St. Tammany</td>
<td>1,254</td>
<td>(3%)</td>
<td>$101,833</td>
<td>1.82</td>
</tr>
<tr>
<td>St. James</td>
<td>925</td>
<td>51%</td>
<td>$83,751</td>
<td>13.41</td>
</tr>
<tr>
<td>St. John the Baptist</td>
<td>454</td>
<td>(2%)</td>
<td>$76,507</td>
<td>3.50</td>
</tr>
<tr>
<td>St. Bernard</td>
<td>385</td>
<td>6%</td>
<td>$71,552</td>
<td>4.02</td>
</tr>
<tr>
<td>Washington</td>
<td>&lt;10</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>14,463</td>
<td>2%</td>
<td>$82,967</td>
<td>2.98</td>
</tr>
</tbody>
</table>
The emergence of Latin America since 2000 is critical to the development of the Third Coast and greater New Orleans. Latin America, with 600 million people, including a middle class of some 400 million, represents one of the world’s great growth markets. Poverty, although still afflicting some 200 million residents, has dropped 17% since 1990. Latin America’s total GDP is already larger than Russia’s and India’s combined – larger, in fact, than that of any regions besides the US, the E.U., and China. Mexico and Central America are the region’s primary Latin trading partners and source of immigrants, and are on the forefront of this change, with half the population now in the middle class.\textsuperscript{114}
Metropolitan Export Growth

Source: International Trade Administration, U.S. Department of Commerce

Top 12 Largest Metropolitan Exporters
2012 ($billions)

<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Total Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston; TX</td>
<td>$110</td>
</tr>
<tr>
<td>New York NY-NJ-PA</td>
<td>$102</td>
</tr>
<tr>
<td>Los Angeles; CA</td>
<td>$75</td>
</tr>
<tr>
<td>Detroit; MI</td>
<td>$55</td>
</tr>
<tr>
<td>Seattle; WA</td>
<td>$50</td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-Miami Beach; FL</td>
<td>$48</td>
</tr>
<tr>
<td>Chicago; IL-IN-WI</td>
<td>$41</td>
</tr>
<tr>
<td>Dallas; TX</td>
<td>$28</td>
</tr>
<tr>
<td>San Jose; CA</td>
<td>$27</td>
</tr>
<tr>
<td>Minneapolis; MN-WI</td>
<td>$25</td>
</tr>
<tr>
<td>New Orleans; LA</td>
<td>$24</td>
</tr>
<tr>
<td>San Francisco; CA</td>
<td>$23</td>
</tr>
</tbody>
</table>

Source: International Trade Administration, U.S. Department of Commerce
These positive trends will be further accelerated by the $5.25 billion widening of the Panama Canal, scheduled for completion in 2014 which will allow the passage of ships carrying twice as much cargo as it does now. This will open the Gulf to megaships from Pacific Basin countries, long dependent on West Coast ports such as Los Angeles and Long Beach.¹¹⁵

**Why the Environmental Challenge is Critical To Regional Survival**

None of this can work if the environment of the region remains threatened. The environmental health of the river system, and of the metropolis itself, has long been problematic. Floods, hurricanes and loss of natural habitat continue to threaten the very ability of the region to regenerate itself. This is particularly critical given that many of the preconditions to achieving key social goals, notably the expansion of high-wage employment, depend overwhelmingly on the health of the ecosystem.

The environmental issue, ultimately, turns into an economic one. The loss of fifty percent of the native wetlands and oyster reefs, and one-third of the cypress forests, have not only hurt the ecology and wildlife of the area, but also the incomes of people throughout the region, from the fisheries and tourism to shipping. If there is no strong action, losses to the economy could reach over $23 billion annually in the coming years.¹¹⁶

Fortunately, the experiences of the past decade have shown the critical importance of preserving the river system and its tributaries to residents of the region, including many leaders in the business community. Geographer Campanella suggests that the region has developed a “dramatically heightened level of knowledge and understanding” about these fundamental ecological problems. “Hurricanes, like wars,” he suggests, “are great teachers.” The big needs, he says, are additional funds to fast-track structural engineering projects and take steps to foster restoration of the natural coastline.¹¹⁷
Over the next fifty years, fines from the BP Oil Spill could create 29.54 new jobs per million dollars – or as many as **57,697 new jobs** across the Gulf Coast region within 10 years. Furthermore, the analysis of the economic benefits of a potential $6.2 billion investment in the greater New Orleans Urban Water Plan reveals as much as $22 billion in economic benefits; although the expenditures seem huge, the potential pay-off is also substantial. Results would include $8 billion in reduced repetitive flood costs, $2.2 billion in reduced cost of sinking land, $609 million in reduced flood insurance premiums through the National Flood Insurance Program’s Community Rating System, $183 million in increased property values, and $11.3 billion from direct and indirect jobs. Most of these environmental jobs, notes Patrick Barnes, President of BFA Environmental, pay above-average salaries.\(^{118, 119}\)

This nascent environmental undertaking has already created the beginnings of a major remediation industry, which could position the New Orleans area, much like the Netherlands, as a major exporter of expertise relating to coastal restoration. Louisiana companies, for example, gained contracts worth $210 million for work related to Hurricane Sandy in the Northeast. Potentially, suggests Garret Graves, Chair of the Coastal Protection and Restoration Authority of Louisiana and the Executive Assistant to the Governor for Coastal Activities, a full restoration project would create upwards of 10,000 permanent jobs. That figure does not include jobs that can be preserved in such areas as fishing and crabbing, longtime mainstays to the economies of some outlying parishes.\(^{120}\)
### Greater New Orleans Coastal Remediation Employment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>237990</td>
<td>Other Heavy &amp; Civil Engineering Construction</td>
<td>3,093</td>
<td>21%</td>
<td>5.87</td>
<td>$60,425</td>
<td>1.83</td>
</tr>
<tr>
<td>238910</td>
<td>Site Preparation Contractors</td>
<td>2,935</td>
<td>40%</td>
<td>1.35</td>
<td>$39,969</td>
<td>1.51</td>
</tr>
<tr>
<td>541330</td>
<td>Engineering Services</td>
<td>6,414</td>
<td>47%</td>
<td>1.54</td>
<td>$87,451</td>
<td>2.39</td>
</tr>
<tr>
<td>541360</td>
<td>Geophysical Surveying &amp; Mapping Services</td>
<td>129</td>
<td>(2%)</td>
<td>1.45</td>
<td>$95,294</td>
<td>2.36</td>
</tr>
<tr>
<td>541620</td>
<td>Environmental Consulting Services</td>
<td>393</td>
<td>69%</td>
<td>0.90</td>
<td>$54,348</td>
<td>1.63</td>
</tr>
<tr>
<td>562910</td>
<td>Remediation Services</td>
<td>691</td>
<td>74%</td>
<td>1.99</td>
<td>$47,695</td>
<td>1.99</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13,655</td>
<td>40%</td>
<td></td>
<td>$68,233</td>
<td></td>
</tr>
</tbody>
</table>

Source: QCEW Employees, Non-QCEW Employees & Self-Employed - EMSI 2013.4 Class of Worker

In this context, contentiousness between industry and environmental interests could prove counter-productive, reducing the very economic opportunity required to fund the necessary remediation efforts. Clearly, it is in the interests of the vast majority of people in the region to preserve wealth-creating industries that can pay for a better, cleaner and more sustainable environment while promoting opportunity across the region. “We have to approach this as a win-win proposition,” notes the Nature Conservancy’s Seth Blitch. “Everyone knows if we do nothing, it’s a lose-lose for everyone.”

### Conducting the Concert: New Orleans in the 21st Century

The longstanding debate about whether New Orleans should be allowed to survive and grow is over. With all its many problems, the region retains its essential place in our national culture, a critical link between heartland America and the outside world, particularly Latin America, a rising industrial power. “Geopolitics,” noted global strategist George Friedman in 2005, “… will force the city’s resurrection, even if it is in the worst imaginable place.” His insight, based on history as well as basic economics, has proven accurate.

Yet however strategic its location, greater New Orleans still must confront two looming challenges: restoring the environment, while generating enough broad-based economic growth to overcome the region’s troubling legacy of poverty and inequality. To improve both human and physical capital in the region will require a combination of entrepreneurial expansion by business and strong, effective government. A critical element here may be the growth of minority, notably African-American owned businesses, something that can help redress historic inequities and help reduce the gap between different racial groups in the region.

To achieve these key economic objectives, the region cannot focus primarily on a few, highly-favored sectors such as entertainment and software, which produce employment for a relatively small section of the population, including many welcome recent arrivals. Instead, the need is to find ways to develop STEM employment across a broad array of industries. We must move our understanding of technology beyond digital software and social media entrepreneurs, and create what the French soci-
ologist Marcel Mauss once called “a traditional action made effective”.  

The Education Imperative

**Metropolitan Educational Attainment**  
Share of Age 25 or older with Bachelor’s Degree or More

<table>
<thead>
<tr>
<th>City</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raleigh</td>
<td>42.0%</td>
</tr>
<tr>
<td>Austin</td>
<td>40.5%</td>
</tr>
<tr>
<td>Charlotte</td>
<td>33.4%</td>
</tr>
<tr>
<td>Nashville</td>
<td>32.6%</td>
</tr>
<tr>
<td>Houston</td>
<td>29.6%</td>
</tr>
<tr>
<td>Orlando</td>
<td>27.8%</td>
</tr>
<tr>
<td>New Orleans</td>
<td>26.7%</td>
</tr>
<tr>
<td>San Antonio</td>
<td>26.5%</td>
</tr>
</tbody>
</table>

*U.S. Census American Community Survey, 2012*

Fortunately, particularly since Katrina, substantial steps have been taken to improve the region’s performance. Perhaps most compelling has been the vast improvement in the public schools in New Orleans, as well as in some other local districts, which must count as one of the great turnaround stories in contemporary urban social policy. Once among the worst districts in the country, New Orleans now outperforms not only the rest of the state, but the nation, in terms of high school graduation rates. Some 78% of the parish’s school children are now enrolled in charter schools. With rising scores and graduation rates, the city’s school district won the 2010 Thomas B. Fordham Institute number one ranking for school reform.

**Metropolitan Adult Population with Less than a High School Degree, 2012**

<table>
<thead>
<tr>
<th>City</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston</td>
<td>18.9%</td>
</tr>
<tr>
<td>San Antonio</td>
<td>16.3%</td>
</tr>
<tr>
<td>New Orleans</td>
<td>15.2%</td>
</tr>
<tr>
<td>Orlando</td>
<td>12.4%</td>
</tr>
<tr>
<td>Charlotte</td>
<td>12.4%</td>
</tr>
<tr>
<td>Austin</td>
<td>11.9%</td>
</tr>
<tr>
<td>Nashville</td>
<td>11.0%</td>
</tr>
<tr>
<td>Raleigh</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

*U.S. Census American Community Survey, 2012*
One critical opportunity lies in teaching the basic skills needed in energy and other “tangible” industries. These skills – related to, for example, welding, machining, and maintenance – are increasingly in short supply, practiced by an aging workforce that needs to be replaced. In 2011, according to the forecast firm EMSI, Inc., there were 50,000 total US job openings in industrial engineering, welding, and computer-controlled machine tool operating jobs alone. Overall, skilled tradespeople now constitute the group most sought-after by employers, according to a recent Manpower survey.\textsuperscript{127}

Many states, such as Ohio\textsuperscript{128} are focusing on meeting this emerging skills gap. Jobs that require either a certificate or a two-year degree could provide badly needed upward mobility for the region’s workers. Fortunately, Louisiana now boasts the nation’s best workforce training program, according to Business Facilities Magazine.\textsuperscript{129} The shift to skills education is likely to continue, as returns to traditional four-year college educations plummet and the demands for specialized skills grows. The long-heralded education bonus started to decline in 2006, narrowing the wage gap between college educated and high school graduates. There are now more college graduates working as janitors than as chemists.\textsuperscript{130}

At the same time demand for skilled workers has increased significantly as manufacturing and energy employment has grown, and older workers retire.\textsuperscript{131} Having a regional concentration of such skilled workers is critical to many employers; particularly those running highly sophisticated operations. “When you are building a petrochemical facility, you have a great need for skills in such things as maintenance and construction,” notes Ralph Phillips, Vice President of Valero, an oil refinery a few miles from the rising Nucor facility. “If you open up in another part of the country, you have to bring in people to run things. Here, the skills are all over the Gulf.”

In the New Orleans region, there are numerous, highly innovative trade-related schools, such as Delgado Community College, and Nunez Community College, two-year colleges with a good track record of producing skilled workers in such key areas as nursing, machining and maintenance. Dr. Monty Sullivan, President of Delgado Community College, which has grown in enrollment since Katrina from 12,000 to over 18,000 (2013)\textsuperscript{132}, notes many of his students come from working class communities around the region. “Two-year colleges are critical to building a middle class,” Sullivan observes. “The difference between $14 an hour and $7 an hour is money for carfare and childcare. It’s a critical difference.”\textsuperscript{133}

The high pay of these industrial and other high skill jobs, notes Nunez chancellor Dr. Thomas Warner, has even attracted some students that are graduates of four-year colleges, and whose degrees have not resulted in anything like the opportunities found in trade and technical fields. “People come here to get a job, and they know these kinds of jobs pay well.”\textsuperscript{134}

**The Infrastructure Challenge**

As has been true from the earliest times, the New Orleans region relies heavily on its basic infrastructure. With much of region at or even below sea level, the need to maintain levees and restore protective wetlands remains essential. Two particular challenges, notes Richard Campanella, will be to respond to the imperatives of “footprint renegotiation,” which may suggest that some areas be
abandoned; we also need, he says, to learn to adapt to the region’s “historic geography”.

The steps being taken by both the state and the region, with the backing of the Federal Government, will be essential in this process. Some moves, such as the five-fold increase in bikeways – from ten to fifty miles in Orleans parish – certainly signal a change of attitude towards building a more sustainable urban system. More critical will be changes to the current approach to water management which have tended to create a dysfunctional environment of poor water quality, sinking land and broken infrastructure. Increasingly, the region looks to find ways to manage storm water, surface water, and groundwater together, as resources for enhancing public spaces, revitalizing neighborhoods, strengthening habitats, and providing opportunities for economic growth.

**New Orleans: The Resilient City on the Rise**

New Orleans has often times been written off as a dubious locale for a great city; yet, after each crisis in its history, the region has responded, and found a new way to assure its relevance in a changing environment. Today’s resurgence plays to many of New Orleans’ strengths: its cultural heritage, rich natural resources (notably oil and gas), and strategic location at the mouth of the world’s most important river. At a time when so many places seem much like any other, greater New Orleans remains unique in both geography and in its essential urban character. This places the region in an ideal position to grow and expand in the years ahead.

But growth is not the only issue. How a region grows is important – for example, how it benefits the entire region. A resurgence of the arts, tourism, and media won’t be enough to lift the great burden of poverty and diminished opportunity that impacts so many residents. In this sense, as one observer wrote, there lies a choice between re-creating “a theme park version of its former self” or “a real and robust city.”

Essentially, the region must focus on all its assets, both physical and cultural, to create the maximum potential for upward mobility across the entire region. “The key is to find a way to pull together,” observes New Orleans Mayor Mitch Landrieu. “This place has to compete not as one city, but as a region. Companies don’t look at political lines, they look at a whole region.”

This recovery, therefore, cannot be tied only to the historic core, or, for that matter, to the suburbs. Growing, vibrant regions such as Houston, for example, have shown that there can be strong exurban as well as urban growth in an expanding economy. Some have suggested that suburbanization is to blame for New Orleans’ legacy of poverty, and that high-density development should be mandated throughout the region. Such approaches, widely adopted in places such as California, have done little to restore equality, and may well have widened class divergences.

Addressing upward mobility should also not be seen as only a city issue. Low, mid-skilled and high-wage employment is spread throughout the region. The central core of New Orleans has a high concentration of both low and high-wage jobs, while the largest number of higher wage jobs – as well as some of the biggest concentrations of low-wage employment – are in Jefferson Parish.

Over time, there cannot be a regional recovery if the majority of places in the area do not par-
ticipate in it. A thriving region allows for a variation of geographies that can appeal to diverse populations; to people at different life-stages, and with varied cultural tastes. This is true for companies as well. Many of the major corporate expansions since Katrina – such as Globalstar and Chevron – have taken place in St. Tammany and other suburban locales, while a large share of software and entertainment ventures have clustered in Orleans Parish. Jefferson Parish, the largest job center in the region, leads in a host of industries, including shipbuilding, water transportation and fishing, rubber and plastics products, engineering, and insurance. “The area has a lot of different kinds of assets,” notes Stirling Properties’s Martin Mayer, who is based in St. Tammany. “All of the parishes are different. This area is not homogeneous and that is an advantage.”

In the coming decades, the region’s considerable open land provides opportunity for expansion, not only on the periphery, but also inside Orleans Parish itself. The residue of Katrina, decades of economic stagnation and concern over environmental risks have left the region with an overall urban area density that is about half that seen in Los Angeles, 40% below San Francisco-San Jose, and a third lower than New York. The room to bring in productive investment and more sustainable housing stock – remains significant.

**Conclusion**

This is a unique time in the history of New Orleans. Although the challenges – social, environmental, economic – remain daunting, our research shows that the area has come back from Katrina in improved form. Critical to this process has been the persistence of a common identity that transcends mere economic considerations and reflects a deep emotional commitment to a particular locale. “The city,” wrote the great sociologist Robert Ezra Park, “is a state of mind, a body of customs, and of organized attitudes and sentiments.”

These intangible feelings have done much to rescue a distressed New Orleans and transform it into a modern exemplar of the “resilient city”. Yet the challenge for the region cannot be met simply by appeals to emotion and sense of place. Long ago, Aristotle reminded us that the city was a place where people came to live, and they remained there in order to live better, “A city comes into being for the sake of life, but exists for the sake of living well”.

The New Orleans region’s future needs to fulfill this basic challenge – that of providing the basis for “living well” – even as it maintains its unique identity. A great city must be more than an image or an idea but also improve materially the lives of the majority of its citizens; it exists on both the thematic and the practical, everyday plane. For generations, people who loved the region ultimately left it for somewhere else; ultimately, it is the economic climate and achievable quality of life that determines whether people, particularly those with options, stay or move into a region. To assure its long-term recovery, greater New Orleans needs to be true, first and foremost, to the people who made it one of the world’s special places.
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