

The Gulf Coast: Economic Recovery Two Years after the Hurricanes

December 2007

Prepared by the Economics and Statistics Administration (ESA)
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Executive Summary

After two years, Federal aid in response to Hurricane Katrina (August 2005) and Hurricane Rita (September 2005) continues flowing to the Gulf states and significant economic recovery in Louisiana and Mississippi is evident. However, economic conditions in the New Orleans, Louisiana and Gulfport-Biloxi, Mississippi Metropolitan Statistical Areas (MSAs) continue to lag behind. In particular,

- The Federal government continues to make payments to the states¹ for disaster relief in the form of individual and public assistance, community development, levee reconstruction, and homeowner and small business loans.
- By 2006, the population (annual average) in Louisiana and Mississippi recovered to pre-Katrina levels while levels in the New Orleans and Gulfport-Biloxi MSAs had not.
- In most areas, unemployment rates have fallen to the pre-Katrina levels. The overall size of the labor force has yet to recover, however, because many people who left the region, especially from the New Orleans and Gulfport-Biloxi MSAs, have not returned. Employment levels are expected to fully recover as reconstruction continues and housing becomes more affordable.
- The housing recovery in Louisiana, has been slower than the population recovery with the number of occupied housing units in 2006 still below pre-Katrina levels, boosting the housing density (people per house) somewhat. In Mississippi, occupied housing in 2006 exceeded pre-Katrina levels while levels in Gulfport-Biloxi remained below.
- Industry output in Louisiana has shown remarkable improvement in some industries—construction, durable goods manufacturing, wholesale and retail trade, and real estate. Output declines continue to occur in non-durable goods manufacturing, education, health care, and arts, entertainment, and recreation. The picture is similar in Mississippi, although in that state the professional services and health care industries also showed significant output improvement.
- The energy, travel and tourism, fisheries, and gaming industries have all shown marked improvement, although some problems still persist.
- Finally, the value of exports from and imports into the Gulf Coast, in general, and from and into Louisiana and Mississippi, in particular, has fully recovered.

¹ Federal aid to the Gulf consisted of (1) supplemental funds appropriated by Congress or, in some cases, agencies using portions of their appropriated funds and (2) preferential tax treatment.

Introduction

This is the sixth² ESA report on economic effects of Hurricanes Katrina and Rita on the economy of the Gulf Coast. This report focuses on the economic recovery in those areas that has occurred since the hurricanes ravaged the Gulf Coast over two years ago.

This report includes information on Federal aid to those areas since the hurricanes and the recovery in population, employment, housing, and industrial output, including change in the composition of industry output in the states. In addition, there are special summary reports on the insurance, travel and tourism, gaming, energy, and fisheries industries. Finally, this report also includes information on the value of goods exported and imported through the Gulf ports over the last two years. Box 1 summarizes the data sources used in this report.

Box 1. Sources of Information Used in this Report

The *2006 American Community Survey* (ACS) released by the Census Bureau in August and September 2007 was used to report on **population** and **housing**. The 2006 ACS data was compared to 2005 pre-Katrina (January through August 2005 average) and post-Katrina (September through December 2005 average) data from a Census special ACS report on the Gulf issued last year. **Industrial output** by state through the fourth quarter of 2006, as measured by its inflation adjusted gross domestic product (GDP), is provided from Commerce's Bureau of Economic Analysis. The latest available monthly data was used for **employment** from Labor's Bureau of Labor Statistics, **energy** production from Energy's Energy Information Administration, **fisheries** data from Commerce's National Oceanic and Atmospheric Administration, and **exports** and **imports** from Commerce's Census Bureau. Various sources were used to report on **Federal aid** to the Gulf Coast, the **insurance** industry, the **travel** and **tourism** industry and the **gaming** sector. These sources are listed in their relative sections.

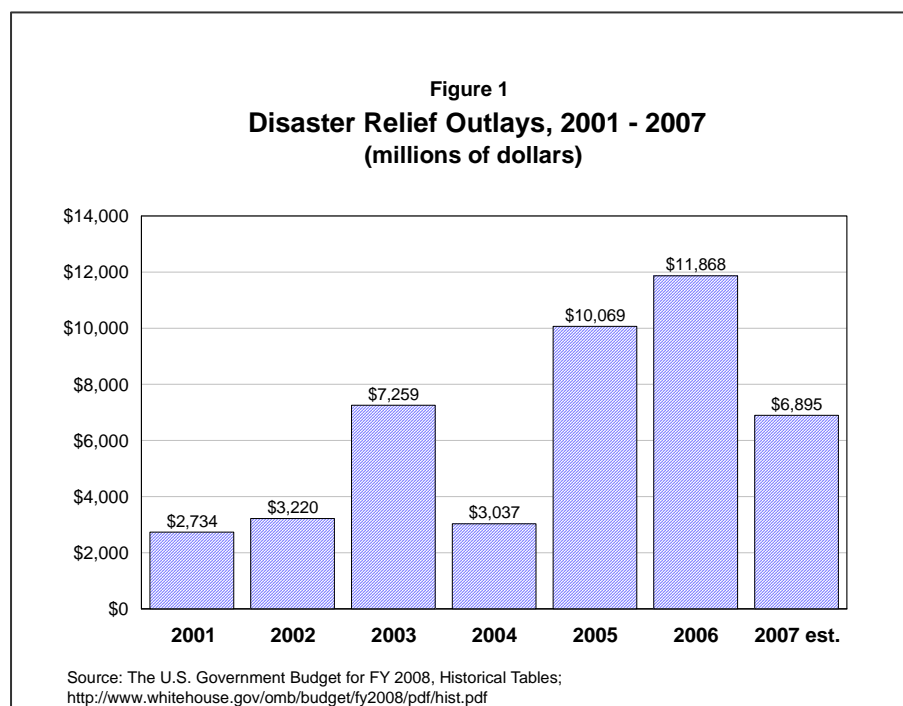
² The five earlier reports are available on the ESA website: www.esa.doc.gov. This report contains revised data and information and may not exactly match estimates contained in earlier reports. Questions regarding any of these reports should be directed to David Henry or Sandra Cooke at 202-482-2566 (david.henry@doc.gov) or 202-482-4027 (sandra.cooke@doc.gov), respectively.

Federal Aid to the Gulf Coast³

The Federal government appropriated about \$95 billion⁴ toward the recovery effort in the Gulf Coast since Hurricanes Katrina and Rita. As of July 2007, about \$41 billion has been obligated to the Gulf states for relief from these hurricanes and \$30 billion has been expended. Federal programs include the Federal Emergency Management Agency's (FEMA's) individual aid and public assistance programs, Housing and Urban Development's Community Development Block Grants (CDBG), funding for the Corps of Engineers to rebuild the levees, and Small Business Administration loans.

In addition to the direct aid to the states, the 2005 Gulf Opportunity Zones Act was extended through 2010 to maintain the tax-exempt bond authority for both residential and non-residential property, expand the low-income housing credit, and the expensing of demolition and clean-up costs, among other provisions. The value of these preferential tax provisions was estimated at \$16 billion.

Figure 1 shows total Federal disaster relief outlays (payments to states) since 2001 and the remarkable increase in spending that occurred since 2005, primarily a result of the Gulf disaster. As of November, about \$8.7 billion in Federal funds was obligated to Louisiana, Mississippi,



³ Sources include “*The Federal Government’s Spending and Tax Actions in Response to the 2005 Gulf Coast Hurricanes*,” Congressional Budget Office (CBO), August 2007; outlays for grants to state and local governments for disaster relief are taken from “*The U.S. Budget for Fiscal Year 2008, Historical Tables*,” Office of Management and Budget; Gulf Coast recovery reporting from the Federal Emergency Management Agency website <http://www.fema.gov/hazard/hurricane/2005katrina/index.shtm> and various testimony to Congress from the Small Business Administration and Department of Housing and Urban Development.

Alabama and Texas for public assistance funding. About 88 percent, \$7.7 billion, was obligated to Louisiana and Mississippi. The states administer the disbursement of Federal aid to grant applicants.

Public assistance is granted for: (1) educational facilities, (2) healthcare infrastructure, (3) other critical infrastructure such as roads, bridges, ports, water systems, and electrical utilities, (4) public spaces such as parks and cultural and historic centers, (5) public safety and criminal justice facilities, and (6) other categories such as replacement or repair of other public structures, such as government buildings, and other public services, such as debris removal.

Below is a summary of FEMA public assistance funding in Louisiana and Mississippi:

- In Louisiana, \$5.4 billion in public assistance funds has been obligated (paid to the state). As of November, the state had disbursed about \$2.8 billion to applicants. The remaining \$2.6 billion is being held by the state for disbursement.
 - FEMA obligated \$1.3 billion of the estimated \$1.7 billion needed for **education** recovery. Because of the hurricanes, 473 schools in 11 parishes in south Louisiana were closed. Eighty percent of these have reopened.
 - FEMA obligated \$442 million of the estimated \$503 million needed for recovery of **healthcare** infrastructure. Of the 550 storm-damaged healthcare structures, nearly 500 are back in service.
 - FEMA obligated \$594 million for the recovery of the **utilities and transportation infrastructure**.
 - FEMA obligated \$166 million for the recovery of **public spaces**, which included \$130 million for repair of the New Orleans Superdome. The state is eligible for \$184 million in grant money for this category.
 - FEMA obligated \$286 million for **public safety and criminal justice** recovery of the estimated \$327 million needed.
 - FEMA obligated the remaining \$2.6 billion to the “other” category.
- In Mississippi, \$2.3 billion in public assistance funds has been obligated (paid to the state). As of November, the state had disbursed about \$1.3 billion to applicants. The remaining \$1.0 billion is being held by the state for disbursement.
 - FEMA obligated almost \$250 million for **education** recovery for over 1,000 projects in 82 school districts. Across the state, the majority of schools requiring repairs (less than 50 percent damage) as a result of the hurricanes have reopened. Temporary facilities have been provided for schools that are rebuilding (with damage of 50 percent or more) until final repairs can be made in time for the 2008-2009 school year.
 - FEMA obligated \$55 million for **healthcare** infrastructure recovery.
 - FEMA obligated \$443 million for the recovery of **utilities and transportation infrastructure**.
 - FEMA obligated \$84 million for the recovery of **public spaces** to rebuild or repair the historical and cultural framework of coastal Mississippi.

⁴ The \$95 billion was from five emergency supplemental spending bills. In addition, some agencies have used portions of their annual appropriations to respond to disasters. See the CBO report for details.

- Mississippi is a member of a multi-state group called the Emergency Management Assistance Compact (EMAC), a multi-state organization that provides assistance from member states for emergency and protective services to a fellow member state affected by a disaster. For the services rendered under the EMAC agreement, FEMA obligated \$61 million and Mississippi reimbursed the EMAC about \$60 million for services rendered after the disaster. In addition to the EMAC funding, FEMA obligated \$32 million for **public safety infrastructure** recovery.
- FEMA obligated the remaining \$1.4 billion to the “other” category.

Other federal aid to the Gulf Coast includes:

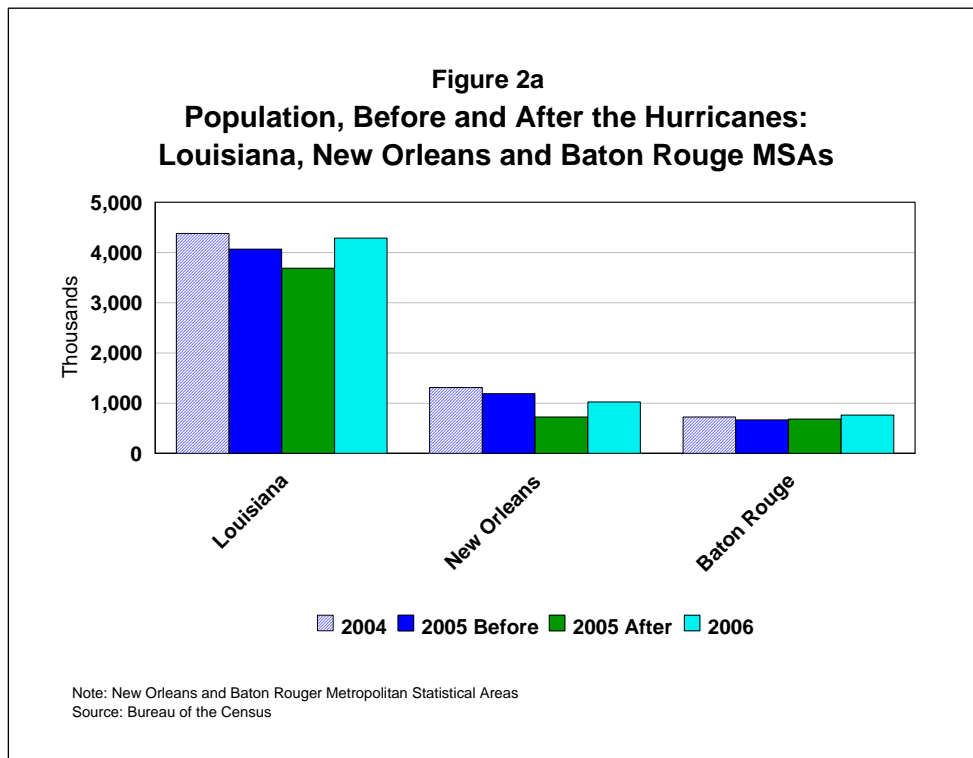
- **Community Development Block Grants.** HUD received an appropriation of \$16.7 billion in CDBG funding for recovery in the Gulf Coast. Louisiana was allocated over half of this amount, \$10.4 billion. These funds are intended to help those that have lost their homes, to restore needed infrastructure, and to promote long-term recovery. As of July, about \$16.2 billion of these funds had been obligated to the states and approximately \$4.8 billion disbursed. The remaining \$11.4 billion is being held by the states for disbursement.
- **Corps of Engineers (Levees).** About \$6 billion of the \$7 billion allocated to the U.S. Army Corps of Engineers through supplemental appropriations in 2006 has been allocated to Louisiana. As of July, the Corps had expended about \$1.6 billion of those funds. An additional \$1.3 billion has been allocated to Louisiana from the \$1.4 billion provided to the Corps in Public Law 110-28. As of July, none of these funds had been obligated.
- **Small Business Administration (SBA) Loans.** The SBA has received about 422,000 loan applications, 364,000 from homeowners and 58,000 from businesses in the Gulf Coast. As of July, all but 1,000 of the 120,000 loans for \$6.9 billion approved so far have been either fully or partially disbursed.

Economic Conditions in the Gulf Coast

Both Mississippi and Louisiana have seen their populations recover to pre-Katrina levels, although the growth has been uneven. In particular, the population of the New Orleans MSA remains substantially below the summer 2005 level. The economy of the affected areas is showing some improvement, although the improvement is uneven across industries. Some industries, such as construction and durable goods manufacturing, are producing more than before Katrina, while other industries continue to produce at levels significantly below their output before the hurricane.

Population

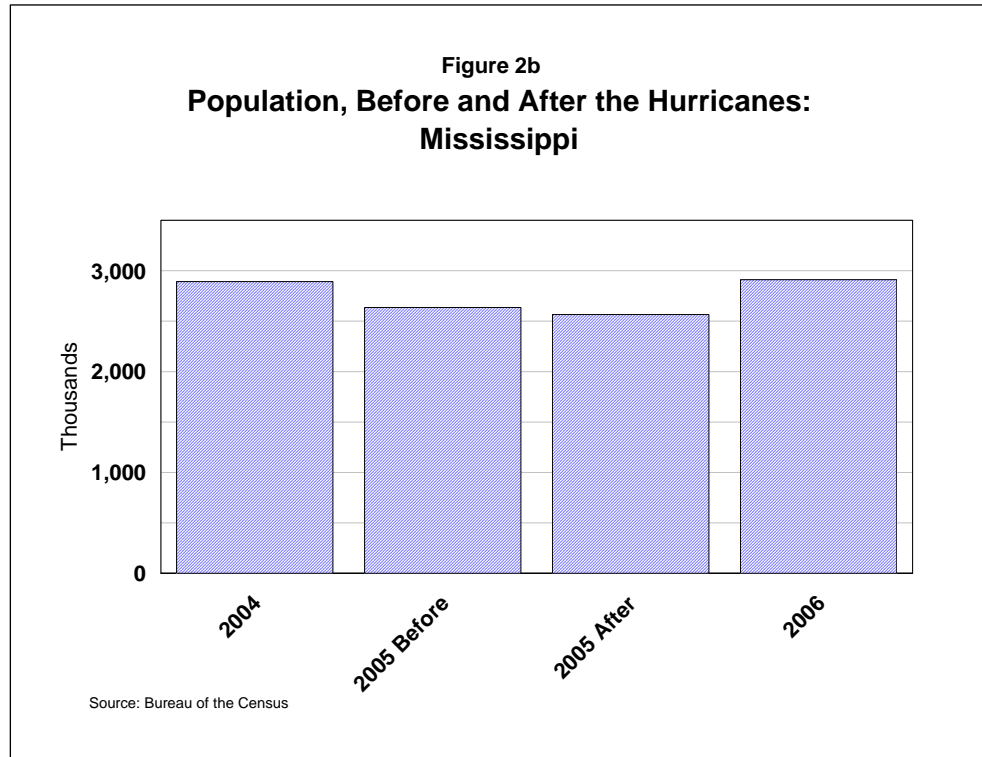
- The significant population loss in both Louisiana and Mississippi in the months immediately after the hurricanes had totally been restored by 2006. (See Figures 2a and 2b.) In 2005, just prior to the hurricanes, Louisiana’s population was 4.1 million. After a loss of some 379,000 in the months immediately following the hurricanes, the state’s population rose almost 600,000 during 2006 to reach 4.3 million—almost equal to its 2004 average population. In Mississippi, the population loss was less drastic—less than 100,000. By 2006, however, the population increased to a higher level than in 2004.



- Population effects of the hurricanes remain uneven among the affected areas. The New Orleans MSA has yet to recover its pre-hurricane population while the population of the Baton Rouge MSA has exceeded its previous level—primarily as a result of the migration that had occurred immediately following the hurricanes.
 - The population of the New Orleans MSA⁵ dropped from 1.2 million, pre-hurricane, to about 724,000 in the four month period after the hurricanes—a significant decline of almost 500,000 in just a matter of months. By the end of 2006, the population had recovered to a little over 1 million—still lower than pre-Katrina levels.

⁵ The New Orleans MSA consists of the following parishes: Jefferson, Orleans, St. Tammany, St. Bernard, St. Charles, St. John the Baptist, and Plaquemines.

- In the Baton Rouge MSA, population increased from 670,000 to over 685,000 immediately following the hurricane and, by 2006, the population had increased to almost 765,000.
- In the Gulfport-Biloxi MSA⁶, the population fell from about 255,000, measured on July 1, 2005 to about 228,000 in 2006. A breakdown of the population data pre- and post-2005 is not available.



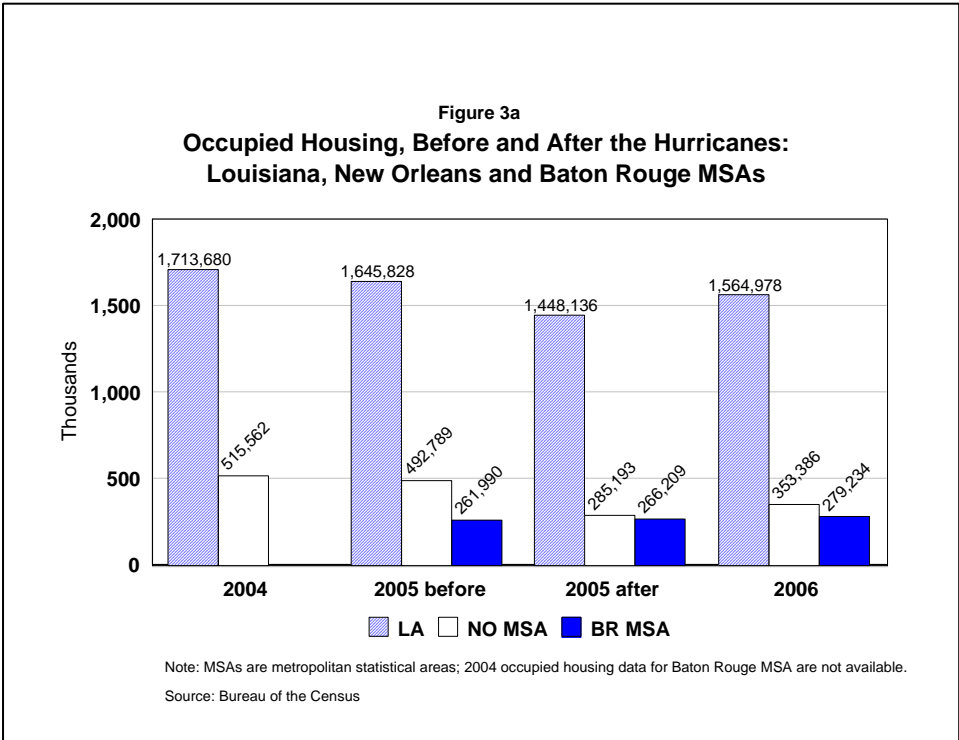
Housing

- Occupied housing in Louisiana dropped by about 198,000 units in 2005 as a result of the hurricanes. By 2006, occupied housing in Louisiana recovered by about 117,000 units, still below the pre-Katrina levels. (See Figure 3a.) Vacant housing in Louisiana increased by about 53,000 units from 237,000 units just prior to the hurricanes to just over 290,000 units just after the hurricanes. Vacant housing units dropped by about 25,000 units in 2006. Housing density in Louisiana, which averaged 2.5 people per occupied housing unit just prior to the hurricanes, increased slightly to 2.6 just after the hurricanes. The recovery in population in 2006 forced this average to increase to 2.8, slightly higher than the 2.6 density in 2004.
 - Occupied housing units in the New Orleans MSA dropped from 493,000 before the hurricanes to 285,000 just after—a loss of about 208,000 occupied homes. By

⁶ The Gulfport-Biloxi MSA consists of Hancock, Harrison and Stone counties.

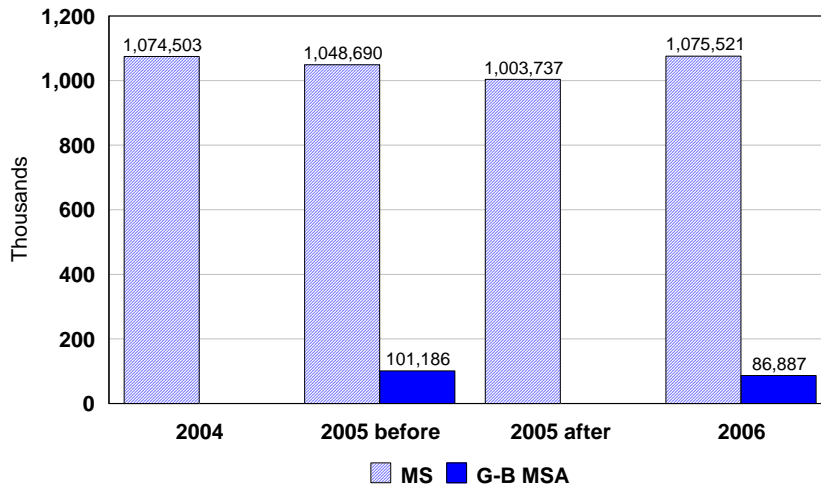
the end of 2006, occupied housing in New Orleans increased by 68,000 units but remained substantially below the pre-Katrina level. Vacant housing in the New Orleans MSA increased from about 60,000 units just prior to the hurricanes to about 133,000 units just after the hurricanes. Vacant housing units declined during 2006 by about 51,000 units to about 82,000.

- The number of occupied housing units in the Baton Rouge MSA, on the other hand, increased by about 4,000 units immediately after the hurricanes. This trend continued through 2006 during which the number of occupied housing units increased by another 13,000 units.



- In Mississippi, the number of occupied housing units dropped by about 45,000 just after the hurricanes. By 2006, occupied housing in Mississippi recovered enough to equal the higher level reached in 2004. (See Figure 3b.) The improvement in population and housing since the hurricanes meant that housing density rose only slightly—from 2.5 people per occupied housing unit just prior to the hurricanes to 2.6 just after. In 2006, housing density was 2.7. In the Gulfport-Biloxi MSA, occupied housing in 2006 remained about 14,000 units under the number prior to the hurricanes.

Figure 3b
Occupied Housing, Before and After the Hurricanes:
Mississippi and Gulfport-Biloxi MSA

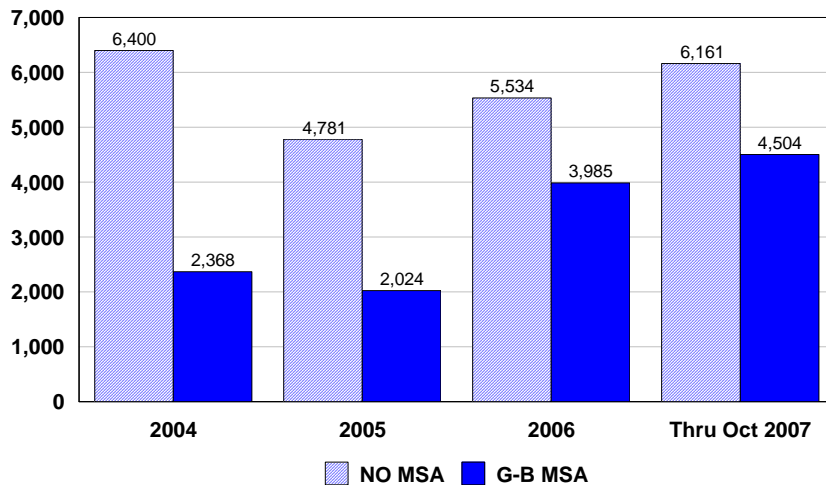


Note: MSA for metropolitan statistical area; 2004 and "2005 after" occupied housing data for Gulfport-Biloxi MSA are not available.

Source: Bureau of the Census

- The Census Bureau publishes the number of new housing units authorized by building permits each month. This is an indicator of upcoming new residential building construction. In the New Orleans MSA, the monthly rate of housing units authorized by building permits through October 2007 of 6,161 seems likely to push the 2007 annual total to equal the total 6,400 units authorized in 2004. (See Figure 4.) In the Gulfport-Biloxi MSA, the 2006 total of 3,985 building permits far exceeded the 2004 pre-hurricane annual total of 2,368. Through October 2007, building permits for 4,504 units has already exceeded the annual total in 2006.

Figure 4
New Housing Units Authorized by Building Permits,
New Orleans and Gulfport-Biloxi MSAs



Source: Bureau of the Census

Industry Output

- Industrial output in Louisiana grew substantially in 2006. Construction output increased by almost 16 percent over 2005; durable goods manufacturing, wholesale and retail trade, and real estate, rentals, and leasing all grew significantly. (See Table 1.) Mining, including oil and natural gas production, also grew. (In 2005, this sector declined by almost 13 percent).
- Educational services, health care, and especially arts, entertainment and recreation (including gaming) continued to decline in 2006 in Louisiana.
- Industrial output grew slightly faster in Mississippi. As in Louisiana, output in the construction industry improved dramatically. The wholesale and retail trade sector, as well as the real estate, rental and leasing and professional services sectors also improved significantly by over 8 percent, over 6 percent, and over 8 percent, respectively. (See Table 2.)
- Utilities, arts, entertainment and recreation (including gaming) and accommodations and food services continued to decline in 2006 in Mississippi.

Table 1. Louisiana: Real GDP by Industry, Annual Change 2004-05 & 2005-06; and Share of Aggregate Industry Output, 2004-2006

Real GDP by Industry	2004	2005	2006	Annual Change		
	(millions of chained 2000\$)			03-04	04-05	05-06
Private industries	121,653	122,470	125,622	5.7%	0.7%	2.6%
Agriculture, forestry, fishing, and hunting	1,235	1,199	1,293	-6.1%	-2.9%	7.8%
Mining	11,282	9,835	10,556	-0.3%	-12.8%	7.3%
Utilities	4,001	4,066	3,939	7.2%	1.6%	-3.1%
Construction	5,378	5,345	6,179	-3.3%	-0.6%	15.6%
Manufacturing	24,267	27,530	26,227	23.8%	13.4%	-4.7%
Durable goods	6,032	6,625	7,478	9.4%	9.8%	12.9%
Nondurable goods	18,151	20,764	19,011	28.8%	14.4%	-8.4%
Wholesale and Retail Trade	18,319	18,804	20,118	1.7%	2.6%	7.0%
Transportation and warehousing, excluding Postal Service	5,062	5,235	5,431	1.7%	3.4%	3.7%
Information	4,265	4,687	4,858	14.6%	9.9%	3.6%
Finance and insurance	5,376	5,255	5,182	3.1%	-2.3%	-1.4%
Real estate, rental, and leasing	11,856	11,530	12,888	1.1%	-2.7%	11.8%
Professional services	11,492	11,337	12,007	5.0%	-1.3%	5.9%
Educational services	924	903	831	1.3%	-2.3%	-8.0%
Health care and social assistance	9,095	8,906	8,595	3.0%	-2.1%	-3.5%
Arts, entertainment, and recreation	2,202	2,112	1,817	-0.8%	-4.1%	-14.0%
Accommodation and food services	4,190	4,138	4,124	3.1%	-1.2%	-0.3%
Other services	3,011	2,845	2,880	-0.1%	-5.5%	1.2%
Share of Industries in State						
	2004	2005	2006			
Private industries						
Agriculture, forestry, fishing, and hunting	1.0%	1.0%	1.0%			
Mining	9.3%	8.0%	8.4%			
Utilities	3.3%	3.3%	3.1%			
Construction	4.4%	4.4%	4.9%			
Manufacturing	19.9%	22.5%	20.9%			
Durable goods	5.0%	5.4%	6.0%			
Nondurable goods	14.9%	17.0%	15.1%			
Wholesale and Retail Trade	15.1%	15.4%	16.0%			
Transportation and warehousing, excluding Postal Service	4.2%	4.3%	4.3%			
Information	3.5%	3.8%	3.9%			
Finance and insurance	4.4%	4.3%	4.1%			
Real estate, rental, and leasing	9.7%	9.4%	10.3%			
Professional services	9.4%	9.3%	9.6%			
Educational services	0.8%	0.7%	0.7%			
Health care and social assistance	7.5%	7.3%	6.8%			
Arts, entertainment, and recreation	1.8%	1.7%	1.4%			
Accommodation and food services	3.4%	3.4%	3.3%			
Other services	2.5%	2.3%	2.3%			

Source: Bureau of Economic Analysis

Table 2. Mississippi: Real GDP by Industry, Annual Change for 2004-05 & 2005-06; and Share of Aggregate Industry Output, 2004-2006

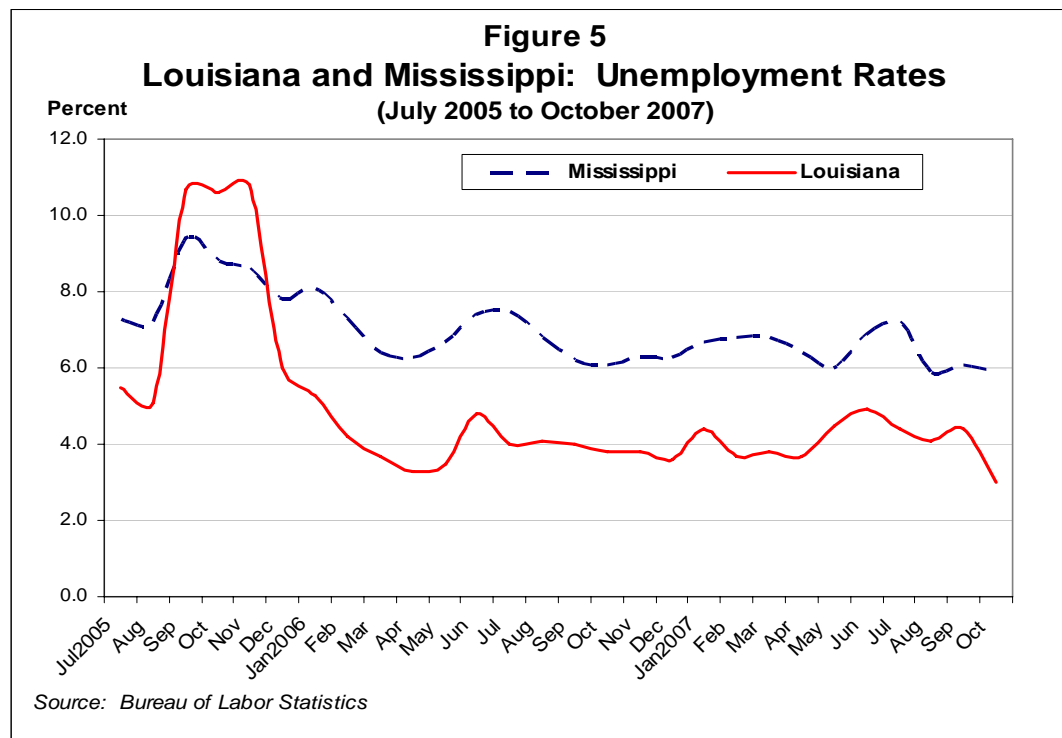
Real GDP by Industry	2004	2005	2006	Annual Change		
	(millions of chained 2000\$)			03-04	04-05	05-06
Private industries	56,843	57,326	59,046	2.4%	0.8%	3.0%
Agriculture, forestry, fishing, and hunting	1,984	1,950	1,933	6.6%	-1.7%	-0.9%
Mining	866	683	678	9.5%	-21.1%	-0.7%
Utilities	1,856	1,910	1,797	7.6%	2.9%	-5.9%
Construction	2,455	2,679	2,959	-4.6%	9.1%	10.5%
Manufacturing	11,733	11,616	11,535	2.3%	-1.0%	-0.7%
Durable goods	7,278	7,238	7,412	7.6%	-0.5%	2.4%
Nondurable goods	4,468	4,392	4,161	-5.0%	-1.7%	-5.3%
Wholesale and Retail Trade	10,147	10,486	11,331	2.2%	3.3%	8.1%
Transportation and warehousing, excluding Postal Service	2,452	2,539	2,571	6.3%	3.5%	1.3%
Information	2,073	2,329	2,416	8.8%	12.3%	3.7%
Finance and insurance	2,895	2,837	2,898	0.8%	-2.0%	2.2%
Real estate, rental, and leasing	5,923	5,977	6,348	-0.6%	0.9%	6.2%
Professional Services	4,319	4,413	4,776	4.3%	2.2%	8.2%
Educational services	334	346	350	3.4%	3.6%	1.2%
Health care and social assistance	4,753	4,838	5,056	3.4%	1.8%	4.5%
Arts, entertainment, and recreation	700	670	573	-3.2%	-4.3%	-14.5%
Accommodation and food services	2,848	2,820	2,612	1.4%	-1.0%	-7.4%
Other services	1,581	1,550	1,575	-0.8%	-2.0%	1.6%
	Share of Industry in State					
	2004	2005	2006			
Private industries						
Agriculture, forestry, fishing, and hunting	3.5%	3.4%	3.3%			
Mining	1.5%	1.2%	1.1%			
Utilities	3.3%	3.3%	3.0%			
Construction	4.3%	4.7%	5.0%			
Manufacturing	20.6%	20.3%	19.5%			
Durable goods	12.8%	12.6%	12.6%			
Nondurable goods	7.9%	7.7%	7.0%			
Wholesale and Retail Trade	17.9%	18.3%	19.2%			
Transportation and warehousing, excluding Postal Service	4.3%	4.4%	4.4%			
Information	3.6%	4.1%	4.1%			
Finance and insurance	5.1%	4.9%	4.9%			
Real estate, rental, and leasing	10.4%	10.4%	10.8%			
Professional Services	7.6%	7.7%	8.1%			
Educational services	0.6%	0.6%	0.6%			
Health care and social assistance	8.4%	8.4%	8.6%			
Arts, entertainment, and recreation	1.2%	1.2%	1.0%			
Accommodation and food services	5.0%	4.9%	4.4%			
Other services	2.8%	2.7%	2.7%			

Source: Bureau of Economic Analysis

Employment⁷

The employment recovery in states and localities affected by the hurricanes has tapered off. Although unemployment rates have fallen to pre-Katrina rates in Louisiana and Mississippi, as well as in the New Orleans and Gulfport-Biloxi metro areas, the size of the labor force has yet to recover. Large segments of the population left and have not returned.

- The unemployment rate in **Louisiana** in October 2007 was 3.0%, well below the post-hurricane peak rate of 10.8%—when over 228,000 workers were unemployed.⁸ (See Figure 5.) After the hurricanes, some residents relocated out of the state and some left the labor force.



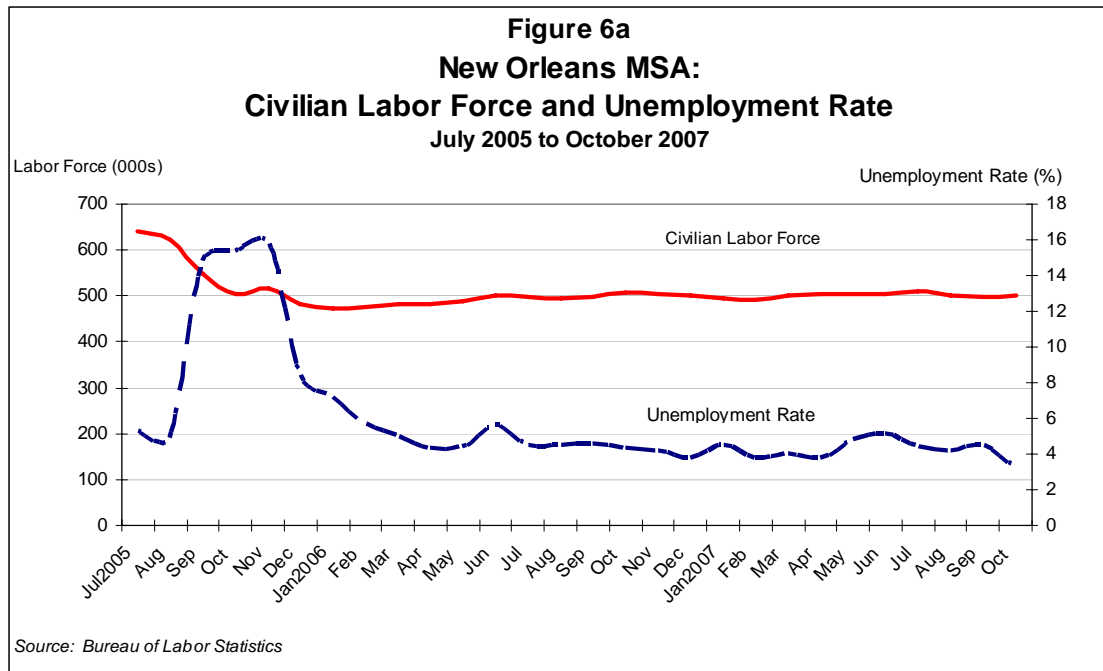
- The October 2007 unemployment rate in **Mississippi** at 5.9% is somewhat lower than the 7.3% rate before the hurricanes. It is well below the peak rate of 9.4% in September 2005, when about 124,000 workers were unemployed. (See Figure 5.) The unemployment rate for Mississippi remains higher than the national average (4.7% in October 2007). The Mississippi Institutions of Higher Learning University Research

⁷ Unless otherwise indicated, employment changes reflect the period of July 2005 to October 2007. Non-seasonally adjusted data were used here to be consistent with the unemployment data for MSAs presented later in this report, which is only reported in non-seasonally adjusted format.

⁸ These estimates may not match those mentioned in earlier Gulf Coast Economic Recovery reports because BLS recently made revisions in the employment data. The Louisiana Department of Labor attributes the dramatic decrease in the rate of unemployment in December 2005 to a combination of several factors. Two of the most significant factors are (1) an unusually large one-month reduction – about 100,000 – in the number of unemployment claims and (2) changes in the methodology used to estimate unemployment that were instituted before Hurricanes Katrina and Rita.

Center expects 2007 employment growth to outpace the rest of the nation as the state continues to recover from the effects of Hurricane Katrina.⁹ In 2008, however, they forecast a slower pace of employment growth that is more in line with the national trend.

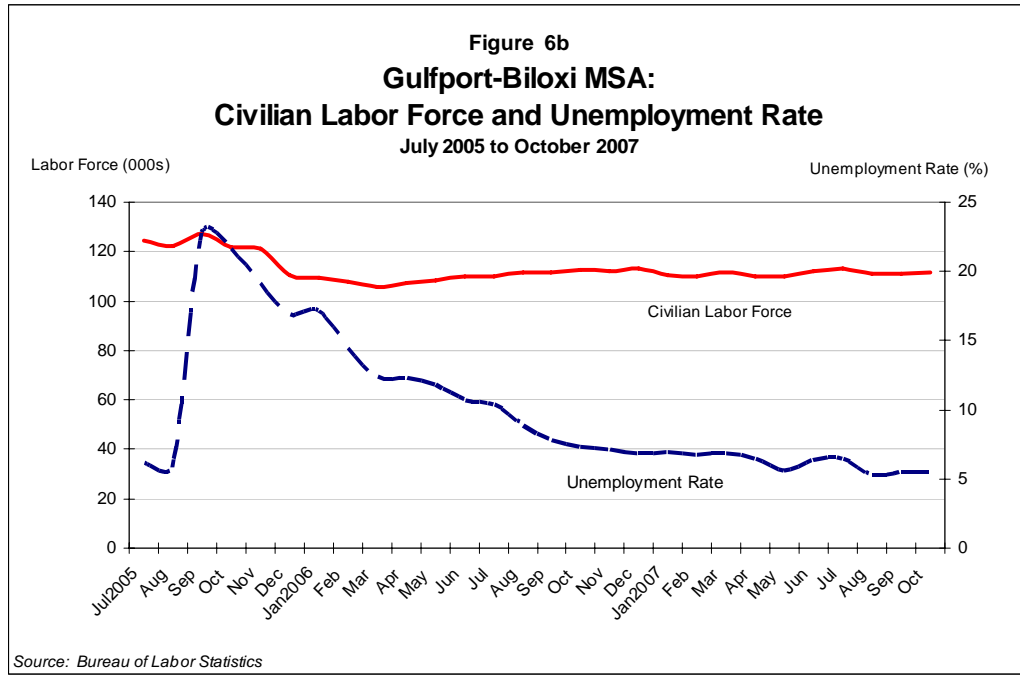
- The **New Orleans** MSA lost a sizable portion of its workforce as the civilian labor force shrank by over 168,000 workers from July 2005 to January 2006, when the decline in the labor force bottomed out and began to stabilize. (See Figure 6a.) Since then, the size of the New Orleans labor force has averaged 496,000 workers, 20% below the pre-Katrina average of more than 622,000 during the first half of 2005.



- The unemployment rate in New Orleans increased dramatically from 4.9% to 14.8% during the month after the hurricanes (August to September 2005). As shown in Figure 6a, the unemployment rate dropped sharply in December 2005, in part because of the re-employment of workers, but also as a result of a change in the method BLS used to estimate unemployment. Throughout most of 2006, the unemployment rate continued to drift downward to below the pre-Katrina rates. As of October 2007, New Orleans labor force and employment levels were almost 80% of the pre-Katrina levels.
- Unemployment in the **Gulfport-Biloxi** area skyrocketed to 22.8% immediately after the hurricanes but gradually fell back to pre-Katrina levels. (See Figure 6b.) The number of unemployed workers increased dramatically from about 7,600 workers before the storm to almost 29,000 afterwards. The number of unemployed workers has been declining steadily since then to 6,100 by October 2007.

⁹ Mississippi Institutions of Higher Learning University Research Center, *Mississippi Economic Review and Outlook*, June 2007 and December 2007. <http://www.ihl.state.ms.us/urc/planning/econdept.htm>.

- As in New Orleans, the lower unemployment rate in Gulfport-Biloxi masks a reduction in the size of the workforce. The Gulfport-Biloxi MSA labor force had lost almost 19,000 workers by March 2006. Since then, Gulfport-Biloxi has recovered to almost 90% of its pre-Katrina labor force level.



Insurance

- The Insurance Information Institute reports that Hurricane Katrina was the costliest natural disaster in history.¹⁰ Payments to policyholders have totaled \$40.6 billion on 1.7 million claims for damage to homes, businesses and cars in six states—Louisiana, Mississippi, Alabama, Florida, Tennessee, and Georgia. This does not include \$15.8 billion paid by the National Flood Insurance Program or the estimated \$2.5 billion of insured damages to energy facilities in the Gulf of Mexico.
- Louisiana and Mississippi residents and business owners filed the majority of the claims and received most of the payments. Roughly 99 percent of the 1.2 million claims filed by homeowners in Louisiana and Mississippi have been settled. Louisiana accounted for \$25.3 billion in claims while Mississippi claims totaled \$13.6 billion. Claims filed by 688,000 homeowners in Louisiana have been settled at a cost of \$10.8 billion. In Mississippi, 350,000 homeowner claims have been settled at \$5.4 billion.

¹⁰ Insurance Information Institute press release, “Hurricane Katrina and Insurance: Two Years Later,” August 27, 2007.

- Insurers were able to manage the unprecedented claims from the 2005 storms by relying on reinsurance which absorbed roughly half of the Katrina losses. In response, reinsurance firms are increasing their rates in coastal areas, and insurance companies are reevaluating their exposure to catastrophic events and adjusting their rates in response.

Travel and Tourism¹¹

The tourism industry, the largest employer in the New Orleans metropolitan area, with more than 85,000 jobs, continues to show signs of recovery:

- **Air Travel:** Louis Armstrong International airport reports 132 flights serving 37 cities (78% of pre-Katrina daily departures and 88% of pre-Katrina destinations; and 15,663 seats or 71% of the pre-Katrina level of seats per day). The number of flights is expected to reach 90% of pre-Katrina levels by the end of 2008 and 100% by 2009.
- **Hotels:** Over 209 metropolitan area hotels are open and 31,888 of the 38,000 metropolitan-wide hotel rooms are back in service.
- **Dining:** According to the Louisiana Restaurant Association, the status of the restaurant industry continues to improve. Restaurant recovery rates are improving in all three affected parishes –Orleans (69%), Jefferson (94%) and St. Bernard (39%). There are 868 restaurants (excluding fast food) open in the French Quarter, downtown and the Warehouse Arts District and other major tourist areas compared with 809 before Katrina. Eighteen major new restaurants have opened since the hurricanes.
- **Louisiana Superdome:** The Superdome reopened on September 25, 2006, after \$168 million in renovations and upgrades. The New Orleans Saints have sold out the season tickets for all home games in 2007 after winning the NFC South championship and coming within one game of the Super Bowl in 2006.
- **Mardi Gras:** Mardi Gras 2007 was a success in February, with an estimated crowd of 800,000 and area hotels reporting a 95 percent occupancy rate throughout the last weekend of Mardi Gras. It was larger than the 2006 crowd of 700,000, but not as large as pre-Katrina numbers of 1 million.
- **Cruise industry:** The Norwegian Cruise Lines, Carnival Cruise Lines, RiverBarge Excursion Lines and Majestic America (American Queen) have resumed service and are sailing from New Orleans. Carnival Corp. announced that it will keep the 2,056-passenger Carnival Fantasy in New Orleans through 2010.

¹¹ New Orleans Convention and Visitors Bureau: “New Orleans Tourism Industry Report, Second Anniversary – Hurricane Katrina,” August 29, 2007, “State of the City” Report, November 6, 2007, and “Tourism, Hospitality and Convention Industry Facts One Year After Katrina,” August 21, 2006. <http://www.neworleanscvb.com>

- ***New Orleans Arena:*** the New Orleans Hornets returned full-time for the 2007-2008 season and they hosted their first home game on October 31st. The Arena will be the site of the NBA All-Star Game in February 2008.
- ***Ernest Morial Convention Center:*** After \$62 million in renovations and upgrades, the facility has reopened with 3.1 million total square feet of space, high speed wi-fi, a 4,000-seat Conference Auditorium, 12 separate/combinable exhibit halls and 140 meeting rooms. Between September 2005 and May 2006, 450 meetings/conventions were cancelled, which translates to 2.25 million room nights lost. Roughly 70% of the 2007 conventions and 92% of 2008 conventions booked before Katrina were retained. Business has been brisk during 2007. The Center has hosted 94 major conventions, tradeshows and meetings.

Gulfport-Biloxi and other Mississippi coastal areas are undergoing long-term rebuilding efforts because residential and commercial structures were completely destroyed during the storm surge generated by Hurricane Katrina.

- There are currently almost 11,000 hotel rooms available, which represents 63% of the pre-Katrina inventory. By 2010, there could be as many as 30,000 hotel and condo rooms available on the Gulf Coast.
- Nearly all the golf courses affected by the hurricane have reopened as have two new golf courses. However, golf industry revenues are below the pre-Katrina levels because of the lack of hotel availability for golf tourists. Golf course operators earn a large share of their revenue from golf tourists who tend to travel at peak golfing times and pay for premium services. Therefore, the outlook is very bright for the golfing industry as more coastal development projects are completed.¹²
- The Mississippi Coast Coliseum and Convention Center will complete a \$68 million renovation and expansion by 2009 that will add 200,000 square feet of exhibit space for upcoming conventions.
- Almost all casinos destroyed or damaged by the hurricanes have reopened. Casinos generate a sizable share of tourism dollars generated in coastal Mississippi. (See next section on gaming.)
- The Biloxi Bay bridge partially reopened on November 2, 2007, allowing traffic to flow for the first time since Hurricane Katrina. The full 10-lane bridge will open by April of next year and is expected to accelerate redevelopment of the area and contribute to tourism along the Gulf Coast.

¹² Kevin Drum, Executive Director of the Mississippi Gulf Coast Golf Association.

Gaming¹³

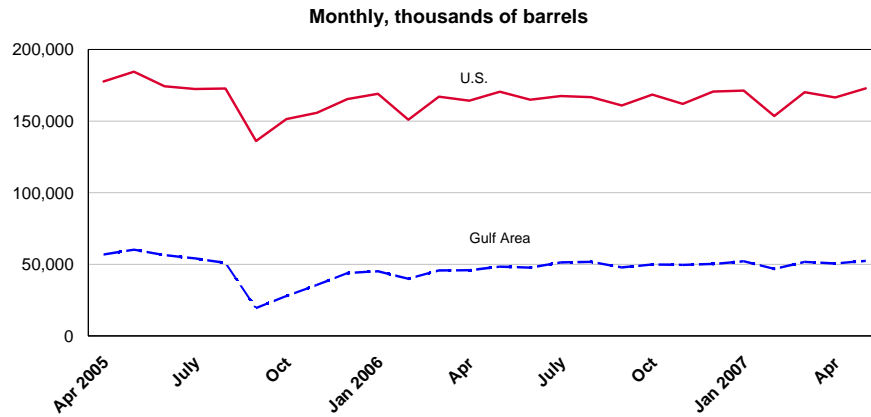
- The gaming industry is helping to lead the recovery of the Gulf Coast. Nearly 20,000 gaming industry workers have returned to work in Louisiana and Mississippi. Ten Mississippi coastal casinos have reopened and six riverboats and one land-based casino in Louisiana damaged by Hurricanes Katrina and Rita have reopened.
- Legislative changes that allow casinos to move from barges onto land and a tax credit to encourage non-gaming investment spurred an investment boom along the Mississippi coast. By 2010, the number of casinos could more than double, as up to \$30 billion of new investment flows into the area.
- Retail sales are up in Biloxi, and are now above pre-storm levels (\$25.4 million for the first four months of 2007 vs. \$20.6 million for the same period in 2006). This may reflect gaming industry spillover effects to the retail sector. A \$500+ million renovation of the Beau Rivage casino by MGM Mirage and the much anticipated \$700 million luxury casino, the Margaritaville, being built by Harrah's Entertainment and Jimmy Buffet, are likely to further spur economic development in the Biloxi area.
- Mississippi gaming tax revenues fell only slightly after Hurricane Katrina because riverboat casinos helped to offset losses from coastal casinos and because of the strong performance of the few coastal casinos that were able to reopen shortly after the hurricane. During the first six months of 2006, the three casinos in operation earned 56% of the revenue generated during the same period of the previous year by all twelve casinos. State gaming tax revenues were up 21% in FY 2007 compared with FY2005. During the first eight months of 2007, monthly gaming revenues of coastal casinos have averaged \$111 million, surpassing the pre-Katrina revenue levels of \$109 million per month.

Energy

- Domestic crude oil production in the Gulf Coast area affected by the hurricanes dropped by about 60 percent immediately following the hurricanes. (See Figure 7.) Since the Gulf accounts for about 30 percent of total U.S. production of crude oil, overall national production of crude fell by 20 percent. By mid-2006, however, domestic crude oil production in the Gulf recovered to around 50 million barrels per month, back to almost one-quarter of domestic production. This level of production in the Gulf continued through May 2007. When domestic production in the Gulf area is combined with crude oil imports into the Gulf, total crude oil supply from the Gulf states is responsible for almost half of total U.S. domestic consumption.

¹³ Mississippi Institutions of Higher Learning University Research Center, Mississippi Gulf Coast Convention and Visitors Bureau, the American Gaming Association, and the Mississippi Gaming Commission.

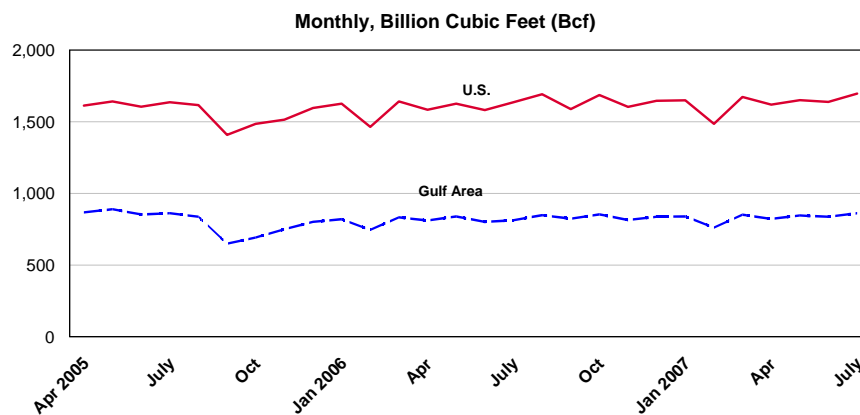
Figure 7
Domestic Crude Oil Production in the U.S.
and in the Gulf Area*Affected by the Hurricanes
April 2005 - May 2007



*Gulf area affected by the hurricanes include Louisiana, onshore and off, Mississippi, Texas offshore and Federal offshore.
 Source: Energy Information Administration

- The Gulf area also generates about half of total U.S. marketed production of natural gas. Hurricane Katrina lowered the Gulf’s production by almost one-quarter in September 2005, from 838 billion cubic feet (Bcf) to 649 Bcf. (See Figure 8.) By 2006, production of natural gas rose to 800 Bcf. By July 2007, natural gas production reached 862 Bcf, the pre-Katrina level.

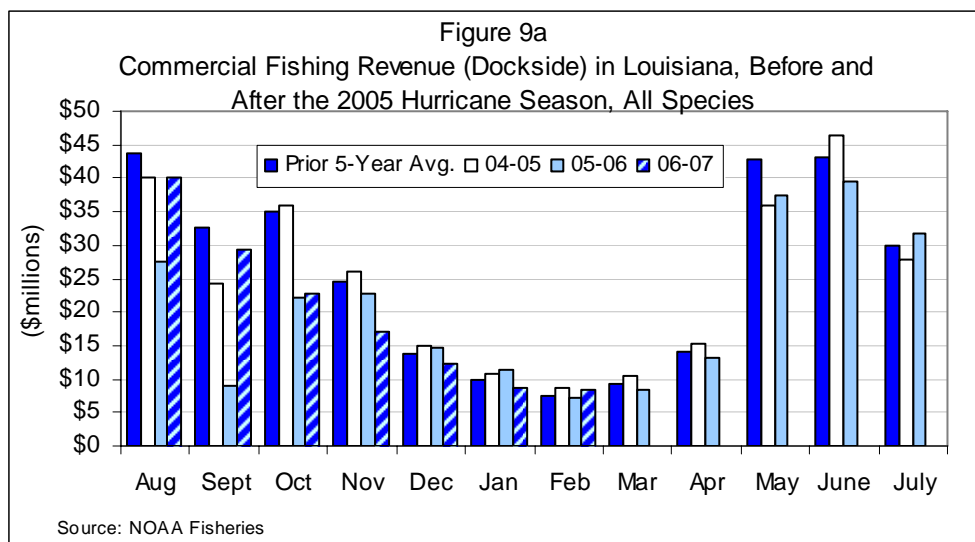
Figure 8
Natural Gas Marketed Production in the U.S.
and in the Gulf Area* Affected by the Hurricanes,
April 2005 - July 2007



*Gulf area affected by the hurricanes include Federal offshore, Louisiana, on and offshore, Mississippi (data through Dec 2006 only) and Texas, on and offshore.
 Source: Energy Information Administration

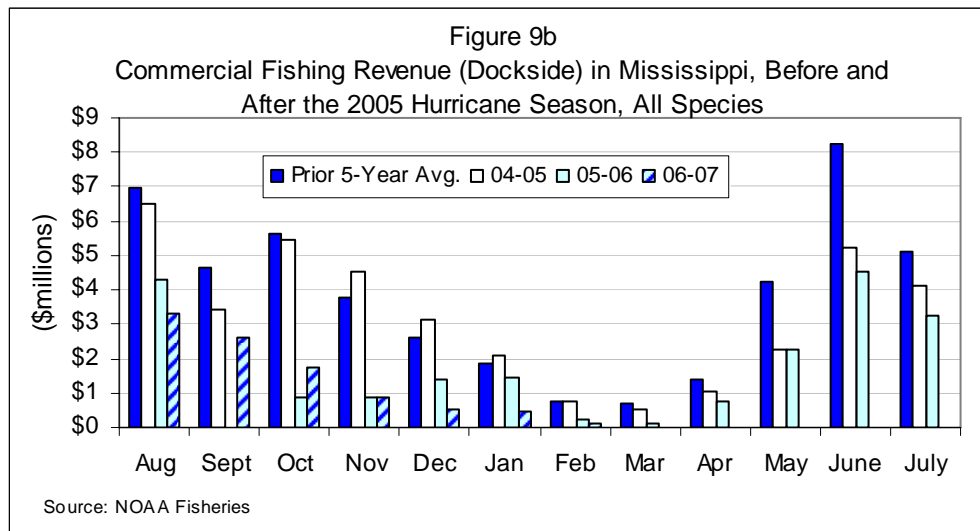
Fisheries

- According to the Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA), the Gulf commercial fisheries produce nearly 20% of U.S. commercial landings and Gulf recreational fisheries support over 30% of marine recreational fishing trips in the U.S.
- Louisiana, with 40 percent of the value of the Gulf commercial harvest, suffered significant losses from the 2005 hurricane season. Dockside revenues for commercial fishermen in Louisiana were approximately \$9.1 million in September 2005 compared to \$24.4 million in September 2004. The 5-year average (2000-2004) was \$32.5 million for September.
- In the aftermath of the hurricanes, no landings were recorded by Mississippi fishermen in September 2005 compared to \$3.4 million in dockside revenues in September 2004 and a 5-year average of \$4.7 million for that month.
- Total commercial dockside revenues gradually increased in Louisiana. By December 2005 and January 2006, dockside revenues exceeded the prior 5-year average change. (See Figure 9a.) During 2006, commercial fishermen in Louisiana received dockside revenues of approximately \$271 million, which was \$20 million greater than in 2005 and about the same as received in 2003 (\$274 million) and 2004 (\$270 million), but was lower than the 5-year average for 2000-2004 of \$318 million.



- Although total fishing revenues returned to pre-Katrina levels, problems remain. Some fishermen in Louisiana in areas of the state that escaped both hurricanes who had no or few losses may be doing relatively well, but others have been severely affected. Many fishermen in these areas lost fishing vessels, homes, and their communities, and were under-insured or had no insurance at all.

- Total commercial dockside revenues in Mississippi remained below average throughout 2006. (See Figure 9b.) Total dockside revenues were approximately \$21.7 million in 2006 compared to \$23.4 million in 2005 and a 5-year average of \$49.2 million from 2000-2004. Dockside revenues for shrimp fishermen were less than \$12 million in 2006 compared to \$13.7 million in 2005 and a 5-year average of \$30.3 million. Dockside revenues for edible finfish also remain low at just \$0.5 million in 2006 compared to \$0.7 million in 2005 and a 5-year average of \$1.2 million from 2000-2004. However, landings and revenues were above average in the (non-edible) menhaden fishery during 2006. Oyster beds were destroyed, and no oysters have been harvested in Mississippi since the hurricanes. Fishermen had averaged \$5.6 million per year from oysters between 2000 and 2004.
- Congress appropriated \$128 million in 2006 to restore the Gulf oyster beds and shrimp grounds, and to monitor the recovery of the Gulf fisheries. NOAA made a large grant to the Gulf States Marine Fisheries Commission in late 2006 to begin this work. It is anticipated that the earliest these beds will produce oysters is the winter of 2008-09. The FY 2007 supplemental appropriated \$84.9 million to NOAA Fisheries to provide assistance to fishermen in the Gulf Coast Region. These funds have been fully obligated to the Gulf States Fisheries Commission. No funds have been sub-awarded by the Commission to the states.

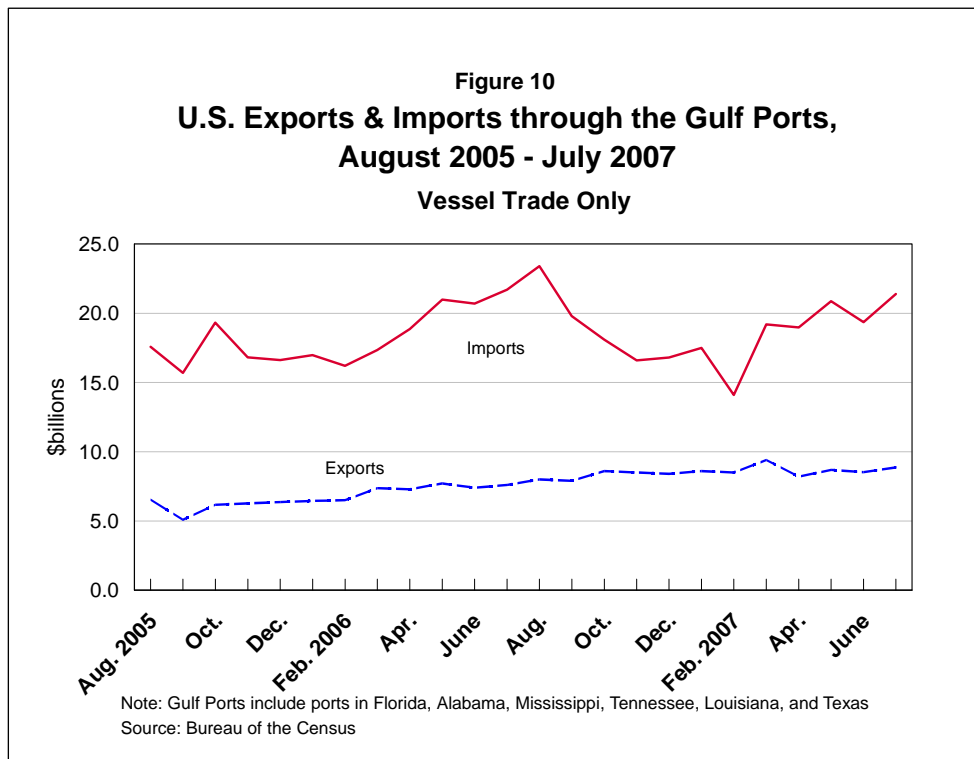


- Shoreside fishing industry infrastructure losses were particularly significant in the Biloxi/Gulfport areas of Mississippi and the Venice/Empire area of southeast Louisiana following Katrina. Four of eight fish dealers have re-opened in the Venice/Empire area. In contrast to eastern Louisiana, most fishing-related sectors in western Louisiana had largely recovered by March 2006.

- Processing capacity has been significantly affected across the region. Loss of facilities, including refrigerated storage capacity combined with persistent labor shortages, continues to suppress production. There were 18 dealer/processors in the Biloxi/Gulfport area in 2004. Of those, 11 are back up and running. Another processor is being rebuilt. Significant increases in housing costs in important processing centers like Biloxi continue to affect labor availability, as do alternative employment opportunities in construction.

Exports and Imports through Gulf Ports

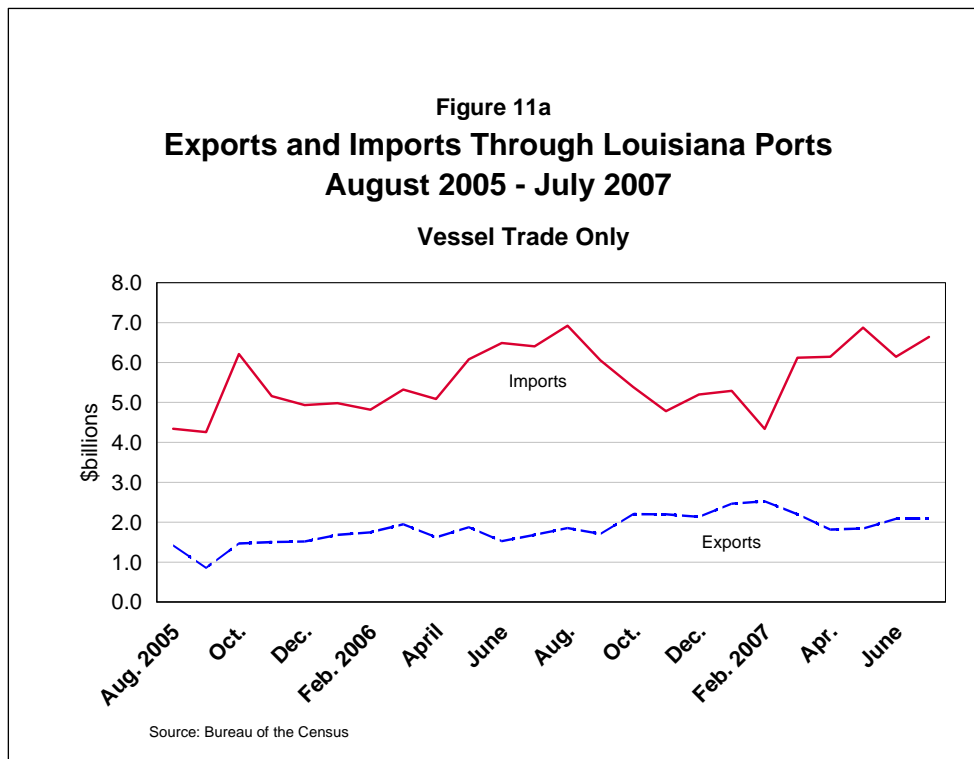
- The ports of the Gulf Coast, a number of which were severely damaged by the hurricanes, represent a significant portion of the country’s ability to export goods to and import goods from the rest of the world. Exports of goods through the Gulf Ports represent about 7% of all U.S. exports and almost 11% of imports (July 2007 data). Crude oil imports through the Gulf Ports, as measured in quantity and value, are critical. Over half—58% of the quantity and 59% of the value—are transported through Gulf Ports.
- U.S. exports of goods (vessel trade) through the Gulf Ports dropped 22% the month after Hurricane Katrina—from \$6.5 billion in August 2005 to just over \$5 billion in September. (See Figure 10.) By October 2005, however, the value of exports through the Gulf Ports was almost back up to pre-Katrina levels—\$6.2 billion. The value of exports through the Gulf Ports has been increasing steadily through July 2007 to around \$9 billion.



- Imports dropped by 11% the month after Hurricane Katrina—from \$17.6 billion in August to \$15.7 billion in September. By October, however, imports into the Gulf ports

were above pre-Katrina levels. In November, imports dropped again, but continued to climb thereafter. By March 2006, imports almost reached pre-Katrina levels of \$17.4 billion. By July of 2007, imports exceeded \$21 billion.

- Practically all of the decline in imports from August 2006 and February 2007 can be attributed to the drop in the value (the price) of imported oil, gas and petroleum products. Between August and November 2006, the value of oil and gas and petroleum products imports dropped by 38%--from \$15.6 billion (data for the customs districts of Houston, Port Arthur and New Orleans) in August to \$9.7 billion in November. The slide in the value of these imports took place at the same time that oil prices dropped by around a third from a high of about \$69 per barrel in August to the low \$50s by the end of the year. By the end of March, the value of imports through the Gulf Ports started to spiral upward once again as the cost of a barrel of oil increased to almost \$60 per barrel.
- Exports through the ports of Louisiana are about a quarter of all exports through the Gulf Coast ports by value, and imports through Louisiana ports account for one-third of all imports through Gulf Coast ports. Exports and imports both suffered the month after the hurricanes, but since then the volume of trade through these ports has recovered. See (Figure 11a.) Exports have fluctuated around the \$2 billion mark over the two year period while imports have fluctuated more widely, around a \$6 billion mark. About three quarters of the value of exports (vessels only) go through the Port of New Orleans. The Louisiana ports of Morgan City, New Orleans, Baton Rouge, Gramercy, and Lake Charles are primary entry ports for about 40% of the total crude oil entering through all of the ports in the Gulf.



- Compared to trade through the Louisiana ports, trade through Mississippi ports is relatively small. Exports and imports in Mississippi ports dropped precipitously in the month after the hurricanes, but improved rapidly over the next several months. Although trade was severely disrupted the months following the hurricanes, the value of exports and imports through these ports reached pre-Katrina levels by spring of 2006. (See Figure 11b.)

