This is the third report on economic impacts of Hurricane Katrina and Rita on the national economy, the economies of Louisiana, Mississippi, and Alabama, and the most severely affected parishes and counties in these states. The first report was issued on October 21, 2005 and the second on December 15. While the two previous reports focused primarily on impacts, the focus of this report is expanded to track, where possible, economic recovery in the region.

**Impact on the Nation**

**Impact on U.S. GDP Growth**
- According to the *Economic Report of the President*, the macroeconomic effects of Hurricanes Katrina and Rita were to lower actual real Gross Domestic Product (GDP) growth by approximately 0.7 percentage points in the third quarter of 2005 and 0.5 percentage points in fourth. The Congressional Budget Office (CBO) estimated a 0.5 percentage point reduction in the third and fourth quarters.
  - Actual real GDP growth was 4.1% in the third quarter of 2005 and 1.7% in the fourth. Thus, according to the above estimates, without the effects of the hurricanes, real GDP growth in the third quarter would have been 4.8% and 2.1% in the fourth.
- CBO also estimated that GDP growth in the first half of 2006 will be stimulated by a similar 0.5 percentage points resulting from economic recovery, particularly in the energy industry in the Gulf Coast.

**Impact on the Federal Budget Deficit and Spending**
- According to the CBO, Federal spending for hurricane-related disaster assistance in addition to related tax relief will add $54 billion to the deficit in 2006 and $23 billion in 2007 and smaller amounts thereafter.
  - Thus, in 2006, hurricane-related spending and tax relief will amount to about 16% of the budget deficit in 2006 and 9% in 2007.
  - The $54 billion is a combination of Federal outlays in 2006 and various forms of tax relief in and tax reductions from the affected area.
- Of the estimated $30 billion in Federal outlays in 2006 for Gulf Coast recovery, $21 billion will be spent by the Federal Emergency Management Agency (FEMA) and the remaining $9 billion by the Department of Housing and Urban Development and the Department of Defense, including levee reconstruction by the Army Corps of Engineers.
  - FEMA, according to CBO, will spend approximately 40% ($8.4 billion) of its $21 billion in outlays for housing and other forms of direct assistance to victims.
The remaining 60% ($12.6 billion) will be spent on debris cleanup and relief coordination and support.

**Impact on National Housing Activity**

- About 650,000 people were displaced by Katrina alone, with about 217,000 homes destroyed or severely damaged and an additional 38,700 homes with severe, but repairable, damage.
- Property damage was estimated at $38.8 billion.
- In January 2006, housing permits, starts, and completions across the nation seemed little affected by the hurricanes and were running well ahead of last January’s pace.
  - Housing permits were 6.8% above last January, starts were 14.5% above, and completions were 1.1% above (seasonally adjusted at annual rates).
- In the South, permits were 6.0% above last January, starts were 8.7% above and completions were 3.1% above.
  - Only about 2% to 3% of the South’s total building permits originated from the most severely hurricane impacted counties.

See Housing Starts in the section below on Impact on the Region to get state residential construction activity since the hurricanes and also the Impact on Metropolitan Statistical Areas (MSA) for residential construction activity in New Orleans MSA and Gulfport-Biloxi MSA since the hurricanes.

**Impact on the Region:**
**Louisiana, Mississippi and Alabama**

**Employment Status through February 2006**

- The national unemployment rate in February was 4.8%, slightly lower than in the months just after the hurricanes. In September and October the national unemployment rate was 5.0%.
- In February, evacuees identified in surveyed households represented slightly more than 1 million persons, age 16 and over, of which more than half had returned to their homes. Roughly 58% of evacuees reported being in the labor force in February and 51% were employed. The unemployment rate of returnees was 4.8% compared with 22.6% for those who had not returned.1
- Unemployment rates in the states affected by Hurricane Katrina are improving. The February 2006 unemployment rate in Mississippi at 8.6% is still higher than before Katrina in August, 7.4% but below the peak rate of 9.4% in September 2005. (Table 1).

The unemployment rate in Louisiana is now lower than it was pre-Katrina, reflecting an

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1 According to BLS, this group represents persons in the civilian non-institutional population age 16 and over who reside in households that were eligible to be selected for the current population survey (CPS). These data are not representative of the total evacuee population because they do not include children or people residing in shelters, hotels, places of worship, or other units out of scope for CPS. The total number of evacuees estimated from the CPS may change from month to month as people move in and out of the scope of the survey.
overall decline in the state’s civilian labor force. The unemployment rate was 4.2% in February 2006, well below the post-Katrina peak rate of 11.8%, but also below the 5.8 percent rate in August of 2005.\(^2\) The Alabama unemployment rate was 4.0% in February 2006, up slightly from the 3.8% rate right after Katrina, but basically in line with the rate of unemployment before the hurricane.

### Housing Construction Activity

- From January through August 2005, housing starts authorized by permits in Louisiana averaged 1,894 per month. After the hurricanes, housing permits were 1,653 in September and 1,590 in October. Between November and February, housing permits averaged 1,646, a 13% average monthly drop compared to pre-Katrina permit activity.
- From January through August 2005, housing starts in Mississippi averaged 1,116 per month. After the hurricanes, housing permits were 1,316 in September and 1,108 in October. Between November and February, housing permits averaged 1,002, a 10% average monthly drop compared to pre-Katrina permit activity.
- From January through August 2005, housing starts in Alabama averaged 2,668 per month. After the hurricanes, housing permits were 2,015 in September and 2,538 in October. Between November and February, housing permits averaged 2,338, a 12% average monthly drop compared to pre-Katrina permit activity.

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\(^2\) The Louisiana Department of Labor attributes the dramatic decrease in the rate of unemployment in December 2005 to a combination of several factors: an unusually large one-month reduction – about 100,000 – in the number of unemployment claims; and a statistical model used by BLS since September 2005 that places more emphasis on the number of claims for unemployment benefits and the nonfarm employment totals than in the methodology used before both hurricanes. The Louisiana Department of Labor, along with the U.S. Bureau of Labor Statistics, will continue to study the results of the current statistical models and report revised estimates over the next several months.
Business Impact

- Data are unavailable to determine the extent of the recovery in the business community. However, we do have data on the concentration of business establishments in the areas impacted by the hurricanes.
  - Louisiana, in 2003, had just over 107,000 business establishments with 1.6 million employees. 70,000 of these were geo-coded with latitude and longitude coordinates by the Census. About 74% (52,000) are in parishes declared as Federal disaster areas and about 19% (13,000) are within the FEMA designated damage zones.
  - Mississippi, in 2003, had just over 62,000 business establishments with just under 900,000 employees. 34,000 of these were geo-coded. Of these 34 thousand, about 16% (5,000) are in counties declared as Federal disaster areas and about 8% (3,000) are within the FEMA designated damage zones.
- Of the business establishments in the affected region, the largest industry (in terms of business establishments) was the Trade, transportation, and utilities sector, 26%; followed by the Professional and business services sector, 15%; and Education and health services; Other services; and the Construction sectors, 9% each.
- Manufacturing industries comprised only 4% of the total establishments in the area.
  - Of the manufacturing establishments in the region, there were six that accounted for 15% or more of that industries’ total U.S. employment: Shipbuilding and repair, 38%; Alkalies and chlorine manufacturing, 35%; Missile and space vehicle parts, 28%; Laundry machinery, 25%; Petrochemicals, 19%; and Petroleum refining, 15%.

Exports of Goods through the Gulf Ports

- U.S. exports of goods (vessel trade) through the Gulf Ports dropped 23% the month after Hurricane Katrina—from $6.5 billion in August 2005 to $5.1 billion in September. See Figure 1. By October, however, exports through the Gulf Ports were back up to $6.2 billion and have increased steadily to $6.5 billion through January 2006. By February, exports through the Gulf Region dropped to $6.3 billion. Exports through the Gulf Ports represent about 8% of total U.S. exports.
  - The primary products exported through the Customs District of New Orleans are Agricultural goods (32%) and Computer and electronic products (20%).
  - The primary products exported through the Customs District of Houston are Chemicals (34%).

![Figure 1. U.S. Exports through the Gulf Region, August 2005 - January 2006](image-url)
and Machinery (21%).
• The dramatic recovery in exports through the Gulf Ports had to do with a reshuffling of exports from one port to another.
  o In September, the port share of total exports dropped for the ports of New Orleans, Louisiana (16% to 7%), Pascagoula, Mississippi (1.1% to 0.1%) and Gulfport, Mississippi (2% to 0%).
  o Baton Rouge, Louisiana September exports were 258% greater in value than their pre-Katrina or August exports.
• By January, with the exception of Gulfport, Mississippi, exports through a majority of the Gulf Ports recovered to their pre-Katrina levels.

Imports of Goods into the Gulf Ports
• The value of imports (vessel trade) going into the Gulf Ports 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 and have stayed between $16 and $17 billion through January 2006. In February, imports into the Gulf Region dropped to $14.4 billion. Imports of goods through the Gulf Ports represent about 13% of total U.S. goods imports.
  o The primary products imported through the Customs District of New Orleans are Oil and gas (47%) and Computer and electronic products (17%).
  o The primary products imported through the Customs District of Houston are Oil and gas (52%) and Petroleum products (10%).
• The dramatic recovery in imports into the Gulf Ports had to do with a reshuffling of imports from one port to another.
  o In September, the port share of the total imports dropped for the ports of New Orleans, Louisiana (12% to 10%), Pascagoula, Mississippi (2.7% to 0.4%) and Gulfport, Mississippi (9% to .1%).
  o Gramercy, Louisiana September imports were 238% greater than their pre-Katrina or August imports while Baton Rouge’s September imports were 63% greater.
• By January, with the exception of Gulfport, Mississippi, imports through a majority of the Gulf Ports recovered to their pre-Katrina levels.

![Diagram showing U.S. Imports into the Gulf Region, August 2005 to January 2006](image)
Energy Impacts and Recovery

- By early October 2005, over 80% of crude oil production and nearly two-thirds of natural gas production in the Gulf Coast were shut-in. “Shut-in” refers to oil and gas production facilities closed down for repair from the storms. Gulf Coast crude oil offshore production accounts for about 29% of total U.S. offshore oil production and 20% of offshore natural gas production.
- By mid-October, shut-in crude oil dropped to just over 60% and shut-in gas dropped to just over 50%. By December, shut-in oil production was 28% while shut-in gas production was 23%. By March, shut-in oil production was 23% and shut-in gas production was 14%.
- National refinery inputs dropped from 15.6 million barrels per day (mmbd) in August to about 14.0 mmbd in September, a 10.6% drop across the country. In December, refinery inputs reached 15.2 mmbd and in January, 14.8 mmbd.

Banking Impacts and Recovery

- There were some 280 commercial banks and savings institutions in the Gulf Coast affected by Katrina. One hundred and twenty (120) of these were located in the 49 counties and parishes most affected by the hurricanes.
  - Immediately after Katrina, damage to facilities was extensive and about 1,000 automatic teller machines were damaged or destroyed. (See www.fdic.gov/news/news/speeches/chairman/spfeb1506.html.)
- As of December, some 100 institutions continued to report damaged offices, with 98 branch offices still closed and about 46 temporary banking locations were operating in the states of Louisiana, Mississippi, Alabama, and Texas.
- Electronic payment systems were severely disrupted right after Katrina, but this proved to be short-lived. Data backup and disaster recovery plans proved to be adequate and routine customer transactions and Automated Clearing House systems were up and running within two weeks after the storm.
- Long term concerns for banks and savings institutions in the region continue to be credit quality and long-term franchise value, according to the FDIC. The FDIC also reported that the massive economic dislocations caused by Katrina exposed many of these institutions to higher levels of credit losses going forward and the credit losses will likely reduce the long-term earnings capacity of these institutions lowering their franchise values.

Fisheries Impact and Recovery

- The Gulf of Mexico is home to a significant share of the U.S. fishing industry, representing 20% of commercial fishing and 30% of saltwater recreational fishing.
- Value of the commercial harvest in the Gulf of Mexico in 2004 was $627 million comprised of oyster, $59 million; shrimp, $286 million; and finfish and other shellfish, $282 million.
- Louisiana, with over half the value of the commercial harvest, is anticipated to have the highest damages followed by Mississippi.
- Commercial fishing revenue in Louisiana was $44.2 million in August. In September, commercial fishing revenue dropped 36% to $28.2 million. See Figure 3. For October, however, commercial fishing revenue jumped back up to $37.8 million. In November and December, commercial fishing revenues were $26.3 million and $14.5
million, respectively, running well above seasonal revenue rates.

Commercial fishing revenues in Mississippi were $6.5 million in August and then dropped by 46% to $3.0 million in September. See Figure 4. For October, however, commercial fishing revenue jumped back up to $5.4 million. In November and December, commercial fishing revenues were $4.5 million and $3.1 million, respectively, running well above seasonal revenue rates.

**Forestry Impact**

- The USDA Forest Service estimated 19 billion board feet of commercial timber was damaged on over 5 million acres in Louisiana, Mississippi, and Alabama, about 30% of the commercial timberland in these states. This, according to the Forest Service, is about a $5 billion loss in potential timber revenues.

- The Mississippi Forestry Commission estimated that 1.3 million acres of forest land were damaged with commercial timber valued at $1.3 billion. (There was no other corresponding state estimated forestry damage for Louisiana and Alabama.)
Gaming Sector

- The gaming industry is important to the economic vitality of the Gulf Coast region. Mississippi has the third highest gaming revenue of any commercial casino state, behind only Nevada and New Jersey. In 2004, Gulfport-Biloxi ranked as the seventh-largest individual gaming market in the country, with total revenues of $911.4 million and New Orleans ranked 15th with total revenues of $608.8 million.
- Twelve of Louisiana’s fifteen riverboat casinos have reopened and, amazingly, gaming revenues are actually higher than this time last year. Statewide gaming revenues were $129.9 million in January 2005, but $169.3 million in January 2006. Harrah’s New Orleans, the only land-based casino in Louisiana, reopened on February 17th, after being closed for almost six months. Upon reopening, 1,250 workers returned to work, about half the number employed prior to Katrina. Harrah’s also suffered losses in Lake Charles, Louisiana and has reopened its hotel, named Lake Front Hotel, but the casino remains closed. The company is on track to open its much awaited $150 million, 450-room, 26-story hotel one block from the French Quarter as early as September 2006.
- In Biloxi, Mississippi, a city of 50,000 where one-quarter of its structures were lost, three casinos reopened in January out of the nine that were there a year ago. While this may appear as only a modest beginning, these three casinos took in $63 million in January compared to $83 million that all nine casinos took in, January a year ago. Another 5 casinos are in the planning stages or are already in construction in Biloxi at a reported cost of about $2.5 billion.
- Mississippi Governor Haley Barbour expects a revival of Mississippi's $2.5 billion a year gambling industry, as companies take advantage of billions of dollars worth of tax breaks and private-activity municipal bonds in the federally declared Gulf Opportunity Zone to help build new facilities. Also, a recent change in the Mississippi state law now allows casinos to be situated on land up to 800 feet from the waterside. Previously, they had to be located on water in floating barges. Thus, rebuilding will take longer because many casinos are planning to build larger, more expansive land-based casinos.

Impact and Recovery on the New Orleans and Gulfport-Biloxi Metropolitan Statistical Areas (MSAs)

In Louisiana, Mississippi, and Alabama, there are 169 counties and parishes eligible for individual and/or public assistance resulting from Hurricanes Katrina and Rita. Seventy-seven of these counties/parishes are designated by FEMA to be the most affected counties and are eligible for both types of assistance. The remaining 102 counties are eligible for public assistance only.

In Louisiana, the most severely damaged parishes were Orleans, St. Bernard, and Jefferson. The New Orleans MSA consists of these parishes plus Plaquemines, St. Charles, St. John the Baptist, and St. Tammany parishes. The most severely damaged counties in Mississippi were Harrison and Hancock Counties. Harrison and Hancock counties are part of the Gulfport-Biloxi, MS MSA along with Stone County.

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3 In this report, “gaming” refers to only riverboat and land-based casinos.
Below are estimates of impact and recovery: (1) on population; (2) of the civilian workforce and numbers of unemployed; (3) on housing; and (4) on hotels and for the most severely impacted MSAs of New Orleans, Louisiana and Gulfport-Biloxi, Mississippi

New Orleans, Louisiana MSA

- According to the Greater New Orleans Community Data Center (See http://www.gnocdc.org/), the population of the New Orleans MSA dropped by almost half, from 1.3 million in July 2005 to 703 thousand in October, as a result of the hurricanes. By January 2006, the New Orleans MSA population reached 850 thousand, a 21% recovery in population since October, but still 36% drop from pre-Katrina levels.
  - The Orleans, Plaquemines, and St. Bernard Parishes had the greatest loss of population, incurring 70 to 80% losses between July and October. See Figure 5. Jefferson Parish has seen the most recovery with an initial 44% loss of population between July and October. But by January 2006, the population loss was cut to 21%.
- In August 2005, the civilian labor force in the New Orleans MSA was 633,800. The number of unemployed was 36,800 so the unemployment rate was 5.8%. The national unemployment rate for August 2005 was 4.9%. BLS reported that in September, the civilian labor force dropped to 470,000 of which 77,600 were unemployed, a 16.5% unemployment rate.
- While the population in the New Orleans MSA has been increasing each month after the hurricanes, the civilian labor force dropped by...
about 40,000 workers in December, but has remained flat since then. See Figure 6. While the number of unemployed in December dropped as well, about 45,000 workers, and the unemployment rate dropped from 17.1% in November to 7.8% in December, this apparent recovery may be more a factor of the drop in the number of workers, rather than the reduction in the unemployed.

- Based on construction data through August of 2005, we estimate that the number of housing units just prior to the hurricane in the New Orleans MSA rose to 580 thousand units.
- Based on damage estimates from the Louisiana Recovery Authority, we estimate that 30 percent of the housing stock in the New Orleans MSA was destroyed (60 percent in New Orleans city). Of the 404 thousand housing units not destroyed, families reported another 146 thousand were damaged.
- Thus, only an estimated 258 thousand housing units of the pre-Katrina housing stock of 580 thousand units went unscathed in the New Orleans MSA.
- Based on housing permit data for the New Orleans MSA through January 2006, the road to recovery for its housing stock to reach pre-Katrina levels will be long and uncertain. See Figure 7. The average monthly number of housing units authorized by building permits in the New Orleans MSA between January and August 2005 (pre-Katrina) was 516. The average between September 2005 and January 2006 (post-Katrina) was 99. In February, however, that number jumped to 378.
- The tourism industry is the largest employer in the city of New Orleans, with more than 80 thousand jobs. The tourism industry has an estimated $5 billion annual impact on the New Orleans economy and generates 40% of the city’s tax revenues. Mardi Gras festivities alone typically generate over $1 billion in revenues and over $20 million in direct tax revenues. Mardi Gras revenue estimates are not yet available for 2006, but attendance was estimated at about a third of the usual one million participants.
- Right after Katrina, only 2,000 of New Orleans’ 38,000 hotel rooms were available and most were used for recovery teams. Roughly 25,000 rooms are available now. Housing continues to be a problem, as many hotels in New Orleans report having to use on average 25% of rooms to house their employees.
- Hotels were full during the Mardi Gras celebration, but there were significantly fewer hotel rooms available. The Greater New Orleans Hotel & Lodging Association reported that of the
38,000 hotel rooms available last year, the city now has 25,000, of which 15,000 were open to tourists during Mardi Gras.

- According to the New Orleans Restaurant Association, 506 restaurants were operating out of the 1,882 in operation before Katrina. Pre-Katrina, the industry employed 55,400 workers, but only 27,700 after Katrina in September 2005. By the end of the year, employment had recovered slightly to 33,200.

**Gulfport-Biloxi, Mississippi MSA**

- Gulfport-Biloxi, Mississippi MSA continues to present a significantly impacted area, albeit on a smaller scale than New Orleans.
- The Census reported that Gulfport-Biloxi MSA had a population of 246,190 in 2000 and 106,051 housing units. By 2004, this population increased by 3.1% to 253,822. (See [www.demographia.com/](http://www.demographia.com/)). Using the population to housing ratio of 2000, we estimate that prior to the storm, there were about 110,400 housing units in this MSA.
- According to a number of reports, there were about 60,600 housing units destroyed in Gulfport-Biloxi and over 50% of the remaining homes were damaged. While there are no estimates of population remaining after the storm, we estimate the surviving housing stock supports a population of about 116,000 or less than half of the existing population pre-Katrina.
- Prior to Katrina, the number of housing units authorized by permits averaged about 216 per month (January through August). After the hurricane, housing permits issued dropped to an average 53 per month through December. Permits in January, however, jumped back up to 213, almost the pre-Katrina average, and permits in February were 200. See Figure 8.

![Figure 8. Housing Units Authorized by Building Permits](#)
• While the housing in Gulfport-Biloxi MSA is reported as woefully inadequate to support the pre-Katrina population, the civilian labor force dropped by only about 10,000 workers after the storm, according to BLS monthly data. Prior to the storm, the labor force was about 120,000 workers. After the storm, the labor force averaged 110,000. See Figure 9.

• The number of unemployed did, however, jump dramatically from about 7,000 workers before the storm to an average 28,000 after the storm. The number of unemployed has been declining steadily since 28,800 were reported in September. By December, the number of unemployed was reported to be 22,700. By February, the number of unemployed was 17,100.

• In Gulfport-Biloxi, restaurants located inside and away from casinos, relied on gaming activity, which is down sharply. Employment dropped 40% after Katrina and is expected to recover slowly in tandem with the rebuilding of the hotels and casinos.

• There were 59 hotels in Gulfport-Biloxi employing 15,300 workers before Katrina. Hotel employment has now fallen to 5,800, a third of pre-Katrina level. Several casinos with hotels attached were damaged or destroyed.

1For an additional review of recovery in these two most severely impacted MSAs, listed above, and the MSAs of Lake Charles, Louisiana and Pascagoula, Mississippi go to http://www.lorenscottassociates.com/Reports/AdvancingInTheAftermath.pdf.