The Gulf Coast:
Economic Recovery
A Year and a Half after the Hurricanes

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This is the fifth ESA report on economic effects of Hurricanes Katrina and Rita on the economies of Louisiana and Mississippi and the New Orleans, Louisiana and the Gulfport-Biloxi, Mississippi Metropolitan Statistical Areas (MSAs). The previous reports were issued in October and December 2005 and April and October of 2006. This report summarizes (1) Federal aid to the Gulf Coast as described in a recent (January 29, 2007) U.S. Senate hearing in New Orleans, (2) current conditions of selected industries and international trade in the Gulf Coast, and (3) current economic conditions—employment, personal income, and housing—in the area.

In summary, considerable progress has been made in the Gulf Coast over the 1½ years since the hurricanes: (1) the Federal government has allocated considerable aid to the area, although much more needs to be done; (2) a number of industries—energy, fisheries, banking, forestry, travel and tourism, and gaming—have improved remarkably, although significant problems persist; (3) exports from and imports into the Gulf Coast have fully recovered, although the mix of trade through the seaports has changed; and (4) the economic indicators of change in employment, personal income, and housing have been showing positive trends, although it appears that, for employment and housing in particular, the growth after the hurricanes has been from a lower base.

Federal Aid to the Gulf Coast

In January 2007, the U.S. Senate Committee on Homeland Security and Governmental Affairs conducted a field hearing in New Orleans titled Hurricanes Katrina and Rita: Outstanding Need and Slow Progress. In that hearing there were a number of Federal government witnesses that testified regarding the progress being made in funding projects in the Gulf Coast area. The following summary of Federal aid in the region is taken from that testimony.1

The Federal government has:

1 Complete testimony for all the witnesses can be found on http://hsgac.senate.gov/index.cfm?Fuseaction=Hearings.Detail&HearingID=415
• committed $110 billion toward the recovery effort through such programs as HUD’s Community Development Block Grants, funding for the Corps of Engineers, FEMA Public Assistance funding for infrastructure, Small Business Administration Loans, and grants from the Departments of Education and Labor.

• extended the 2005 Gulf Opportunity Zones Act through 2010. This extends the tax-exempt bond authority for both residential and non-residential property, expansion of the low-income housing credit, and the expensing of demolition and clean-up costs, among other provisions.

Examples of specific programs include:

**Community Development Block Grants (CDBG)** These funds are intended to help those that have lost their homes, to restore needed infrastructure, and to promote long-term recovery. In December 2005, Congress set aside $11.5 billion for these grants, $6.2 billion of which was designated for Louisiana. In June 2006, an additional $4.2 billion was added to the Louisiana designation and another $1.0 billion for the Gulf Coast region for a total of $16.7 billion. Gulf Coast States have spent approximately $1.2 billion in CDBG funds so far.

**Corps of Engineers (Levees)** The government has allocated nearly $6 billion for the U.S. Army Corps of Engineers to repair and enhance levees. Since September 2005, over 220 miles of levees and floodwalls have been repaired and restored. This work is to continue through 2010. In addition to the levee enhancement, the state of Louisiana amended its constitution to dedicate the State’s share of revenues realized from off-shore oil and gas royalties to wetlands and coastal restoration.

**FEMA’s Individual Assistance** FEMA has provided more than $5.4 billion to individuals and families in Louisiana under the Individuals and Household Program. More than 857,000 households from Louisiana have been approved for Housing Assistance, totaling more than $3.8 billion and averaging over $4,400 per household. Housing assistance includes temporary housing, repair and replacement, and rental assistance. In addition, 314,000 residents of Louisiana received $1.6 billion in Other Needs Assistance, an average of about $5,100 each for such items as personal property replacement, medical and dental expenses, funeral and moving expenses.

**FEMA’s Public Assistance** FEMA provides funds for State and local governments to administer programs to restore, rebuild, or rethink public services and facilities. In Louisiana, FEMA obligated $4.5 billion in public assistance funding of an estimated $6.3 billion funds in total costs for eligible projects.

**Small Business Administration (SBA) Loan Program** The SBA has received about 420,000 loan applications from small businesses in the Gulf Coast that were affected by Katrina. As of January 2007, the SBA has approved 160,000 of these requests and about 98% of these have either received all or part of their funds, or have chosen not to borrow. Of the $11 billion in approvals, about $2.1 billion or approximately 20% is still available for disbursement.
Current Conditions in Industries in the Gulf Coast

Energy

- According to the Department of Interior’s Mineral and Mining Service, 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” means that oil and gas production facilities closed down for repair from the storms. The Gulf Coast accounts for about 29% of total U.S. offshore oil production and 20% of offshore natural gas production.

- As of June 2006, shut-in oil production in the Gulf of Mexico was down to about 15% from pre-Katrina levels and shut-in gas production was down to about 10%. After the middle of last year, shut-in production was not that much of an issue, according to the Department of Energy’s Energy Information Administration, except for some lingering problems with storage and pipelines.

- Oil production in the Gulf Coast was back up to over 80% of pre-Katrina levels by December 2005. (See Figure 1.) By July 2006, oil production reached pre-Katrina levels, before tapering off through the end of the year, at the same time that crude oil prices dropped from about $69 per barrel in August 2006 to per barrel prices in the $50s by the end of the year. As stated above, storage and pipeline problems persisted. Total oil production in the Gulf Coast for 2005 was 466.2 million barrels. In 2006, oil production was down slightly to 456.5 million barrels.

- Natural gas production in the Gulf Coast reached almost 90% of pre-Katrina levels and maintained that level through the middle of 2006. The downturn in natural gas production that began by the end of summer 2006 appeared to be the continuation of a downturn that was going on prior to Katrina. See Figure 2. Total natural gas production in 2005 in the
Gulf Coast was 3.1 trillion cubic feet. In 2006, the Gulf Coast produced slightly less, 2.8 trillion cubic feet.

**Fisheries**

- According to the Department of Commerce’s National Oceanographic and Atmospheric Administration, 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.

- Louisiana, with 40% of the value of the Gulf commercial harvest, suffered the highest total dollar-value losses from the 2005 hurricane season, followed by Mississippi. Dockside revenues for commercial fishermen in Louisiana were approximately $9.2 million in September 2005 compared to $24.5 million in September 2004 and the 5-year average (2000-2004) of $34.6 million for September. In the aftermath of the hurricane, no landings were recorded by Mississippi fishermen in September 2005 compared to $3.4 million in dockside revenues in September 2004 and the 5-year average of $5.0 million for September.

- Total commercial dockside revenues gradually increased in Louisiana and achieved average levels by December 2005. (See Figure 3.) Dockside value for January through July 2006 was higher than the 5-year (2000-2004) average for those months. The total value of fish landed in Louisiana from January through July 2006 compares to pre-storm levels.

- However, just because fishing revenues returned to pre-Katrina levels does not mean that problems in this industry have gone away. Some fishermen in Louisiana who had no or few losses may be doing relatively well in areas of the state that escaped both hurricanes Katrina and Rita, but many others are not. Many fishermen in these areas have lost fishing vessels, homes, and their communities, and were under-insured or had no insurance at all.
Total commercial dockside revenues in Mississippi remain below average. (See Figure 4.) 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. Dockside revenues for finfish were below average through 2005 but recovered to approximately average levels from January through July 2006. Dockside revenues for shrimp fishermen have remained below average. Congress appropriated $128 million in 2006 to restore the Gulf oyster beds, and 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.

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. In contrast to eastern Louisiana, most fishing-related sectors in western Louisiana had largely recovered by March 2006. Further studies of Gulf fishing infrastructure rebuilding efforts after March 2006 have not been conducted.

Processing capacity has been significantly affected across the region. Loss of facilities, including refrigerated storage capacity combined with persistent labor shortages, continue...
to suppress production. Many of the processors who reopened are still operating at partial capacity. Significant increases in housing costs in important processing centers like Biloxi also affect labor availability, as does alternative employment opportunities in construction.

**Banking**
- Two hundred eighty (280) commercial banks and savings institutions in the Gulf Coast were 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. As of December 2005, some 100 institutions continued to report damaged offices, with 98 branch offices still closed.
- Electronic payment systems were severely disrupted right after Katrina, but these disruptions were 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.

**Forestry**
- 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, was about a $5 billion loss in potential timber revenues.

**Travel and Tourism**
- The tourism industry, with more than 85,000 jobs, continues to improve, particularly in New Orleans where tourism employs more people than any other industry.2
  - As of March 2007, 31,000 of the 38,000 metropolitan-wide hotel rooms are back in service.
  - The Louisiana Restaurant Association reports that over 743 restaurants are open in the Orleans parish (90% of pre-Katrina level).
  - Louis Armstrong International airport offers 110 daily flights serving 32 cities with 13,465 seats sold (68% of daily departures, 77% of destinations, and 65% of seats per day pre-Katrina).
  - After over $60 million in renovations and upgrades, the Ernest N. Morial Convention Center reopened in 2006 and expects to host over 70 major conventions in 2007.
  - After $168 million in renovations and upgrades, the Louisiana Superdome reopened on September 25, 2006 to a Monday night football game featuring the New Orleans Saints and pre-game concerts that generated $20 million for the city’s economy. The Saints enjoyed a sold out season for the first time in its 40-year franchise history and made it within one game of the Super Bowl.

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Mardi Gras 2007 attracted an estimated 700,000-800,000 revelers who occupied 90% of available hotels and generated revenues of $250 million. (Pre-Katrina Mardi Gras attendance topped one million.)

New Orleans is looking forward to hosting a number of major events including the Arena Bowl in July 2007 and the NBA AllStar Game in February 2008.

Unlike New Orleans, tourism in Gulfport-Biloxi and other Mississippi coastal areas will take longer to fully recover. In these areas, residential and commercial structures were completely destroyed by the storm surge generated by Hurricane Katrina and the structures will have to be completely rebuilt.

- There are currently 6,800 hotel rooms available which represents 38% of pre-Katrina inventory of 17,500. By the end of 2007, 10,000 rooms are expected to be available and by 2010, there could be as many as 30,000 hotel and condo rooms available on the Gulf Coast.
- Golf courses and charter fishing cruises are both operating at 90% of the pre-Katrina levels.
- Flights from the Gulfport-Biloxi airport are operating at 114% of the pre-Katrina seating capacity.
- 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.

Gaming

- The gaming industry is a major contributor to the economic vitality of the Mississippi coast. Hurricane Katrina damaged or destroyed twelve casinos (plus one that was about to open) and displaced 16,000 workers. Ten coastal casinos have reopened employing almost 14,000 workers. During the first half of 2006, the three casinos that were open, generated 55% of the revenues of all twelve previous casinos. By September, a total of nine casinos had reopened and earned over $109 million, the highest amount ever recorded in September. December revenues were slightly lower at $98 million with ten casinos operating. For the entire year, gaming revenues from Mississippi coastal casinos totaled almost $910 million, roughly 72% of the pre-Katrina 2004 annual revenues of $1.2 billion.

- 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.
Exports and Imports in the Gulf Coast

- 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 5. By October, however, the value of exports through the Gulf Ports was back up to pre-Katrina levels. Exports through the Gulf ports (mid-year 2006) represented about 9% of total U.S. exports. The value of exports through the Gulf Ports continued to climb through January 2007, when the value stayed between $8 and $9 billion.

- The value of imports (vessel trade only) 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. See Figure 6. By October, however, imports into the Gulf ports were above pre-Katrina levels. In November, however, imports into the Gulf Coast dropped again, but continued to climb in February 2006 to above $19 billion. The value of imports into the Gulf Coast continued upward through August 2006 above $23 billion, but then again dropped precipitously through November of 2006, when the value went below $17 billion.

Practically all of this decline can be attributed to the drop in the value of imported oil and gas and petroleum products. Between August and November 2006, the value of oil and gas and petroleum products imports dropped by 39%--from $15.5 billion (data for the customs districts of Houston, Port Arthur and New Orleans) in August to $9.5 billion in November. As in the reduction in domestic production of oil and gas in the Gulf Coast, the slide in 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.
Below are summary status reports, as of the middle of 2006, on six (6) of the 43 ports in the Gulf Coast. Figures 7 and 8, respectively, show the value of exports and imports (vessel trade only) through these ports through January 2007. Combined, these ports handled 72% of the value of exports and 41% of the value of imports for the region in January:

- The Port of New Orleans regained 100 percent of cargo ship calls as of mid-February 2006. The value of exports through New Orleans reached its pre-Katrina level by January 2006--$1.1 billion. In January 2007, exports were $1.7 billion.
The value of imports reached its pre-Katrina levels in December 2006 at $1.0 billion. In January 2007, they were $1.4 billion.

- The **Port of Houston** experienced explosive growth in non-container trade with twice the amount of grain exports by the end of June 2006, as compared to the previous year. Similarly, steel exports were up 73% and bulk materials handling increased by over 32%. Exports through the Houston port dropped from $3.1 billion in August 2005 (pre-Katrina) to $2.5 billion in September. By December 2005, exports reached pre-Katrina levels. Imports dropped by 31% from August 2005 to September 2005—from $4.9 billion to $3.4 billion. By October, however, imports through this port almost reached the pre-Katrina level at $4.6 billion. Imports peaked in August 2006 at $6.2 billion, but declined to $4.5 billion through January 2007, as petroleum imports declined.

- The **Port of Gulfport** was moving approximately 60 to 70% of the cargo it handled prior to Hurricane Katrina by mid-2006--around $87 million in exports, compared to $137 million in August 2005 and around $140 million in imports compared to $183 million in August 2005. Exports in January through Gulfport were $78 million and imports were $111 million.

- The **Port of Pascagoula** was handling approximately 80-90% of the cargo volume moved pre-Katrina by the beginning of 2006. The monthly value of exports exceeded the value of August 2005 ($75 million) in 10 of the 13 months between January 2006 and January 2007. The monthly value of imports through this port exceeded the August 2005 level of $548 million in all 13 months between January 2006 and January 2007.

- The **Port of Mobile** experienced bulk cargo handling up by 30% over pre-Katrina levels by the end of 2006. The monthly value of exports exceeded the value of August 2005 ($115 million) in all 13 months between January 2006 and January
2007. The monthly value of imports through this port exceeded the August 2005 level of $331 million in all 13 months between January 2006 and January 2007.

- Although the Port of Tampa’s bulk cargo trade was up over 50% of the pre-Katrina levels due to post-Katrina diversions, the value of exports through this port, in general, stayed below the $222 million in exports in August 2005. The value of imports fluctuated widely since the $150 million value posted in August 2005.

**Economic Conditions in Louisiana & Mississippi**

The following is a discussion of employment, personal income and housing in Louisiana and Mississippi. Employment and housing in New Orleans, Louisiana MSA and Gulfport-Biloxi, Mississippi MSA are also presented. Care needs to be used in interpreting these economic data. For instance, while the unemployment rates in these areas have fallen to pre-Katrina levels, the size of the labor force in these areas has not recovered. In addition, while the number of housing permits issued per month in these areas has recovered to pre-Katrina rates, the permit data do not reflect the significant loss in the number of dwellings in these areas. Finally, while the personal income data in these states show significant gains in statewide personal income, the data mask the loss that occurred in the most devastated parishes and counties.

**Employment**

- Employment is slowly recovering in the states and localities affected by the hurricanes. 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 evacuated and have not returned. Despite very low unemployment rates, the affected areas will not fully recover until the residents return and are able to find adequate housing and employment.

- The unemployment rate in Louisiana at the end of 2006 was 3.8%, substantially lower than the 6.2% rate before the hurricanes and well below the post-hurricane peak rate of 11.8%, when almost 240,000 workers were unemployed. The unemployment rate continues to decline, suggesting that many of the workers looking for jobs are finding them.

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3 Unless otherwise indicated, employment changes reflect the entire period of July 2005 to December 2006. 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.

4 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 both hurricanes.
• The December 2006 unemployment rate in Mississippi at 7.0% is slightly lower than before the hurricanes--7.4%, and well below the peak rate of 9.4% in September 2005, when over 125,000 workers were unemployed. (See Figure 9.) Still, the unemployment rate remains higher than the national average (4.3% in Dec. 2006). The Mississippi Institutions of Higher Learning University Research Center forecasts 2007 employment growth to outpace the rest of the Nation as the state continues to recover from the effects of Hurricane Katrina.5

• The New Orleans MSA lost almost one-third of its workforce since the hurricanes as the civilian labor force shrank by over 218,000 workers from July 2005 to the end of 2006. See Figure 10a. The size of the New Orleans labor force stabilized in December 2005 and has averaged roughly 433,000 workers during 2006 but is still well below the pre-Katrina average of more than 630,000 during the first half of 2005.

• The unemployment rate increased dramatically from 5.6% to 17.7% during a single month after the hurricanes (August to September 2005). As shown in Figure 10a, the unemployment rate dropped sharply in December 2005 in part because of the re-employment of workers, but also as a result of BLS changing its methods to estimate unemployment. Throughout most of 2006 the unemployment rate has continued to drift downward below the pre-Katrina rate to end the year at 4.4%.

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• Unemployment in the Gulfport-Biloxi area skyrocketed to 22% right after the hurricanes but gradually has fallen to near pre-Katrina levels. At the end of 2006, the unemployment rate was 7.7%. See Figure 10b. The number of unemployed increased dramatically from about 7,400 workers before the storm to almost 28,000 afterwards. The number of unemployed has been declining steadily since then to about 8,500 by the end of 2006.

• Like New Orleans, the lower unemployment rate in Gulfport-Biloxi masks the loss in the size of the workforce. The Gulfport-Biloxi MSA labor force has lost almost 16,000 workers since the hurricanes. Prior to the storms, the labor force had about 127,000 workers and since then has declined steadily before leveling off in December 2005. During 2006, the labor force has averaged around 109,000 workers.
Personal Income

- According to the Bureau of Economic Analysis, Louisiana's personal income grew faster than the national average in the third quarter of 2006 (latest data available). Prior to the third quarter, personal income in Louisiana grew less than the national average. Personal income in Mississippi also continues to grow—at higher levels than the pre-Katrina period. Figure 11 shows the level of personal income in these two states from the second quarter of 2005 through the third quarter of 2006.

- Personal income from the real estate, health care, and hotels and food services sectors was hit particularly hard by the hurricanes. Figure 12a shows personal income for the construction, mining (including for the oil and natural gas sectors), farming, utilities, manufacturing, wholesale and retail trade, and transportation sectors in Louisiana.
Personal income from the construction and mining sectors has demonstrated a dramatic improvement since the hurricanes.

- Figure 12b shows personal income for professional services, finance and insurance, real estate, health care, hotels and food services, and education sectors in Louisiana. Personal income from these industries bounced back to pre-Katrina levels by the third quarter of 2006.

- Just as in Louisiana, personal income from most sectors in Mississippi, including the real estate sector, have rebounded since Katrina. Figure 13a shows personal income for the construction, mining, farming, utilities, manufacturing, wholesale and retail trade, and transportation sectors. As was the case in Louisiana, construction in Mississippi, in
particular, experienced some healthy growth through the third quarter of 2006.

- Figure 13b shows personal income for professional services, finance and insurance, real estate, health care, hotels and food services, and education sectors.

**Housing**

- According to the Census Bureau’s 2005 American Community Survey (ACS) Special Gulf Coast Area report (latest available data), the number of housing units across Louisiana dropped by almost 145,000 units from pre-Katrina (January through August 2005) to the post-Katrina period (estimated from September through December 2005). These losses were practically in all of the parishes declared by FEMA to be eligible for public and private assistance, including the New Orleans MSA. In addition, the number of vacant housing units across the state increased from about 237,000 in the pre-Katrina period to just over 290,000 in the post-Katrina period, an increase of about 53,000 vacant units.

- In the New Orleans MSA separately, the number of privately owned houses dropped by a little over 134,000 from pre- to post-Katrina and of those 418,000 homes standing post-Katrina, almost one-third or 138,000 homes were vacant. Prior to the storms, about 11% of the 552,000 homes in this MSA or about 61,000 homes were vacant.
• The number of new privately owned housing units authorized for construction by building permits in Louisiana and New Orleans MSA reached or exceeded pre-Katrina levels by the beginning of 2006. (See Figure 14.) In Louisiana, the number of building permits hovered around 2,000 through the end of 2006 with a sudden spurt of about 3,900 in December. In New Orleans MSA, the number of building permits rose slowly through the end of 2006 and represented about one-quarter of building permits across the state.

![Figure 14. New Housing Authorized by Building Permits: Louisiana and New Orleans MSA July 2005 - January 2007](source: Bureau of the Census)

• According to the Census Bureau’s special ACS report, the number of housing units across Mississippi dropped by almost 33,000 units from pre-Katrina (January through August 2005) to the post-Katrina period (estimated from September through December 2005). Over 90 percent of these losses were in the parishes declared by FEMA to be eligible for public and private assistance, including the Gulfport-Biloxi MSA. In addition, the number of vacant housing units across the state increased from about 142,000 in the pre-Katrina period to almost 154,000 in the post-Katrina period, an increase of about 12,000 vacant units.

• In the Gulfport-Biloxi MSA separately, the number of privately owned houses dropped by almost 30,000 from pre- to post-Katrina and of those 131,000 homes standing post-Katrina, almost 17% or 22,000 homes were vacant. Prior to the storms, about 12% of the 161,000 homes in this MSA or about 18,000 homes were vacant.
The number of new privately owned housing units authorized for construction by building permits in Mississippi and Gulfport-Biloxi MSA reached or exceeded pre-Katrina levels by the beginning of 2006. See Figure 15. In Mississippi, the number of building permits increased to just over 2,000 by mid-year 2006 and then declined steadily, somewhat like the rest of the nation, through the end of the year. In the Gulfport-Biloxi MSA, the number of building permits rose similar to the pattern demonstrated by the state. By March 2006, building permits issued in this MSA were above the pre-Katrina levels.