



LOUISIANA ECONOMIC DEVELOPMENT

Economic Impact of Hurricanes Gustav and Ike on Louisiana *Revised September 18, 2008*

CONSERVATIVE PRELIMINARY ESTIMATES

On September 1, 2008, Gustav made landfall in Terrebonne Parish as a strong Category 2 hurricane and followed a northwest path into central Louisiana, causing widespread physical damage, power outages, and/or flooding across the vast majority of parishes in Louisiana. Nearly two weeks later, on September 12 and 13, Hurricane Ike swept along the Louisiana coast, severely flooding many communities with storm surge and causing additional power outages and moderate wind damage. While Gustav caused widespread minor and moderate physical damage across a broad swath of Louisiana, Ike had a devastating impact on a handful of parishes in south Louisiana with little physical damage to the rest of the state.

LED's conservative preliminary estimates suggest the total physical damage in Louisiana as a result of Gustav and Ike combined amounts to roughly \$8-20 billion. This figure does not include substantial temporary economic activity losses (including \$2.5-5.0 billion from Gustav alone) or economic impacts related to assets in the Gulf of Mexico.

Impact	Gustav	Ike
Physical damage	\$4.5-10.0 billion	\$3.5-10.0 billion
Temporary economic activity loss	\$2.5-5.0 billion	TBD
Businesses impacted	~97,000	TBD

In addition, Louisiana produces 22.2 percent of domestic crude oil and 10.5 percent of natural gas in the United States. As evidenced in recent spikes in fuel prices, our nation is vulnerable to disruption due to Louisiana's energy production. Over the next few months, it is expected that the outer continental shelf (OCS) region of the Gulf of Mexico will gradually return to pre-storm levels of production following required damage assessments and recovery procedures. At current market rates, LED's rough preliminary estimates suggest an output loss due to disrupted oil and gas production of \$8-10 billion from the Gulf of Mexico fields and the Louisiana Offshore Oil Port (LOOP).

In addition to energy production, Louisiana produces an estimated 25 percent of North America's seafood off its coast. These industries along with other essential Louisiana economic drivers were critically impaired due to the destruction caused by Gustav and Ike.

Hurricane Gustav

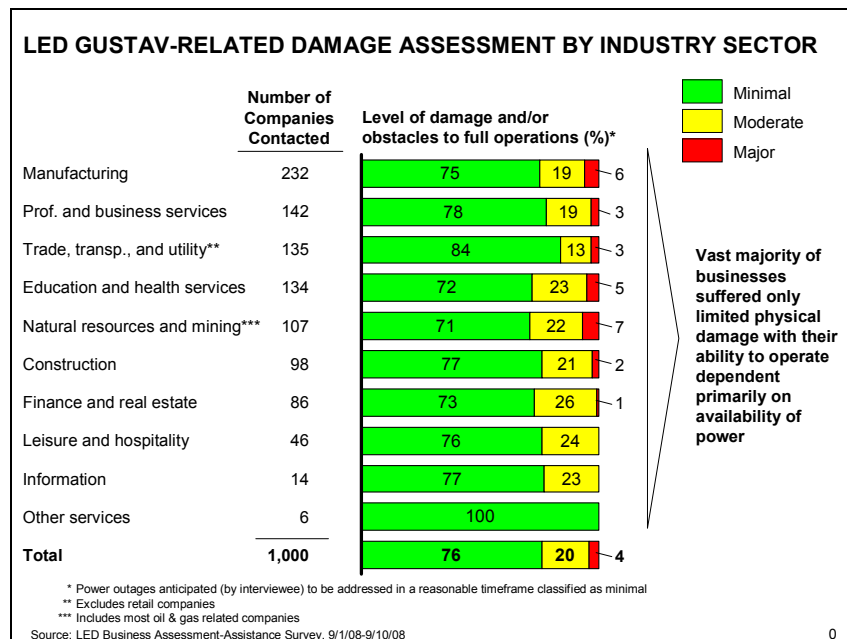
LED's conservative preliminary estimates suggest that Hurricane Gustav caused roughly \$4.5-10 billion in total property damage in Louisiana (including both insured and uninsured losses).

- \$2.0-4.5 billion for homes, vehicles, and personal property
- \$1.0-2.5 billion for commercial structures, property, and inventory
- \$1.5-3.0 billion for other property (e.g., agriculture, timber, and fisheries losses; public infrastructure; public facilities)

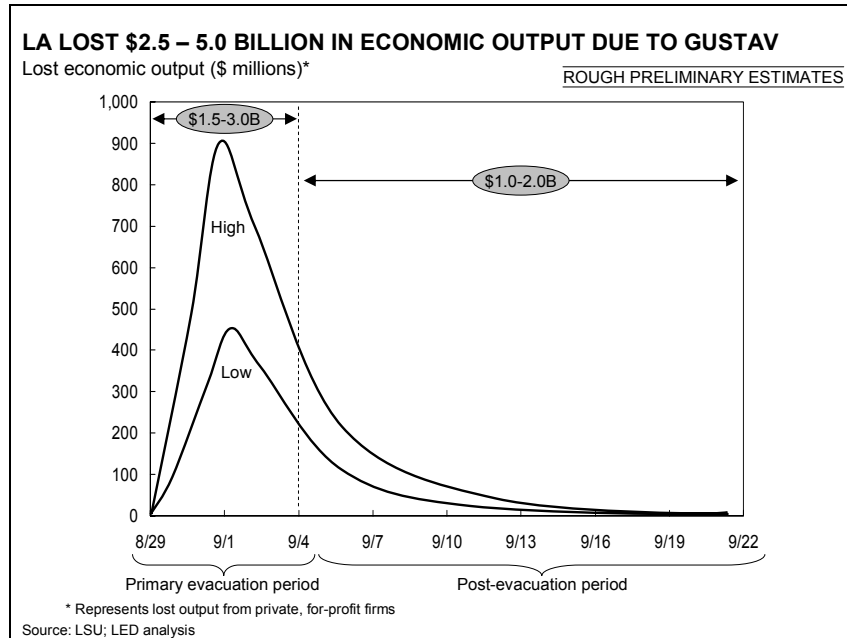
Considering Gustav-related property losses as a proportion of the total property value in each parish, the most heavily impacted parishes include Assumption, Lafourche, and Terrebonne. Considering the dollar value of property damage, the most heavily impacted parishes include East Baton Rouge, Jefferson, Lafourche, Rapides, and Terrebonne.

While the cumulative amount of property damage from Gustav is very substantial, relatively few businesses experienced total destruction of buildings and/or equipment (i.e., a very large number of businesses sustained relatively modest physical damages to their property). As such, the greatest threat facing companies statewide as a result of Gustav is business interruption due to the temporary displacement of employees, loss of electricity, and related issues.

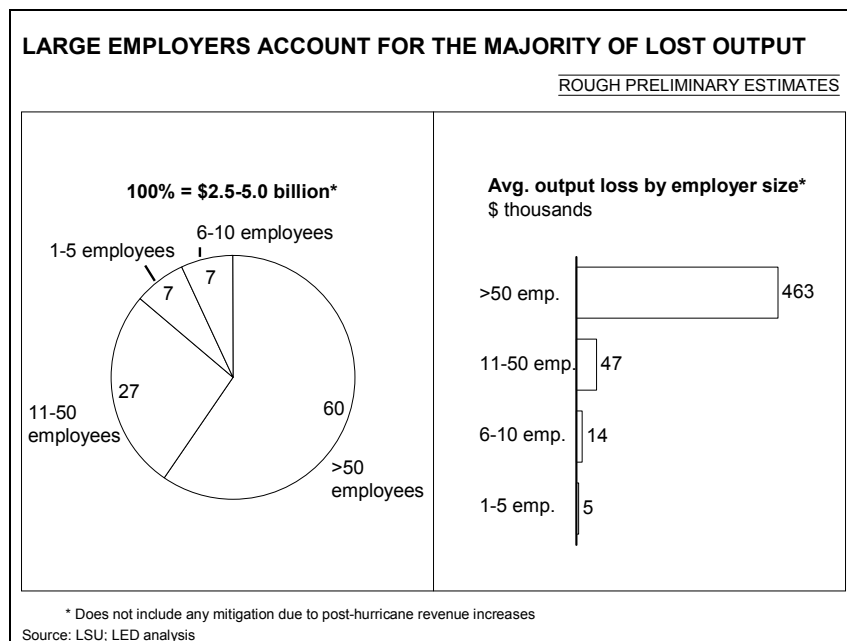
Immediately after Gustav's landfall, LED and its economic development partners directly contacted approximately 1,000 of the largest economic-driver firms across Louisiana to assess their post-hurricane status and to respond to their recovery-related needs. With relatively few exceptions, these companies sustained limited physical damage but need support with electricity outages, employee issues (due to evacuations, personal property damages, road blockages, and/or fuel concerns), fuel shortages, telecommunications outages, and/or access/logistics issues. In addition, several firms have indicated a need for temporary worker housing.



Altogether, Louisiana businesses incurred roughly \$1.5-3.0 billion in lost economic output during the primary evacuation period (including two days prior to and after landfall) and will likely incur a total of \$2.5-5.0 billion in lost economic output due to business interruptions from Gustav.



The majority of lost output was incurred by employers with more than 50 employees. However, small businesses are also experiencing a significant loss of economic output due to Gustav, averaging roughly \$5,000 (firms with 1-5 employees), \$14,000 (6-10 employees), and \$47,000 (11-50 employees).



All of Louisiana's economic-driver industries were impacted by Gustav, with the manufacturing sector experiencing the greatest loss of economic activity and labor productivity (roughly \$0.5-1.0 billion and \$100-200 million, respectively).

ALL OF LOUISIANA'S ECONOMIC-DRIVER INDUSTRIES WERE IMPACTED BY LOST ECONOMIC ACTIVITY FROM GUSTAV

ROUGH PRELIMINARY ESTIMATES

Industry Sector	Lost output (\$ billions)	Lost labor productivity (\$ millions)
Manufacturing	0.5 - 1.0	100 - 200
Trade, transportation, and utilities*	0.4 - 0.8	100 - 200
Natural resources and mining**	0.3 - 0.6	50 - 100
Finance and real estate	0.3 - 0.6	50 - 100
Prof. and business services	0.3 - 0.6	125 - 250
Construction	0.2 - 0.4	80 - 160
Education and health services	0.1 - 0.2	60 - 120
Leisure and hospitality	0.1 - 0.2	50 - 100
Information	0.1 - 0.2	15 - 30
Other services	0.1 - 0.2	20 - 40
Total (est.)***	2.5 - 5.0	650 - 1,300

* Excludes retail operations

** Includes majority of oil & gas businesses

*** Figures may not sum exactly due to rounding

Source: LSU; LED analysis

Excluding the Gulf of Mexico, property damage from Hurricane Gustav appears to be about 5-10 percent of that from Hurricanes Katrina and Rita (roughly \$100 billion together).

Hurricane Ike

LED's conservative preliminary estimates for Hurricane Ike suggest very roughly \$3.5-10 billion in total property damages.

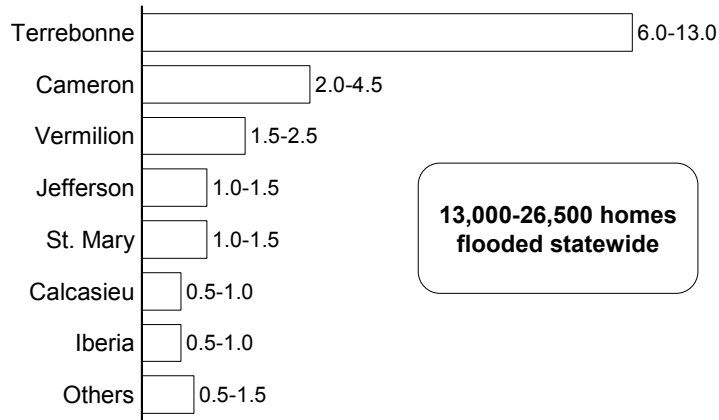
- \$2.0-5.5 billion for homes, vehicles, and personal property
- \$0.5-2.0 billion for commercial structures, property, and inventory
- \$1.0-2.5 billion for other property (e.g., agriculture, timber, and fisheries losses; public infrastructure; public facilities)

The parishes most heavily impacted by Ike, in both relative and absolute terms, include Cameron, Jefferson, St. Mary, Terrebonne, and Vermilion.

IKE CAUSED ROUGHLY \$2.5 - 7.5 BILLION IN RESIDENTIAL AND COMMERCIAL PROPERTY DAMAGE

Number of flooded homes (thousands)

VERY ROUGH PRELIMINARY ESTIMATES



Source: LED analysis

Immediately after Ike's landfall, LED and its economic development partners directly contacted approximately 300 of the largest economic-driver firms in the parishes that were apparently most heavily impacted to assess their post-hurricane status and to respond to their recovery-related needs. While the majority of companies contacted sustained little or no physical damage, many companies in the most heavily impacted areas are currently experiencing substantial challenges due to severe flooding and related concerns (e.g., anticipated workforce housing issues). As such, businesses severely impacted by Ike may need proportionally greater support with mitigating physical damages than those impacted by Gustav alone.

In addition to property damage, Louisiana businesses in impacted areas sustained a substantial temporary loss of economic activity from Hurricane Ike due to evacuations, power outages, and/or flooding. LED will estimate the amount of lost economic output due to Ike as more specific information becomes available on the extent of flooding and supply chain challenges.

Comprehensive, precise economic impact assessments for major disasters take several months to develop. These are very preliminary estimates that will be updated over the coming days, weeks, and months. These estimates do not include physical damages or temporary losses of economic activity associated with assets in the Gulf of Mexico.