The Economic and Construction Outlook in the Gulf States after Hurricane Katrina

The American Institute of Architects

AIA

By a wide margin, Hurricane Katrina ranks as the most costly natural disaster in U.S. history. Current estimates place the loss in the $150 billion to $200 billion range, more than four times the damage incurred by Hurricane Andrew in 1992. Somewhere between 275,000 and 300,000 homes are probably permanently lost to the region's housing stock, with an equal number likely in need of major improvements. Losses to the nonresidential building stock, as well as to public infrastructure, have not yet been accurately estimated, although both are significant.

Within the coming months and years, the rebuilding of this region will progress. The magnitude and composition of the rebuilding will depend on many factors: the amount of money ultimately earmarked by the federal government for rebuilding; payments by insurance companies for insured losses; and the magnitude of charitable contributions for disaster relief that are used by households for rebuilding. These funds will supplement reinvestment by businesses and households for affected communities and business activities.

However, the rebuilding of residential and nonresidential buildings in this region is not simply a matter of replacing structures that were lost and renovating those that were damaged. These activities take place in the context of a broader regional economy, where the economic impacts from the hurricane also will determine the level of rebuilding activity. How will the economic base of this region post-Katrina compare with its pre-Katrina version? How many households and businesses have left or will leave the region never to return? How many households and businesses will be attracted into the region due to economic opportunities presented by rebuilding activities? What's the likely timetable for ongoing construction projects, in terms of accelerating schedules to take advantage of a lull before rebuilding begins as opposed to putting ongoing projects on hold to sort out the likely impacts of Hurricane Rita?

To address these issues, The American Institute of Architects (AIA) contracted with Economy.com, a leading economics consulting firm specializing in forecasting regional growth patterns. The analysis that follows pulls heavily from material supplied to the AIA by Economy.com, as well as from surveys of AIA members on the timing of rebuilding after natural disasters.

The Timing of Rebuilding

Experience from previous natural disasters demonstrates that the rebuilding process typically takes place over an extended time period. Initially, there is an assessment phase where the extent of damage to a structure is determined and the owner decides whether to renovate, rebuild in the current location, or devote those resources to other purposes. For any specific rebuilding project, the design and construction process then begins, which typically lasts from six months to three years depending on the complexity of the structure and the availability of construction labor and other resources.

Often dependent on the rebuilding schedule are decisions on the timing of projects that were begun before Hurricane Katrina hit. While there are some reports of work on existing projects being accelerated to complete them before potential increases in construction materials and labor costs occur, there have been other reports of current projects being placed on hold to reassess an appropriate design and construction schedule.

A recent survey of U.S. architecture firms determined that area rebuilding after a natural disaster typically lasts anywhere from two to five years, with one in six respondents indicating that rebuilding often continues for more than five years. For this analysis, we have assumed that most of the rebuilding will occur by the end of 2008. While probably realistic for most areas in the Gulf region, this schedule is likely optimistic for rebuilding New Orleans, given the complex issues caused by extensive flooding. This period is divided into two phases: early rebuilding, which is assumed to happen by the end of 2006, and later rebuilding, which will occur in 2007 and 2008. The impact on three states is assessed: Louisiana, Mississippi, and Alabama.

The Outlook for Louisiana

Louisiana will likely take the longest to recover from the aftermath of Hurricane Katrina. Three key components of the state's economy—energy, transportation/port, and leisure/hospitality—were dramatically affected by the storm. Employment in the state is estimated to have declined by 10 percent immediately after Hurricane Katrina. Due to their importance to the national economy, the energy and transportation sectors are likely to get the most attention and rebound the fastest.

The state economy is expected to decline between 3 percent and 4 percent during the second half of this year, and remain essentially stable next year. This means that the state economy will not recover from Hurricane Katrina until 2007. Office employment is expected to decline through 2006 and then recover by 2008. Retail sales are expected to grow by almost 5 percent per year through 2008, so commercial construction levels will largely serve to offset losses to the pre-Katrina inventory.

Job losses will likely translate into population losses over the next several quarters. By the end of 2006, the population of the state is expected to still be below the pre-Katrina levels. Close to a quarter million housing units are estimated to have been destroyed in the New Orleans metro area alone. Many of the homes destroyed were built since 1970. Though the New Orleans metro area has a relatively old and historic housing stock—more than 20 percent of homes in the metro area, and a greater share within the city, were built before 1950—the older homes were generally located on higher ground where the damage from flooding generally was not as severe.

Declining population levels in the near-term will limit the need for replacement housing units, so not even all of the units lost in the storm will need to be immediately replaced to house its population. However, some of the population declines expected to be realized in New Orleans will be offset by gains from migration to other parts of the state, most noticeably Baton Rouge. Other migrants will relocate to other states. Historically, almost 40 percent of Louisiana out-migrants settle in Texas, which is expected to continue as a popular destination for those leaving the state. By 2008, probably only about 100,000 of the housing units lost to the stock will have been replaced.

Exhibit 1: Economic and Construction Indicators for Louisiana Post-Katrina

LOUISIANA	2004	2006	2004–06 CHANGE	2008	2006–08 CHANGE
Gross state product (billions of 2000$)	133.3	131.9	-1.1%	140.4	6.4%
Resident population (000s)	4,516	4,521	0.1%	4,550	0.6%
Employment (000s)	1,919	1,847	-3.8%	1,910	3.4%
Construction employment (Q4:SAAR 000s)	116.6	136.3	16.9%	115.4	-15.3%
Office employment (Q4:SAAR 000s)	350.3	343.6	-1.9%	351.1	2.2%
Manufacturing employment (Q4:SAAR 000s)	151.5	141.4	-6.7%	139.1	-1.6%
Retail sales (Q4:SAAR billions $)	59.1	64.2	8.6%	70.3	9.5%
Housing permits (000s)	23.0	95.6	315.7%	15.2	-84.1%

Source: Economy.com

Note: SAAR refers to the seasonally adjusted annual rate

The Outlook for Mississippi

Much of the reconstruction in Louisiana—particularly in the New Orleans area—will be delayed until the flooded areas are cleaned and a redevelopment plan is in place. However, the reconstruction of Mississippi can begin sooner. While state employment levels no doubt fell in the third quarter, a rebound should begin by the fourth quarter, and pre-Katrina employment levels are expected to be reached by mid-2006.

The economic base of the areas that sustained significant hurricane damage—the coastal cities of Gulfport-Biloxi and Pascagoula—is heavily concentrated in the manufacturing sector and the leisure and hospitality sector. Both of these sectors are expected to see a fairly quick rebound, with a significant portion of the rebuilding completed by the end of 2006. Given recent strong economic growth, the recovery in Hattiesburg should occur even more rapidly than the coastal areas. Its economy is more diversified than neighboring Gulf Coast cities.

Gulfport-Biloxi and Pascagoula lost an estimated 25,000 housing units during the storm or about 15 percent of their combined stock of homes. Resulting rebuilding of these homes will likely push construction levels in these metro areas up an additional 22,000 units over the next three years from levels that were expected prior to Hurricane Katrina.

Exhibit 2: Economic and Construction Indicators for Mississippi Post-Katrina

MISSISSIPPI	2004	2006	2004–06 CHANGE	2008	2006–08 CHANGE
Gross state product (billions of 2000$)	68.9	73.5	6.7%	77.2	5.0%
Resident population (000s)	2,903	2,927	0.8%	2,958	1.1%
Employment (000s)	1,124	1,153	2.6%	1,173	1.7%
Construction employment (Q4:SAAR 000s)	49.6	51.9	4.6%	49.4	-4.8%
Office employment (Q4:SAAR 000s)	166.1	174.3	4.9%	178.1	2.2%
Manufacturing employment (Q4:SAAR 000s)	178.8	179.9	0.6%	179.2	-0.4%
Retail sales (Q4:SAAR billions $)	33.5	38.8	15.8%	42.3	9.0%
Housing permits (000s)	14.5	29.1	100.7%	10.6	-63.6%

Source: Economy.com
Note: SAAR refers to the seasonally adjusted annual rate

The Outlook for Alabama

Alabama was the least affected of the three states, with Mobile being the principal area affected by the hurricane. Employment levels are expected to have eased slightly in the third quarter, with a full recovery in place by the fourth quarter of this year. Only 2 percent of the housing stock in Mobile is estimated to have been destroyed by the hurricane, which can be accommodated out of current vacancy rates, so minimal residential construction directly linked to Hurricane Katrina is expected.

Exhibit 3: Economic and Construction Indicators for Alabama Post-Katrina

ALABAMA	2004	2006	2004–06 CHANGE	2008	2006–08 CHANGE
Gross state product (billions of 2000$)	126.9	132.2	4.2%	138.6	4.8%
Resident population (000s)	4,530	4,559	0.6%	4,593	0.7%
Employment (000s)	1,902	1,950	2.5%	1,973	1.2%
Construction employment (Q4:SAAR 000s)	106.2	104.5	-1.6%	99.2	-5.1%
Office employment (Q4:SAAR 000s)	374.7	389.4	3.9%	399.3	2.5%
Manufacturing employment (Q4:SAAR 000s)	292.9	288.1	-1.6%	282.4	-2.0%
Retail sales (Q4:SAAR billions $)	62.5	69.8	11.7%	75.7	8.5%
Housing permits (000s)	22.6	19.2	-15.0%	16.5	-14.1%

Source: Economy.com
Note: SAAR refers to the seasonally adjusted annual rate

Building Materials and Labor Outlook

The past two years have seen significant price increases in selected construction commodities (e.g., steel, concrete, gypsum products, and insulation), as well as occasional materials shortages. Part of this increase is the result of a recovering nonresidential construction industry in the United States coupled with strong international demand. However, in some cases the price hikes have been the result of U.S. trade policy designed to strengthen domestic industries. In all likelihood, trade restrictions will be eased in those cases where materials price increases have been excessive.

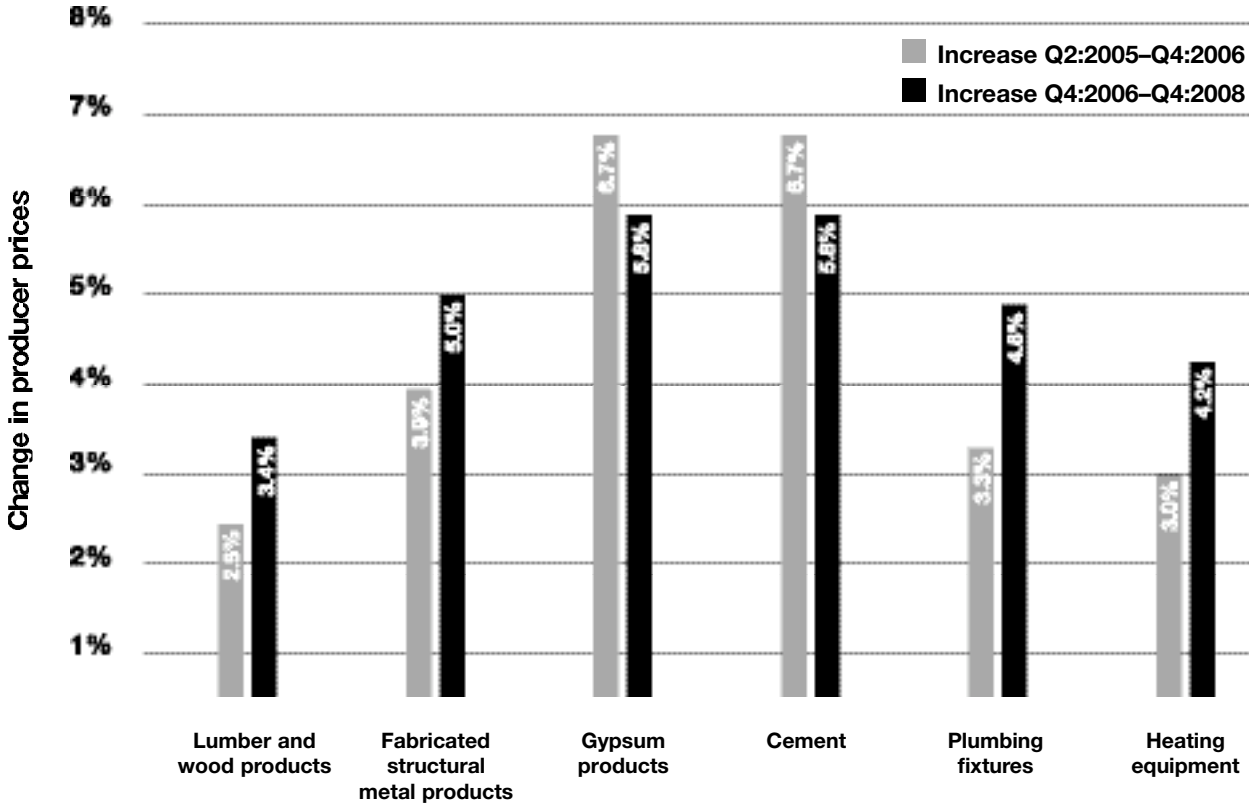
In the short term, we can expect to see some spikes in prices for construction commodities. Gypsum products (e.g., wallboard) prices have increased 5.5 percent over the past two months, while concrete prices have risen 2.5 percent over this period. In the months ahead, we should also see some jumps in lumber and plywood/OSB prices because some regional timberlands were destroyed by Hurricane Katrina. There may even be supply shortages for some products in addition to price increases. There already are reports of wallboard supplies being placed under allocation in some parts of the country. Other short-term dislocations in materials prices and availability are likely to occur until building product manufacturing and distribution facilities in the region are fully functional.

Rising prices for petroleum products, already a key concern for the economic outlook prior to Hurricane Katrina, will further complicate the construction outlook. Transportation costs have risen dramatically, and prices for petroleum-based construction products—most notably roofing products, PVC piping, and asphalt paving—have recently increased. Again, we can expect near-term volatility in prices for these products until regional refining facilities have fully resumed operations.

However, over the longer term, the affect of Hurricane Katrina on building materials prices—even commodity building products—should be fairly well contained. Due to the relatively long time horizon for rebuilding the affected Gulf Coast areas after Hurricane Katrina, and given that the rebuilding should follow a staged timing, price increases are expected to be moderate. Between now and the end of 2006, price increases are expected to be in the 3 percent to 4 percent range with the exception of gypsum products and cement. Both of these products are in short supply at present, have experienced volatile prices in recent quarters, and are expected to see further increases in the 7 percent range by the end of next year. Between 2006 and 2008, prices for building materials are expected to moderate, with increases averaging about 2 percent to 3 percent a year.

The impact of rebuilding after Hurricane Katrina on construction labor should be comparable to that of materials prices. While demand for labor is expected to increase by about 20,000 positions in Louisiana over the next 18 months, and an additional 2,000 in Mississippi, this is coinciding with an expected national slowdown in residential construction, which should free up some of the skilled trades needed for rebuilding in this region. There is likely to be some relocation of labor to the region, as workers in areas with depressed construction levels look to opportunities in the Gulf region. Labor problems that may emerge are more specialized engineering skills needed to rebuild the infrastructure around New Orleans.

Exhibit 4: Construction Material Prices Settle Back to More Normal Increases



Source: Economy.com