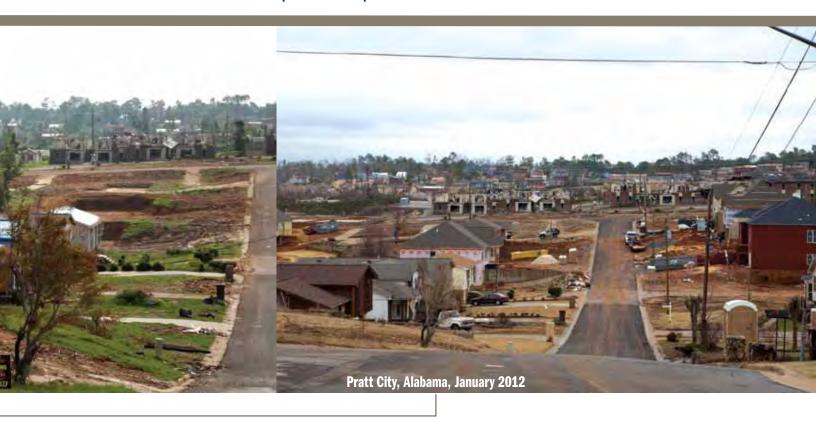
Down but Not Out:

Alabama Recovering from Tornadoes



Last April, a wave of tornadoes swept through the Southeast, devastating parts of Alabama. The loss of life and the toll on the economy were enormous. In the storms' aftermath, the state is rebuilding—and beginning to heal.

The Birmingham neighborhood of Pratt City was devastated by the tornadoes last April. With input from local residents, architects drafted plans to revitalize the city. Homes are being rebuilt for greater energy efficiency, and plans call for neighborhoods to have more green space and bikes paths than before the storms.



The most recent national championship college football game pitted Louisiana State University against the University of Alabama. With both schools located in the Southeast, it's difficult to pick a favorite. But the sentimental favorite was the Crimson Tide for much the same reason people pulled for the New Orleans Saints to win the Super Bowl a few years ago in the wake of Hurricane Katrina. Alabama, and Tuscaloosa, in particular, had been through the kind of disaster in 2011 that made people want to give them something to celebrate. In a way, the Tide's victory in the championship game was symbolic of how the state's people and its economy have risen to the challenge of rebuilding after they suffered the devastating impact of the April 2011 tornadoes. In short, there's much more to Alabama than football.

A tragic day in the South

The series of destructive tornadoes that struck the southeastern United States on April 27, 2011, was one of the deadliest in the country since systematic tornado record keeping began in 1950. It easily ranked with the 1974 super tornado outbreak and 1965 Palm Sunday outbreak. In Alabama alone, nearly 250 people died, and there were more than 2,400 injuries.

The Southeast is no stranger to natural disasters—witness Hurricane Katrina's destruction. Yet last April 27 was different in the randomness of the storms and their scope: 62 tornadoes were confirmed, tracking over 1,200 total miles and leading to 43 of Alabama's counties being declared federal disaster areas. Other states were also affected, but none more so than Alabama. As if we needed further reminder of how

Table 1 **Property damage estimates**

Structures destroyed	7,300
Structures damaged	15,700
Major	5,800
Minor	5,200
Affected	4,700
Schools destroyed	4
Schools damaged	10
Critical facilities destroyed/unusable	5
Forest land damaged	
Acres	177,857
Value	\$228,360,576

Sources: Alabama Emergency Management Agency, Federal Emergency Management Agency, American Red Cross, Alabama Forestry Commission

random these storms strike and how devastating the impact, the region witnessed further tornado events in January and late February 2012.

Assessing the costs

The economic impact of April 27 on Alabama's economy was dramatic. In several communities, businesses were destroyed and the transportation, communications, and energy infrastructure was shattered. The National Weather Service reported that damages from this outbreak totaled over \$4.2 billion across five

states—Mississippi, Tennessee, Georgia, Virginia, and Alabama. In Alabama, property damage was estimated at \$1.1 billion, according to the Alabama Emergency Management Agency. Other estimates were much higher.

In some ways, the fact that the tornadoes were spread out over several localities meant that no single area bore the brunt of the damage. Only one large metro area was hit—Tuscaloosa. Smaller communities like Rainesville and Hackleburg took direct hits as well, but unlike when a major hurricane strikes, concentrated damage was not something Alabama experienced, for the most part.

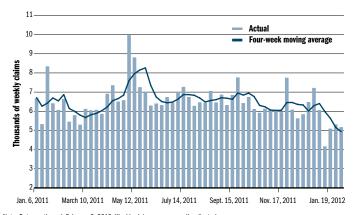
But the damage was significant when aggregated to the state level. The University of Alabama's Center for Business and Economic Research (CBER) estimated that the statewide impact of the April 27 tornado outbreak was reductions in employment of 0.2 percent to 0.5 percent, or 5,600 to 13,200 jobs. There was also a drop in Alabama's gross state product of 0.5 percent to 0.7 percent, or \$835 million. The CBER also reported that insured losses ranged from \$2.6 billion to \$4.2 billion, making it the costliest natural disaster in the state's history. A CBER study titled "April 27, 2011: A Day that Changed Alabama," by Samuel Addy, CBER director and research economist, and Ahmad Ijaz, director of economic forecasting, highlights damage from the storm to structures and timberland (see table 1). A total of 23,000 structures were damaged or destroyed, and nearly 178,000 acres of forest land were damaged—that's roughly 278 square miles, or about twice the size of the city of Atlanta.

Table 2 Alabama Counties' 2011 Employment

	Number employed			Labor force			
	Jan. 2011	Dec. 2011	Pct. change	Jan. 2011	Dec. 2011	Pct. change	Jan. 2011
State of Alabama	1,898,700	1,972,300	3.9	2,106,300	2,132,000	1.2	207,600
Selected counties							
Tuscaloosa	80,513	82,247	2.2	88,031	88,076	0.1	7,518
DeKalb	25,154	25,527	1.5	28,731	28,035	-2.4	3,577
Franklin	11,617	12,300	5.9	13,239	13,335	0.7	1,622
Marion	9,577	10,224	6.8	11,258	11,323	0.6	1,681
Jefferson	269,256	279,860	3.9	297,174	301,531	1.5	27,918
St. Claire	32,196	33,464	3.9	35,628	36,059	1.2	3,432
Lawrence	13,550	14,040	3.6	15,553	15,330	-1.4	2,003
Madison	154,562	159,746	3.4	168,161	170,735	1.5	13,599

Note: Data are not seasonally adjusted Source: U.S. Bureau of Labor Statistics

Initial Unemployment Claims: Alabama



Note: Data are through February 2, 2012. Weekly claims are seasonally adjusted. Source: U.S. Department of Labor

The number of jobs affected by the tornadoes can be estimated by looking at various economic indicators. Initial claims for unemployment insurance provide the most accessible tracking measure. As the chart shows, unemployment claims spiked in the storms' aftermath.

It is difficult to separate the impact of the tornadoes on the state's labor market performance from other factors. Recall that at about the same time the tornadoes struck, the national economy began to slow. In Alabama, the storms magnified the larger deceleration in economic activity over

 Number unemployed			Unemployment rate			
 Dec. 2011	Pct. change	Jan. 2011	Dec. 2011	Pct. change		
159,700	-23.1	9.9	7.5	-2.4		
5,829	-22.5	8.5	6.6	-1.9		
 2,508	-29.9	12.4	8.9	-3.5		
1,035	-36.2	12.3	7.8	-4.5		
1,099	-34.6	14.9	9.7	-5.2		
21,671	-22.4	9.4	7.2	-2.2		
2,595	-24.4	9.6	7.2	-2.4		
 1,290	-35.6	12.9	8.4	-4.5		
 10,989	-19.2	8.1	6.4	-1.7		

the summer, as damaged and destroyed businesses struggled to restart operations.

Small businesses bear the brunt

The Tornado Recovery Action Council of Alabama—a diverse group of 19 governor-appointed community, corporate, and nonprofit leaders from across the state—issued a report on the storms and their aftermath in January 2012. The council found that small businesses bore the brunt of Alabama's tornado destruction, many of them firms that employed fewer than 10 workers.

According to the council's report:

The city of Cullman offers a snapshot. The Department of Industrial Relations' unofficial tally of the impact on employers listed 180 businesses in Cullman with some degree of damage, including 69 that were destroyed or had major damage. Typical of those 69 were these: a tire shop with 10 workers, a shoe repair shop with four, a cafe with eight, a florist with five, a barbershop with two, a gun shop with five, a plumber with five and a locksmith with five. In short, the backbone of an enterprising community was left in desperate need.

Historically, the economic pattern of disasters starts with initial losses as affected areas experience a slowdown in activity. The duration of the slowdown is associated with the extent of damage in economically important areas and the duration of loss of services such as power and water. Recovery is driven largely by two factors—physical rebuilding of damaged and destroyed infrastructure and replacement of capital and household goods. As insurance checks are distributed and government aid delivered, the economic recovery begins to take hold. Rebuilding infrastructure and replacing capital and goods can stretch out over several years, depending on the extent of the damage. Alabama's experience in 2011 was no exception, and rebuilding is expected to continue to add to overall economic activity in 2012.

Over the expected recovery period, the CBER forecasts that the "recovery activities are expected to generate enough revenue to cover damage-induced losses to state finances as well as the state spending for cleanup if assumptions on losses and spending hold."

"While the tornadoes' damages are largely localized, the economic impacts of the ensuing recovery activities will be more widespread," the CBER concludes.

Rebuilding and other economic development projects are expected to assist the recovery in Alabama in 2012. The CBER's Addy and Ijaz expressed increased optimism about the state's economy at the center's 24th annual Economic Outlook Conference held on January 12.

Alabama's employment outlook is improving

Despite the tornadoes and the impact of the larger economic slowdown in the second and third quarters, Alabama's total

Resilience amid Recovery

n April 27, I drove from Atlanta to Birmingham to start my new role as Birmingham regional executive. Making the drive that morning, I had no idea what the day would bring, but the moment I arrived I realized it wouldn't be a typical transition. We were operating on generator power as a result of the morning storm in nearby Cahaba Heights. By the time the sun set, several of our staff had serious damage to their homes, many of our business contacts had lost everything, and most tragically a former employee and his wife perished in the storm.

In spite of the grief that employees were experiencing, the next day the staff

began working to gather information about the impact of the storms to share with Atlanta Fed President Lockhart and the Fed's Board of Governors. We got out into the community to help—not only by providing emergency services to the financial community, but to the community in general. Staff in Birmingham and throughout the district donated time and money to help in the cleanup and recovery. The way everyone came together was amazing. I saw firsth and what kind of people we have in this great state, and I was very proud to be one of its newest citizens.

In the weeks and months since the tragedy, I have met with many business and community leaders who were directly affected by the tornadoes. I was and remain impressed by the resilience of my fellow Alabamans and with how the state has bounced back economically. We still have a lot of work to do, but in all but the most devastated areas I can see economic activity firmly back on track.

This article was written by Lesley McClure, regional executive of the Birmingham Branch of the Atlanta Fed.



A house demolished by a tornado in Pratt City, Alabama, on April 27, 2011, gets rebuilt using construction methods that can withstand 120 mph winds.

employment rose by nearly 7,000 in 2011. In particular, the state's durable goods manufacturers rebounded, posting a net increase of 4,300 jobs during the year. Alabama's unemployment rate is back below the U.S. rate, at a seasonally adjusted 8.1 percent. On a nonseasonally adjusted basis, the state's unemployment rate was 7.5 percent in December 2011.

Looking at some of the most affected counties' employment data reveals little evidence of broad economic impacts from the tornadoes. Table 2 (on pages 28 and 29) compares January 2011-to-December 2011 nonseasonally adjusted data from the U.S. Bureau of Labor Statistics Household Employment Survey. By nearly all measures, labor indicators show improvement for the year.

Another indication that Alabama's economy is on the mend is that business sentiment among executives statewide rebounded

into positive territory on the CBER's Alabama Business Confidence Index survey for the first quarter of 2012, rising 5.3 points from the previous quarter to 50.8.

That is not to say that communities damaged by the tornadoes have fully recovered in other ways. The emotional toll for those who lost homes, property, and most devastatingly, loved ones cannot be measured.

Community efforts to heal

The Tornado Recovery Action Council of Alabama held several public forums in the most affected areas throughout the state. Participants from each forum identified opportunities to strengthen their communities through rebuilding and recovery efforts. Topics included sustaining the spirit of volunteerism, implementing improved building codes, creating new community organizations, and using urban planning tools effectively. Those communities affected by the tornadoes are seeking ways to emerge renewed and bettered for the future. Many communities are focused on how to incorporate economic development into their recovery plans.

Friends of Alabama in Florida, the Mississippi Gulf Coast, and New Orleans will attest to how inclusive, transparent, and forward-looking reconstruction and redevelopment planning can help communities rebuild and reenergize in the wake of natural disasters. Combined with a sustainable recovery for the economy in general, most affected areas in Alabama appear poised to experience positive growth and increased employment in 2012. ■

This article was written by Michael Chriszt, an assistant vice president in the Atlanta Fed's research department.