



Hurricanes of 2004

Florida Labor Market Impact

**Florida Agency for Workforce Innovation
Labor Market Statistics**

May 2006

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Hurricanes of 2004 Florida Labor Market Impact

Executive Summary

In 2004 Florida was hit by four hurricanes that severely disrupted the economies of several of the state's metropolitan areas and rural counties. The four hurricanes, dates of landfall, and counties most impacted are as follows:

Hurricane	Date of Landfall	Counties Most Impacted	Labor Market Impact
Charley	August 13, 2004	Charlotte, Sarasota, Lee, DeSoto, Hardee, Polk	Severe job impacts in several industries, large job increases for recovery
Frances	September 5, 2004	Martin, St. Lucie, Okeechobee, Indian River, Polk	Minimal job losses, weak category 2 hurricane
Jeanne	September 26, 2004	Martin, St. Lucie, Okeechobee, Indian River, Polk	Severe job impacts in several industries, especially agriculture support services; moderate job increases due to recovery
Ivan	September 16, 2004	Escambia, Santa Rosa	Severe job impacts in tourism-related industries, large job increases for recovery

The Agency for Workforce Innovation, Labor Market Statistics analyzed the impacts on industry employment, unemployment rates, and initial claims for unemployment insurance for all counties within the hurricane strike zones. Counties adjacent to initial hurricane landfall were analyzed for hurricane-related employment impacts. Statistical tests using regression analysis were conducted on all industry data series to test if changes were hurricane-related and not part of normal seasonal or cyclical employment changes.

The hurricanes caused initial job losses in agriculture support services, hospitals, food services and drinking places, accommodations, clothing and accessories stores, nursing and residential care facilities, and gasoline service stations. Job declines in agriculture support services were confined mostly to rural counties in Central Florida and along the Atlantic coast.

The hurricanes distorted the normal seasonal patterns in tourism-related industries, and in many cases hit when the tourism-related industry components were already in seasonal decline. In general, the 2004 hurricanes caused employment to decline even more than normal for the accommodation and food services and drinking places industries.

Industries that increased after the hurricanes included specialty trade contractors, building contractors, building materials and garden supply stores, professional and technical services, administrative and support services, real estate, and truck transportation.

Almost all counties experienced increases for specialty trade contractors and building materials and garden supply stores.

All the hurricanes caused initial claims for unemployment insurance benefits to spike, many counties had claims increase by over 2,000, and four counties increased by 3,500-5,000 additional claims each. Of these, Escambia County had an increase of over 5,000 initial claims. In all cases, initial claims plummeted to pre-hurricane levels in one or two months after the hurricane made landfall. The annual pattern of initial claims is very seasonal in many areas and the hurricanes severely distorted the normal patterns of increases and decreases.

Most counties and metro areas in the initial landfall zones experienced over-the-year increases in unemployment rates in the 1.1-1.7 percent range. Indian River County, with many losses in agricultural services jobs, posted a 2.0 percent increase in the unemployment rate in September 2004.

Overall, the four hurricanes of 2004 exhibited some similar industry and initial claims impacts. Initial claims for unemployment insurance followed a consistent pattern across all counties and declines in tourism-related industry components seemed to follow the same patterns in coastal counties. The specific nature of hurricane-related impacts was also determined by industry cluster patterns.

Introduction

In 2004, Florida experienced impacts from four major hurricanes: Hurricane Charley made landfall in Charlotte County on August 13, 2004; Hurricanes Frances and Jeanne made landfall in Martin County on September 5, 2004 and early on September 26, 2004, respectively; and Hurricane Ivan made landfall along the Alabama-Florida border near Escambia County on September 16, 2004. All of these storms impacted employment in the state.

This study analyzed hurricane impacts on detailed industries by county in the state. Typically after a hurricane, there are some industries such as leisure and hospitality that lose employment, while construction-related industries post gains. Some employment gains are not reflected in the data, such as workers from other states that travel to Florida to assist with utility infrastructure repairs and are still employed by their home-state's utility. These workers remain in the employment counts of their home states.

This analysis concentrated on county employment by industry between the quarter prior to the hurricanes and the same quarter a year later (2nd quarter of 2004 and 2005). Using the same quarter in both years eliminates any changes due to seasonality. In addition, unemployment rates and initial claims for the counties hardest hit were reviewed to determine the impact of the storm.

Overall, in the affected counties, the industries that experienced large employment changes between the 2nd quarter of 2004 and the 2nd quarter of 2005 were: support activities for agriculture and forestry; construction of buildings; heavy and civil engineering construction; specialty trade contractors; real estate; food services and drinking places; amusement and recreation; accommodation; membership organizations; and nursing and residential care facilities.

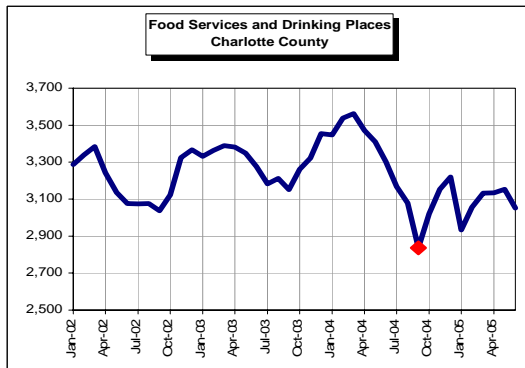
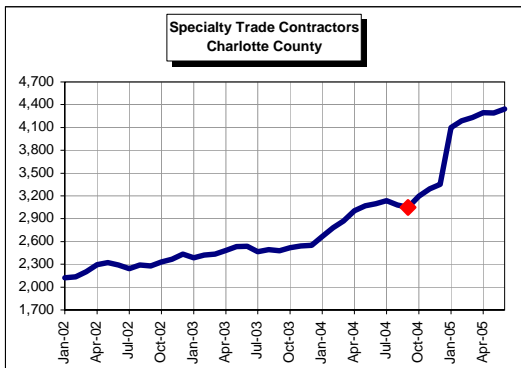
The following analysis is by hurricane for the most impacted counties. Each storm affected a number of counties and some counties were impacted by multiple storms.

Hurricane Charley

Hurricane Charley made landfall north of Captiva (Lee County) at 3:45 PM on August 13, 2004 and one hour later hit Punta Gorda (Charlotte County). The angle of landfall (traveling north northeast) and the small size of this storm (7-mile radius for damaging winds) served to minimize damage. Nevertheless, Hurricane Charley was a category 4 storm and caused 10 deaths in the U.S. Charley continued the north northeast track and was downgraded to a tropical depression in Central Florida.

Charlotte County

- Within a 10-mile radius of the track of Hurricane Charley, there were 5,123 businesses in Charlotte County. Almost 22 percent of these were trade, transportation, and utilities-related businesses.
- Between the 2nd quarter of 2004 and 2nd quarter of 2005, Charlotte County experienced increases in the specialty trade contractors industry (+1,252 jobs, +41.0 percent). This was much larger than the gains in this industry during the same period from 2002 to 2003 and 2003 to 2004 (+214 jobs and +539 jobs, respectively).
- Other construction industries that also gained jobs in the county between the 2nd quarter of 2004 and 2nd quarter of 2005 were construction of buildings (+128 jobs, +18.2 percent) and building material and garden supply stores (+236 jobs, +37.4 percent).
- Job losses in Charlotte County between the 2nd quarter 2004 and 2nd quarter of 2005 included: food services and drinking places (-282 jobs, -8.3 percent); nursing and residential care facilities (-221 jobs, -13.4 percent); personal and laundry services (-68 jobs, -15.8 percent); and membership associations and organizations (-57 jobs, -11.7 percent).

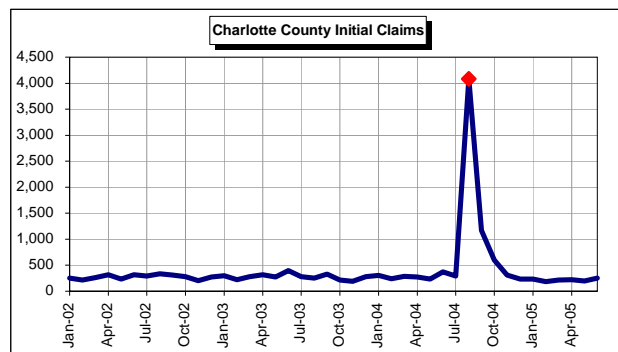


- Occupations most likely to have gained jobs after Hurricane Charley included: roofers, roofer helpers, carpenters, painters, construction laborers, plumbers,

Hurricane Charley, continued

electricians, cement masons and finishers, construction managers, iron and steel workers, crane operators, concrete workers, cost estimators, retail salespersons, cashiers, retail managers, freight and material movers, stock clerks, and industrial truck drivers.

- Occupations most likely to have lost jobs included: nursing aides and orderlies, licensed practical nurses, registered nurses, food preparation workers, maids and housekeeping cleaners, cafeteria cooks, waiters and waitresses, short-order and restaurant cooks, dishwashers, bartenders, hosts and hostesses, combination food preparation and serving workers, first-line supervisors of food service workers, and dining room and bartender helpers.
- The unemployment rate in Charlotte County jumped to 6.9 percent in September 2004, an increase of 1.5 percentage points from the same month a year ago when the rate was 5.4 percent.
- Initial claims for unemployment insurance in Charlotte County peaked at 4,086 in August 2004 and rapidly declined to around 230 by December 2004.

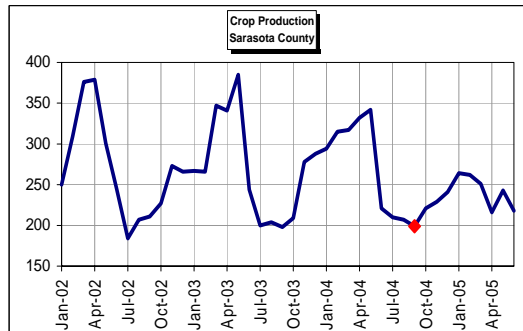
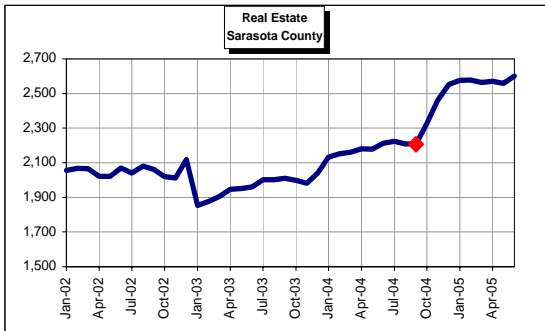


Sarasota County

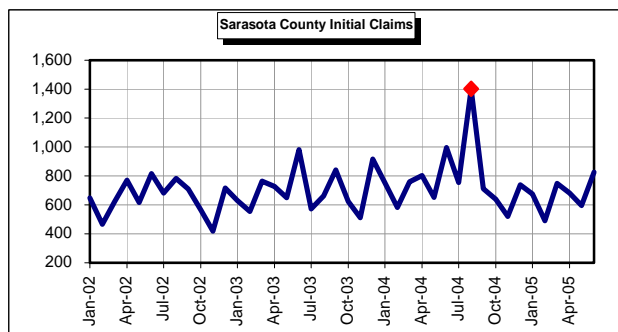
- Within a 10-mile radius of the track of Hurricane Charley, there were 1,665 businesses in Sarasota County. About 21 percent of these were construction-related businesses.
- Between the 2nd quarter of 2004 and 2nd quarter of 2005, Sarasota County experienced employment increases in the following industries: real estate (+386 jobs, +17.6 percent); building material and garden supply stores (+273 jobs, +15.5 percent); accommodation (+271 jobs, +11.3 percent); and furniture and home furnishing stores (+216 jobs, +21.1 percent).
- Job losses in Sarasota County between the 2nd quarter 2004 and 2nd quarter of 2005 were concentrated in crop production (-73 jobs, -24.4 percent). The hurricane distorted the normal seasonal pattern in the crop production industry and prevented a return to peak employment in the spring and summer of 2005.

Hurricane Charley, continued

- Membership associations and organizations industry lost jobs between September 2004 and December 2004 (-233 jobs, -10.2 percent).



- Occupations most likely to have gained jobs due to Hurricane Charley included: real estate agents and brokers, secretaries and office clerks in real estate offices, receptionists and information clerks, retail salespersons, cashiers, retail managers, freight and material movers, stock clerks, industrial truck drivers, hotel desk clerks, maids and housekeeping cleaners, first-line supervisors in accommodation and food services, and bartenders.
- Occupations most likely to have lost jobs included: recreation workers, fitness trainers, child care workers, and amusement and recreation attendants.



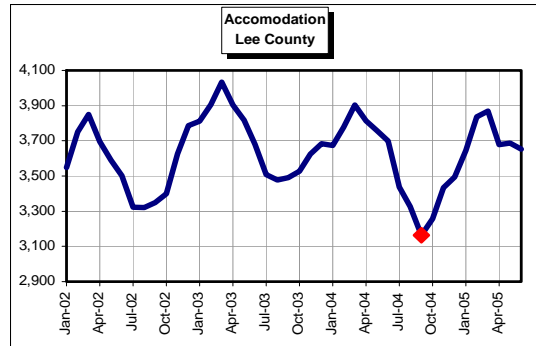
- Initial claims for unemployment insurance in Sarasota County peaked at 1,403 in August 2004 and rapidly dropped to 738 by December of 2004. Claims returned to their normal seasonal pattern for the first two quarters of 2005.

Lee County

- Within a 10-mile radius of the track of Hurricane Charley, there were 267 businesses in Lee County. About 28 percent of these were trade, transportation, and utilities-related businesses.

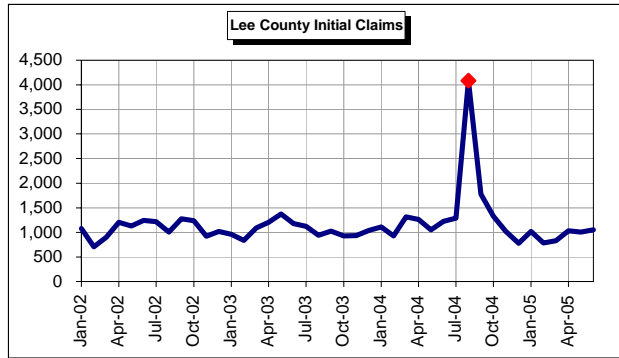
Hurricane Charley, continued

- Job gains between the 2nd quarter of 2004 and 2nd quarter of 2005 were concentrated in specialty trades contractors (+5,701 jobs, +32.2 percent); construction of buildings (+1,528 jobs, +34.1 percent); building material and garden supply stores (+836 jobs, +25.2 percent); real estate (+806 jobs, +21.3 percent); management of companies and enterprises (+316 jobs, +26.0 percent); health and personal care stores (+175 jobs, +10.8 percent); and crop production (+103 jobs, +7.1 percent). Heavy and civil engineering construction increased between September 2004 and December 2004 (+237 jobs, +6.5 percent).
- Between the 2nd quarter of 2004 and 2nd quarter of 2005 the following industries posted job losses: accommodation (-84 jobs, -2.2 percent) and rental and leasing services (-13 jobs, -0.8 percent). Hurricane Charley hit during a seasonal decline in employment in the accommodation industry, exaggerating the employment loss and causing employment levels to decline below normal seasonal lows.



- Occupations most likely to have gained jobs in Lee County due to Charley included: roofers, roofer helpers, carpenters, painters, construction laborers, plumbers, electricians, cement masons and finishers, construction managers, concrete workers, cost estimators, iron and steel workers, crane operators, retail salespersons, cashiers, retail managers, freight and material movers, stock clerks, and industrial truck drivers.
- Occupations most likely to have lost jobs included: waiters and waitresses, cooks, dishwashers, bartenders, hosts and hostesses, combination food preparation and serving workers, first-line supervisors of hotel workers, maids and housekeeping cleaners, hotel desk clerks, dining room and bartender helpers, farm workers and laborers, graders and packers of agricultural products, laborers and freight movers, industrial truck and tractor drivers, first-line supervisors of agricultural workers, farm labor contractors, and agricultural machine tenders.
- Initial claims for unemployment insurance in Lee County peaked at 4,084 in August 2004 but declined rapidly to 776 by December of 2004.

Hurricane Charley, continued

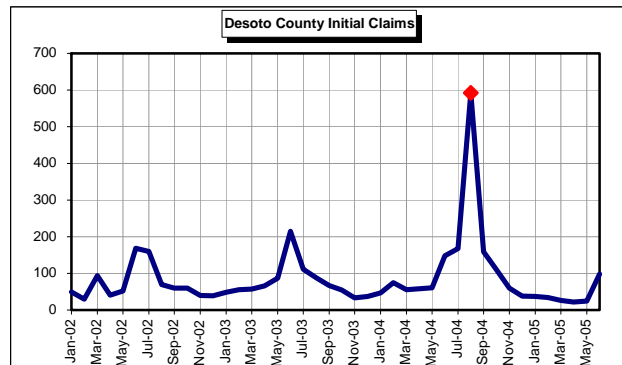


DeSoto County

- Within a 10-mile radius of the track of Hurricane Charley, there were 839 businesses in DeSoto County. Approximately one-fourth of these were trade, transportation, and utilities-related businesses.
- The eye of Hurricane Charley passed over DeSoto County with sufficient winds to cause extensive damage, particularly to agriculture.
- Between the 2nd quarter of 2004 and 2nd quarter of 2005 the industries in DeSoto County that were gaining employment were: construction (+108 jobs, +30.3 percent); food services and drinking places (+45 jobs, +12.3 percent); and food and beverage stores (+16 jobs, +19.9 percent).
- Employment in agriculture and forestry support activities continued to decline between the 2nd quarter 2004 and 2nd quarter of 2005 (-438 jobs, -22.9 percent). This industry lost approximately half as many jobs over the same period between 2002 and 2003 and 2003 and 2004 (-115 jobs and -137 jobs, respectively).
- Other industries that posted job losses between the 2nd quarter of 2004 and 2nd quarter of 2005 were: healthcare and social assistance (-74 jobs, -10.5 percent) and amusement and recreation (-71 jobs, -61.9 percent).
- Occupations most likely to have gained jobs due to Hurricane Charley included: maids and housekeeping cleaners, hotel desk clerks, retail salespersons, cashiers, and stock clerks.
- Occupations most likely to have lost jobs in DeSoto County due to Charley included: graders and packers of agricultural products, laborers and freight movers, industrial truck and tractor drivers, first-line supervisors of agricultural workers, farm labor contractors, and agricultural machine tenders.
- The unemployment rate in this county jumped to 9.3 percent in September 2004, an increase of 1.3 percentage point from the same month a year ago and 1.6 percentage points from the prior month.

Hurricane Charley, continued

- Initial claims for unemployment insurance in DeSoto County peaked at 592 in August 2004 and then dropped back to their normal level of 38 by December 2004.

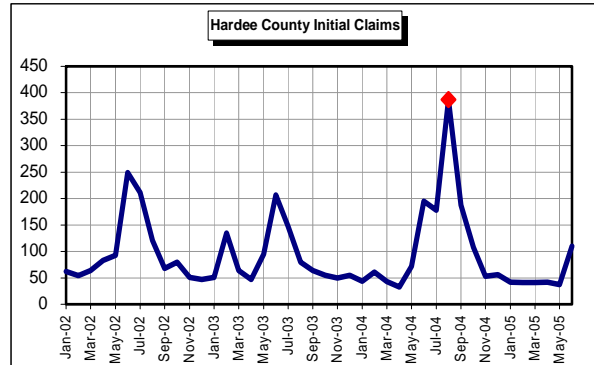


Hardee County

- Within a 10-mile radius of the track of Hurricane Charley, there were 717 businesses in Hardee County. About 28 percent of these were trade, transportation, and utilities-related businesses.
- Hurricane Charley passed over much of Hardee County with sufficient winds to cause extensive crop damage.
- Hardee County did not experience major job gains due to Hurricane Charley. Within Hardee County, the specialty trade contractors industry saw employment gains between the 2nd quarter of 2004 and 2nd quarter of 2005 (+10 jobs, +10.0 percent).
- Agriculture and forestry support services was the industry most affected by the storm. Hardee County has a large agricultural base and suffered a decrease in employment (-297 jobs, -23.0 percent) between the 2nd quarter of 2004 and 2nd quarter of 2005. This job loss was larger but not inconsistent with losses experienced during the same period from 2002 to 2003 and 2003 to 2004 (-387 jobs and -215 jobs, respectively).
- Other Hardee County industries with employment losses possibly from Hurricane Charley between the 2nd quarter of 2004 and 2nd quarter of 2005 were food and beverage stores (-78 jobs, -41.1 percent) and food services and drinking places (-27 jobs, -9.9 percent).
- Occupations most likely to have lost jobs due to the hurricane included: graders and packers of agricultural products, laborers and freight movers, industrial truck and tractor drivers, first-line supervisors of agricultural workers, farm labor contractors, and agricultural machine tenders.

Hurricane Charley, continued

- Initial claims for unemployment insurance in Hardee County were increasing seasonally before Hurricane Charley, but peaked in August 2004 at 387. Claims declined to 56 by December 2004.



Hurricanes Frances and Jeanne

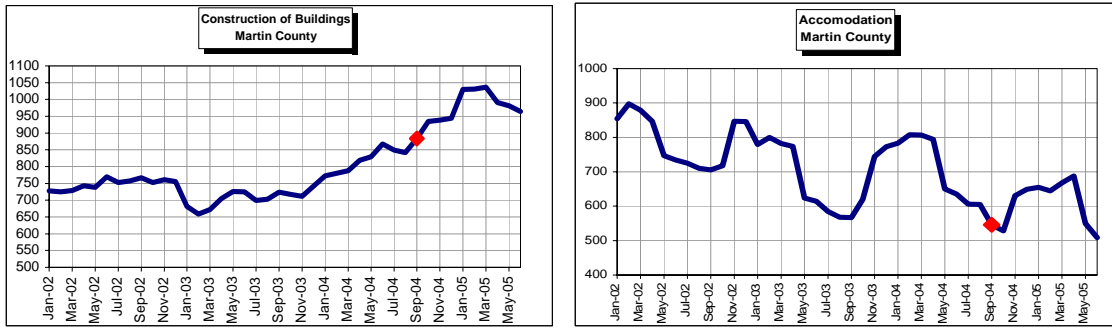
These two hurricanes made landfall at very nearly the same place on Florida's Atlantic Coast. Hurricane Frances made landfall on September 5, 2004 near Stuart, Florida (Martin County). Frances was a category 2 storm with 105 mph sustained winds. After passing over peninsular Florida, the storm fortunately weakened and did not gain strength in the Gulf of Mexico. Hurricane Frances hit Florida's Big Bend area as a tropical depression on September 6, 2004.

Hurricane Jeanne was larger than Hurricane Frances, and hit Florida's Treasure Coast on the St. Lucie-Martin County line very early on the morning of September 26, 2004. Hurricane Jeanne had already caused 3,000 deaths in Haiti due to flash-floods and mudslides. Upon making landfall in Florida, the category 3 storm had 120 mph sustained winds and dangerous winds could be found in a 60-mile radius from the eye. The storm caused three deaths in Florida but fortunately weakened as it made way toward Tampa Bay, becoming a tropical depression by the afternoon. The resulting tropical depression did not enter the Gulf of Mexico but turned northeast through coastal and central Florida, and later caused flooding in Georgia, the Carolinas, and Virginia.

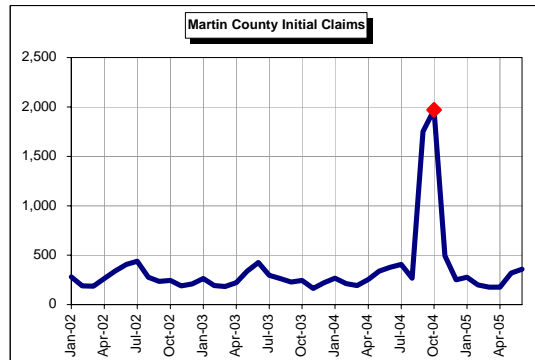
Martin County

- In Martin County a total of 5,224 businesses were within a ten-mile radius of Hurricane Frances and 5,338 businesses were within a ten-mile radius of Hurricane Jeanne; most likely these were many of the same businesses. About 25 percent of these companies in both hurricane tracks were trade, transportation, and utilities-related businesses.
- The majority of the hurricane clean-up was performed by leasing companies, which is reflected in the administrative and support services sector. Between the 2nd quarter of 2004 and 2nd quarter of 2005, this industry gained 458 jobs (+16 percent).
- Other industries within Martin County that posted job gains during this period were in real estate (+142 jobs, +18 percent) and construction of buildings (+140 jobs, +16.7 percent).
- Job losses between the 2nd quarter of 2004 and 2nd quarter of 2005 were concentrated in the following industries: accommodation (-111 jobs, -16.0 percent) and sporting goods, hobby, book and music stores (-55 jobs, -9.7 percent). The accommodation industry typically exhibits strong employment seasonality in this county. Hurricanes Frances and Jeanne made landfall during a seasonal downturn in accommodation employment, which deepened the employment loss and depressed the expected seasonal increase following the storms.

Hurricanes Frances and Jeanne, continued



- Occupations most likely to have gained jobs due to the hurricanes included: refuse collectors, construction laborers, painters, carpenters, concrete finishers, first-line supervisors of construction workers, bricklayers and brickmasons, plumbers, electricians, heating and air conditioning mechanics, real estate agents and brokers, receptionists and information clerks, and secretaries.
- Occupations most likely to have lost jobs due to the hurricanes included: maids and housekeeping cleaners, hotel desk clerks, waiters and waitresses, bartenders, dining room and bartender helpers, packing and filling machine tenders, industrial truck operators, and first-line supervisors of production workers.
- Initial claims for unemployment insurance in Martin County increased in both September and October 2004, peaking at 1,971 in the latter month. Initial claims rapidly declined to the near normal level of 251 by December 2004.

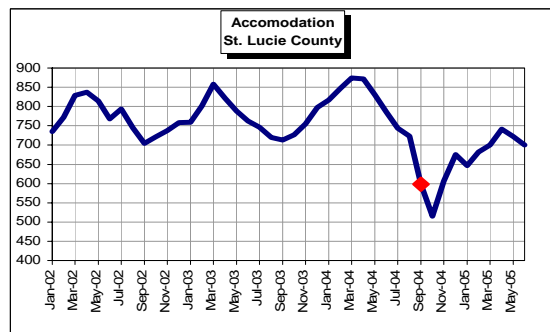
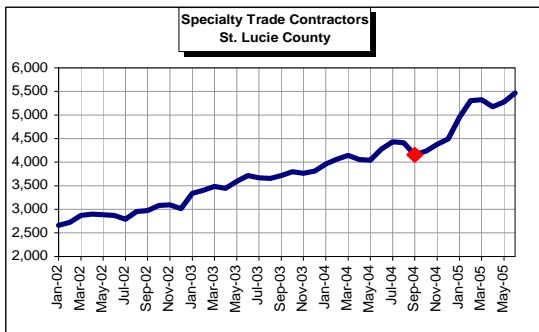


St. Lucie County

- In St. Lucie County, a total of 2,449 businesses were within a ten-mile radius of Hurricane Frances, and 2,510 businesses were within a ten-mile radius of Hurricane Jeanne; most likely these were many of the same businesses. About 21 percent of the businesses in both tracks were trade, transportation, and utilities-related.

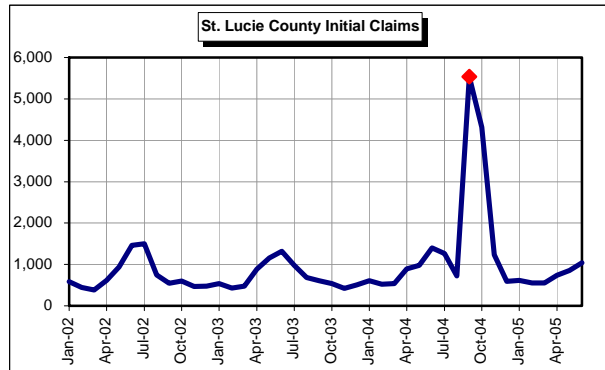
Hurricanes Frances and Jeanne, continued

- Specialty trade contractors (+1,182 jobs, +28.7 percent); construction of buildings (+191 jobs, +26.0 percent); real estate (+169 jobs, +24.3 percent); and rental and leasing services (+30 jobs, +9.4 percent) each posted job gains between the 2nd quarter of 2004 and 2nd quarter of 2005.
- Industries that experienced job losses between the 2nd quarter of 2004 and 2nd quarter of 2005 included: hospitals (-286 jobs, -13.3 percent); accommodation (-109 jobs, -13.1 percent); and sporting goods, hobby, book, and music stores (-22 jobs, -14.8 percent). Hurricanes Frances and Jean struck during a seasonal downturn in accommodation employment, worsening the seasonal decline in employment. As of 2nd quarter 2005, the accommodation industry had not recovered to employment levels reached prior to the storms.



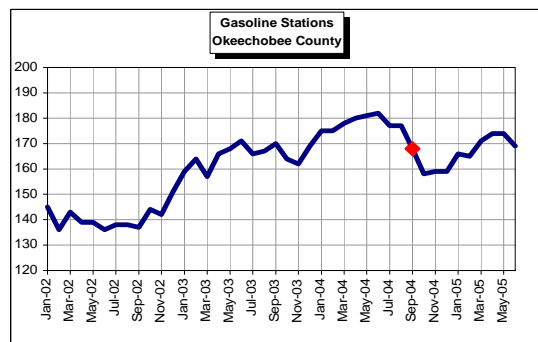
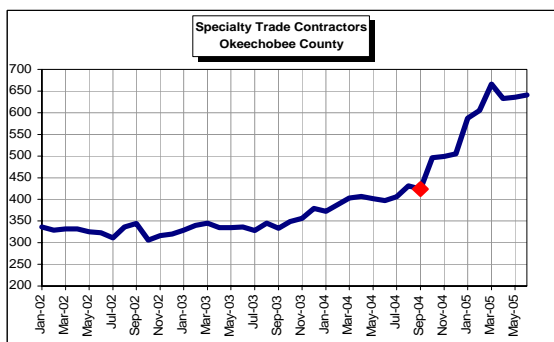
- Occupations most likely to have gained jobs as a result of the hurricanes included: roofers, roofer helpers, carpenters, painters, construction laborers, plumbers, electricians, cement masons and finishers, construction managers, concrete workers, cost estimators, and real estate brokers and agents.
- Occupations most likely to have lost jobs as a result of the hurricanes included: maids and housekeeping cleaners, hotel desk clerks, waiters and waitresses, bartenders, dining room and bartender helpers. Temporary losses in hospitals could have included registered nurses, nursing aides and orderlies, licensed practical nurses, and maids and housekeeping cleaners.
- The unemployment rate in this county jumped to 8.5 percent in September 2004, an increase of 1.1 percentage points from the same month a year ago and 2.0 percentage points from the prior month.
- Initial claims for unemployment insurance in St. Lucie County increased to 5,537 in September 2004 due to the hurricanes but dropped rapidly to 596 by December 2004.

Hurricanes Frances and Jeanne, continued



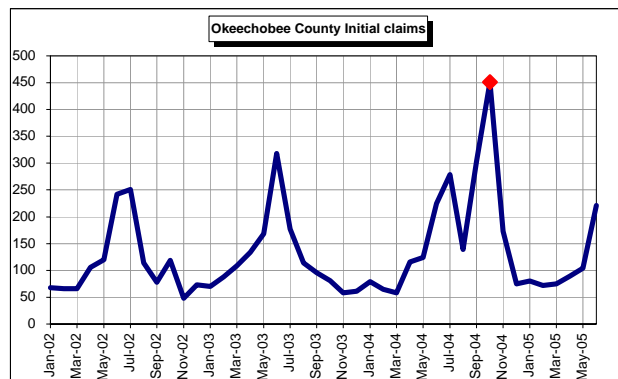
Okeechobee

- In Okeechobee County, a total of 1,130 businesses were within a ten-mile radius of Hurricane Frances, and 322 businesses were within a ten-mile radius of Hurricane Jeanne. The trade, transportation, and utilities industry represented 26.4 percent of businesses in the hurricane path for Jeanne and 28.8 percent of businesses in the hurricane path for Frances.
- Industries that had increased employment between the 2nd quarter of 2004 and 2nd quarter of 2005 included: specialty trade contractors (+235 jobs, +58.4 percent); administrative and support services (+165 jobs, +84.8 percent); food services and drinking places (+157 jobs, +21.3 percent); construction of buildings (+66 jobs, +47.8 percent); and accommodation (+12 jobs, +22.6 percent).
- Industries that lost employment from the 2nd quarter of 2004 to the 2nd quarter of 2005 included crop production (-16 jobs, -5.1 percent) and gasoline stations (-9 jobs, -4.8 percent).



Hurricanes Frances and Jeanne, continued

- Occupations most likely to have gained jobs as a result of the hurricanes included: roofers, roofer helpers, carpenters, painters, construction laborers, plumbers, electricians, cement masons and finishers, construction managers, concrete workers, cost estimators, waiters and waitresses, food service managers, hotel desk clerks, and maids and housekeeping cleaners.
- Initial claims for unemployment insurance in Okeechobee County exhibit a strong seasonal trend and the hurricanes hit just as claims were starting to decline. Claims peaked at 451 in October 2004, but then declined quickly to only 75 by December 2004.



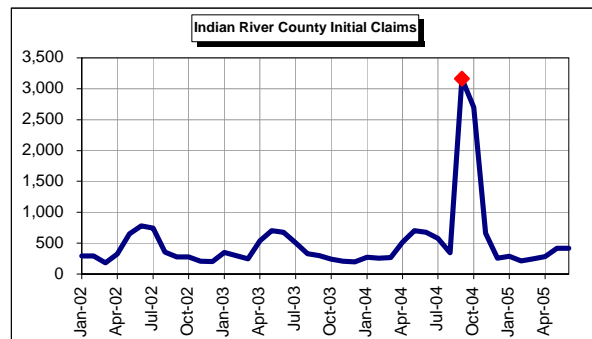
Indian River County

- Indian River County sustained enough building damage to cause several construction industries to increase dramatically in the year after the hurricanes. In addition, the two storms caused extensive damage to agriculture and distorted the normal seasonal pattern of hiring, especially in tourism-related sectors.
- Industries experiencing job gains in Indian River County between 2nd quarter 2004 and 2nd quarter 2005 included: specialty trades contractors (+1,259 jobs, 49.0 percent), building contractors (+214 jobs + 23.8 percent), and building materials and garden supplies retailers (+292 jobs, 49.5 percent).
- The following industries in Indian River County experienced job losses between the 2nd quarter of 2004 and 2nd quarter of 2005: agriculture and forestry support activities (-811 jobs, -40.9 percent); membership associations and organizations (-82 jobs, -12.8 percent); amusement and recreation (-81 jobs, -3.9 percent); accommodation (-57 jobs, -10.9 percent); and food services and drinking places (-57 jobs, -1.7 percent).
- Occupations most likely to have lost jobs due to Hurricanes Frances and Jeanne included: cashiers, amusement and recreational attendants, ushers and ticket takers, first-line supervisors of recreational workers, waiters and waitresses, cooks, dishwashers, bartenders, hosts and hostesses, combination food preparation

Hurricanes Frances and Jeanne, continued

and serving workers, first-line supervisors of food service and accommodation workers, graders and packers of agricultural products, laborers and freight movers, industrial truck and tractor drivers, first-line supervisors of agricultural workers, farm labor contractors, agricultural machine tenders, hotel desk clerks, and maids and housekeeping cleaners.

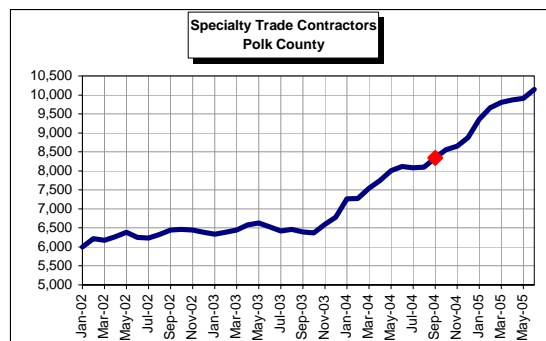
- The unemployment rate in this county jumped to 9.7 percent in September 2004, an increase of 2.0 percentage points from the same month a year ago and 2.8 percentage points from the prior month.
- The unemployment rate in Indian River County increased by 2.0 percentage points to 9.7 percent in September 2004 from the 7.7 percent rate in September 2003. The unemployment rate was 6.9 percent before the hurricanes in August 2004.
- Initial claims for unemployment insurance in Indian River County were in seasonal decline when the county was hit by the hurricanes. Claims peaked at 3,163 in September 2004 and resumed their normal seasonal pattern declining to 260 by December 2004.



Hurricanes Charley, Frances, and Jeanne

Polk County

- Polk was Florida's only county traversed by three of the four hurricanes of 2004.
- The number of businesses varied greatly within a 10-mile radius of the track of each of the hurricanes that struck Polk County: Hurricane Charley had 6,808 businesses; Hurricane Frances had 13,617 businesses; and Hurricane Jeanne had 9,441 businesses. Approximately one-fourth of businesses in each of the tracks were trade, transportation, and utilities-related companies. In some cases, the same businesses were hit by all three storms.
- Between the 2nd quarter of 2004 and 2nd quarter of 2005, the following industries posted job gains in Polk County: specialty trade contractors (+2,019 jobs, +25.4 percent); building material and garden supply stores (+1,137 jobs, +63.4 percent); construction of buildings (+903 jobs, +45.5 percent); truck transportation (+896 jobs, +20.7 percent); heavy and civil engineering construction (+228 jobs, +15.1 percent); furniture and home furnishings stores (+226 jobs, +29.5 percent); accommodation (+195 jobs, +21.1 percent); and crop production (+38 jobs, +1.8 percent).
- Job losses between the 2nd quarter of 2004 and 2nd quarter of 2005 were concentrated in agriculture and forestry support activities (-1,175 jobs, -22.7 percent); management of companies and enterprises (-638 jobs, -11.3 percent); food and beverage stores (-577 jobs, -11.1 percent); and nursing and residential care facilities (-209 jobs, -4.8 percent).

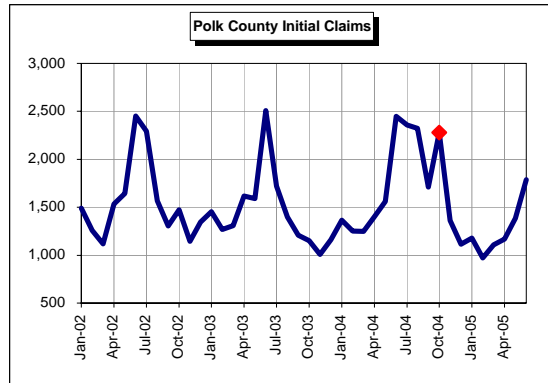


- Occupations most likely to have gained jobs in Polk County due to the three hurricanes included: roofers, roofer helpers, carpenters, painters, construction laborers, plumbers, electricians, cement masons and finishers, construction managers, iron and steel workers, crane operators, concrete workers, cost estimators, first-line supervisors of hotel workers, maids and housekeeping

Hurricanes Charley, Frances, and Jeanne, continued

cleaners, hotel desk clerks, dining room and bartender helpers, retail salespersons, cashiers, retail managers, freight and material movers, stock clerks, and industrial truck drivers.

- Occupations most likely to have lost jobs due to the three hurricanes included: farm workers and laborers, graders and packers of agricultural products, laborers and freight movers, industrial truck and tractor drivers, first-line supervisors of agricultural workers, farm labor contractors, agricultural machine tenders, nursing aides and orderlies, licensed practical nurses, registered nurses, food preparation workers, maids and housekeeping cleaners, cafeteria cooks, real estate agents and brokers, receptionists and information clerks, and secretaries.
- Initial claims for unemployment insurance in Polk County are extremely seasonal and were starting to decline when the hurricanes hit. Hurricane-related claims peaked at 2,321 in August 2004 but dropped to 1,114 by December 2004.



Hurricane Ivan

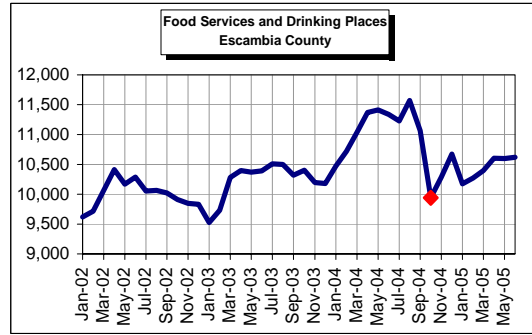
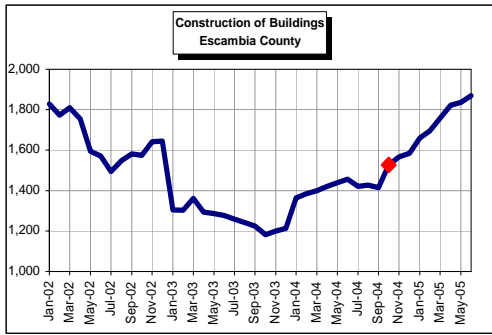
Hurricane Ivan came ashore as a strong category 3 hurricane at Gulf Shores, Alabama on September 16, 2004. This hurricane impacted the counties in Florida's western panhandle, particularly Escambia and Santa Rosa. Most of the damage was due to the 10-15 foot storm surge associated with Ivan and the storm caused 25 deaths in the US. Hurricane Ivan spawned over 100 tornados in the Southeast US as it headed north and then east.

Total employment in these two counties increased by about 2,217 jobs between the 2nd quarter of 2004 and 2nd quarter of 2005, while this area gained about 6,642 jobs for the same period from 2003 to 2004.

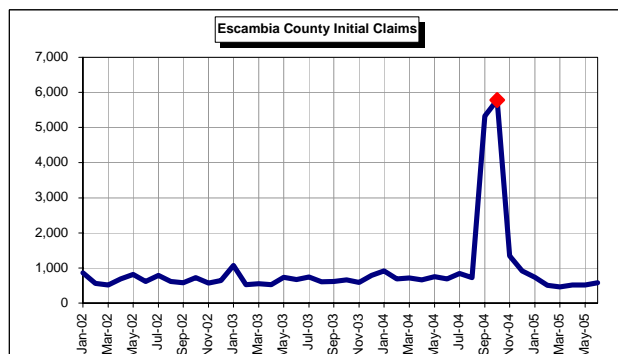
Escambia County

- A total of 31 businesses were within a twenty-mile radius of Hurricane Ivan in Escambia County. About 45 percent of these were in the trade, transportation, and utilities industry businesses.
- Hurricane Ivan made landfall west of Escambia County, placing parts of the county and neighboring counties in the high wind and storm surge quadrant of the storm.
- Overall, the construction industry gained jobs between the 2nd quarter of 2004 and 2nd quarter of 2005 in Escambia County. These gains were in specialty trade contractors (+922 jobs, +17.1 percent) and construction of buildings (+403 jobs, +28.0 percent).
- Other industries that gained employment in Escambia County between the 2nd quarter of 2004 and 2nd quarter of 2005 were: employment services (+1,159 jobs, +38.1 percent); truck transportation (+157 jobs, +17.6 percent); furniture and home furnishing stores (+116 jobs, +18.2 percent); and health and personal care stores (+89 jobs, +12.9 percent).
- In Escambia County, employment losses were centered in food services and drinking places (-767 jobs, -6.7 percent). During this same period from 2002 to 2003 and 2003 to 2004, this industry experienced employment gains (+97 jobs and +987 jobs, respectively).
- Other industries that experienced job losses were: management of companies and enterprises (-318 jobs, -23.4 percent); accommodation (-314 jobs, -22.0 percent); amusement and recreation (-207 jobs, -20.3 percent); personal and laundry services (-121 jobs, -8.1 percent); nursing and residential care facilities (-99 jobs, -2.6 percent); and ambulatory health care services (-28 jobs, -0.4 percent).

Hurricane Ivan, continued



- Occupations most likely to have increased due to Hurricane Ivan included: refuse collectors, construction laborers, roofers, roofer helpers, carpenters, plumbers, electricians, cement masons and finishers, construction managers, iron and steel workers, crane operators, concrete workers, cost estimators, truck drivers, retail salespersons, cashiers, retail managers, freight and material movers, stock clerks, and industrial truck drivers.
- Occupations most likely to have lost jobs due to Hurricane Ivan included: waiters and waitresses, cooks, dishwashers, bartenders, hosts and hostesses, combination food preparation and serving workers, maids and housekeeping cleaners, hotel desk clerks, security guards, first-line supervisors of hotel workers, dining room and bartender helpers, recreation workers, amusement and recreation attendants, and janitors and cleaners.
- The unemployment rate in this county jumped to 6.2 percent in October 2004, an increase of 1.7 percentage points from the 4.5 percent rate of October 2003.
- Initial claims for unemployment insurance in Escambia County peaked at 5,781 after Ivan in October 2004, and dropped to near pre-hurricane levels by December 2004 with 915 initial claims.



Hurricane Ivan, continued

Santa Rosa County

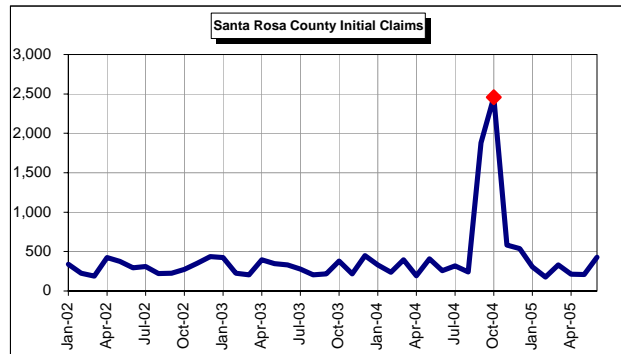
- Industries that gained employment in Santa Rosa County between the 2nd quarter of 2004 and 2nd quarter of 2005 were: food services and drinking places (+259 jobs, +8.7 percent); building material and garden supply stores (+254 jobs, +48.4 percent); real estate (+108 jobs, +37.6 percent); repair and maintenance (+88 jobs, +21.2 percent); support activities for transportation (+52 jobs, +41.4 percent); and rental and leasing services (+52 jobs, +26.5 percent).
- In Santa Rosa County, employment losses were centered in: food and beverage stores (-45 jobs, -5.5 percent); membership associations and organizations (-38 jobs, -10.6 percent); nonstore retailers (-15 jobs, -30.3 percent); and amusement and recreation (-9 jobs, -2.1 percent).



- Occupations most likely to have gained jobs in Santa Rosa County due to Hurricane Ivan included: retail salespersons, cashiers, first-line supervisors of sales workers, freight and material movers, stock clerks, industrial truck drivers, carpenters, painters, maintenance and repair workers, real estate brokers and agents, and receptionists and information clerks.
- Occupations most likely to have lost jobs due to Hurricane Ivan included: waiter and waitresses, cooks, dishwashers, bartenders, hosts and hostesses, combination food preparation and serving workers, first-line supervisors of hotel and restaurant workers, maids and housekeeping cleaners, hotel desk clerks, dining room and bartender helpers, cashiers, animal caretakers, amusement and recreational workers, ushers and ticket takers, and first-line supervisors of recreational workers.
- The unemployment rate in this county jumped to 4.9 percent in October 2004, an increase of 1.0 percentage point from the same month a year ago. The unemployment rate in Santa Rosa County was 3.7 percent in September 2004, the month prior to Hurricane Ivan.

Hurricane Ivan, continued

- Santa Rosa County initial claims peaked at 2,457 in October 2004 then fell to 537 in December 2004. The number of claims in December was above pre-hurricane levels.



Conclusions

The four hurricanes of 2004 mostly affected Charlotte, DeSoto, Escambia, Hardee, Indian River, Lee, Martin, Okeechobee, Polk, St. Lucie, Santa Rosa, and Sarasota counties. Overall, from the second quarter of 2004 to the second quarter of 2005, total employment (including government employment) for all of the impacted counties increased by 44,388 net jobs. Total gains for all impacted counties numbered 44,542 jobs. Total employment increased in all counties except Escambia, which lost 154 jobs (-0.1 percent). The largest percentage change in total employment was in Martin County (+9.5 percent, +5,068 jobs), while Lee County posted the largest numeric gain of all counties with (+14,578 jobs, +7.4 percent).

Increasing Industries

The industries with the biggest net gains over the year were those central to the clean up process and rebuilding efforts. These increasing industries were: specialty trade contractors (+16,258 jobs); construction of buildings (+4,638 jobs); building material and garden supply stores (+3,914 jobs); professional and technical services (+1,938 jobs); administrative and support services (+1,878 jobs); real estate (+1,611); truck transportation (+1,195 jobs); fabricated metal product manufacturing (+1,144 jobs); and furniture and home furnishings stores (+1,110 jobs).

Decreasing Industries

Industries that lost jobs over the year included: agriculture and forestry support activities (-6,744 jobs); hospitals (-1,313 jobs); food and beverage stores (-577 jobs); accommodation (-488 jobs); nonstore retailers (-270 jobs); clothing and clothing accessories stores (-226 jobs); management of companies and enterprises (-209 jobs); plastics and rubber products manufacturing (-178 jobs); gasoline stations (-148 jobs); publishing industries, except internet (-134 jobs); and transit and ground passenger transportation (-123 jobs). Of these losses, the declines in the agriculture and tourism-related industries (accommodation and food and beverage stores) are most clearly associated with the hurricanes.

Unemployment Claims and Rates

Initial claims for unemployment insurance followed a similar pattern in all areas: an extreme spike immediately after the hurricanes and then a rapid and sharp decline back to pre-hurricane levels. Some areas, such as Polk, Indian River, and Okeechobee counties, had their normal seasonal pattern of claims severely disrupted by the hurricanes. The largest spike in initial claims filings occurred in Escambia County with 5,781 claims. The lowest number of claims came from Hardee County with 387 claims. Unemployment rates increased as much as 2.0 percentage points over the year in some counties (Indian River); most counties had hurricane-related annual increases in unemployment rates in the 1.0 to 1.6 percentage point range.

Conclusions, continued

Hurricane Charley

Hurricane Charley was the first storm of 2004 to make landfall in Florida. Charley struck in southwest Florida on August 13, 2004, initially hitting Charlotte, DeSoto, Hardee, Lee, Polk, and Sarasota counties. Of these impacted counties, DeSoto, Lee, Polk, and Sarasota were the most affected over the one year period. Polk County had the distinction of being in the path of three hurricanes in 2004 (Charley, Frances, and Jeanne). DeSoto was the only county to post a net loss of jobs by the second quarter of 2005. Job losses in DeSoto County were centered primarily in agriculture and agricultural-related services. Lee and Polk counties experienced losses in agriculture as well, but achieved substantial employment gains in specialty trade contractors, building material and garden supply stores, construction of buildings, truck transportation, and furniture and home furnishings stores.

Initial claims for unemployment insurance in DeSoto and Lee counties peaked dramatically in August of 2004, but rapidly declined to levels consistent with pre-hurricane activity in the following months. Initial claims in DeSoto and Lee counties peaked at 592 and 4,084 claims, respectively. Polk County initial claims followed a different pattern due to the number of hurricanes passing through the area. In August of 2004, initial claims filings in Polk County reached 2,321 claims, which was lower than the previous month but an aberration from normal seasonal declines. Hurricane Charley prolonged the period of high initial claims filings; claims should have started to decrease in August. Initial claims spiked in Polk County in October of 2004, following Hurricanes Frances and Jeanne (2,280), straying again from the usual seasonal activity. The unemployment rate in DeSoto County jumped up to 9.3 percent in September 2004, an increase of 1.6 points from the previous month. Lee and Polk counties did not experience unusual changes of this magnitude in their unemployment rates.

Hurricanes Frances and Jeanne

Hurricanes Frances and Jeanne both struck Florida in September of 2004. Hurricane Frances made landfall on September 5, 2004 and initially impacted Martin, St. Lucie, Okeechobee, Indian River, and Polk counties. Hurricane Jeanne closely followed Frances, making landfall on September 26, 2004, and affected the same five counties. Hurricanes Frances and Jeanne combined had the most impact on Indian River, Martin, and St. Lucie counties.

Indian River County gained jobs in construction of buildings and specialty trade contractors, while job losses were centered in tourism-related industries and in agricultural services. St. Lucie County lost the most jobs in accommodation, health care and social assistance, and agricultural services industries. Martin County gained jobs in construction and construction-related industries such as construction of buildings, specialty trade contractors, and administrative and support services. Martin County employment losses were felt in agriculture and accommodation. St. Lucie also gained jobs primarily in construction and construction related industries.

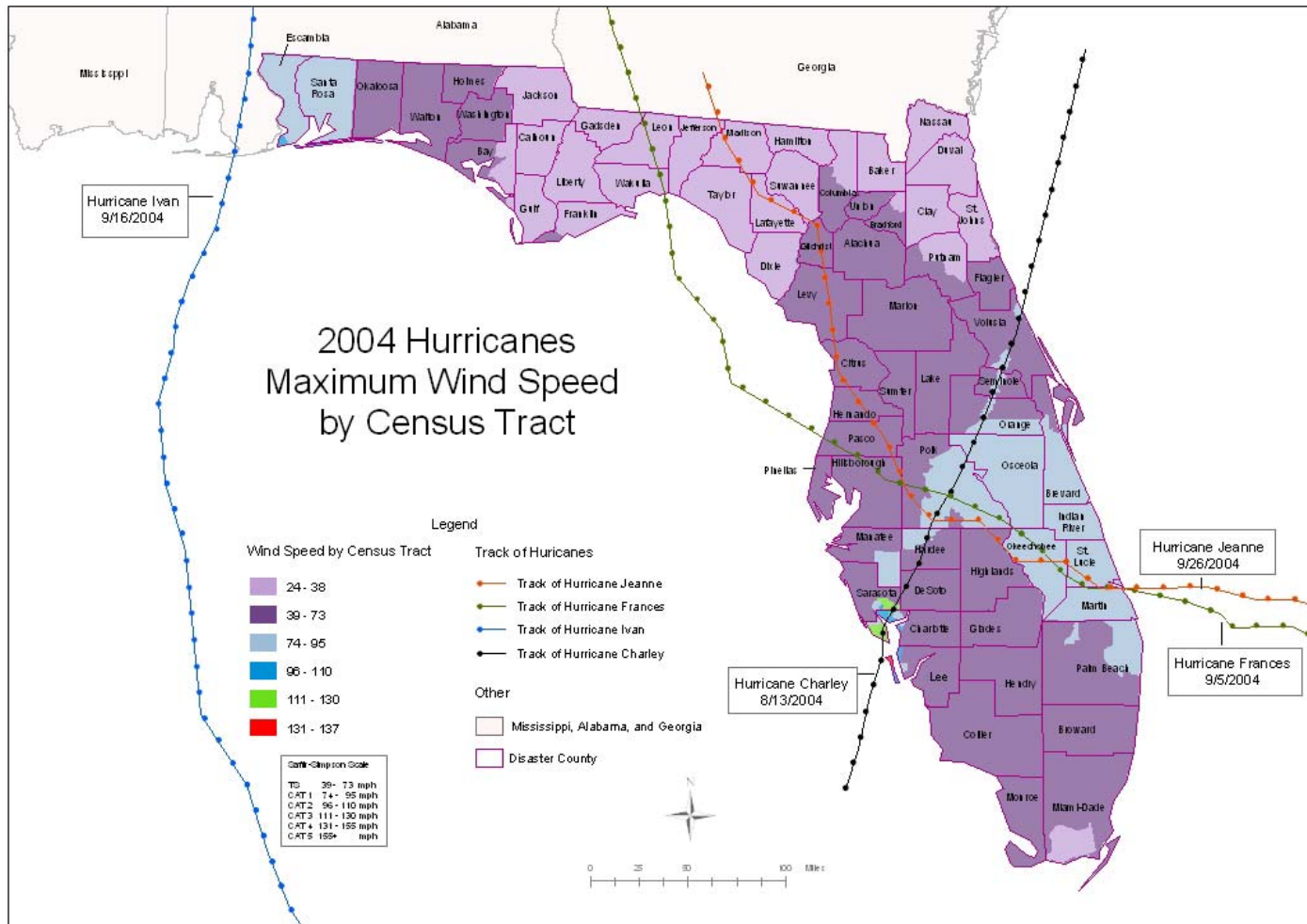
Conclusions, continued

Initial claims for unemployment insurance in Indian River and St. Lucie counties peaked in September 2004 at 3,163 and 5,537. Martin peaked in initial claims filings in October of 2004 at 1,971 claims. The number of claims in all three counties rapidly decreased following the storms, and the usual seasonal patterns resumed. The unemployment rates in Indian River and St. Lucie counties increased substantially in September 2004, up to 9.7 percent for Indian River and 8.5 percent for St. Lucie. These increases reflected over-the-year changes of 2.0 and 1.1 percentage points for the respective counties.

Hurricane Ivan

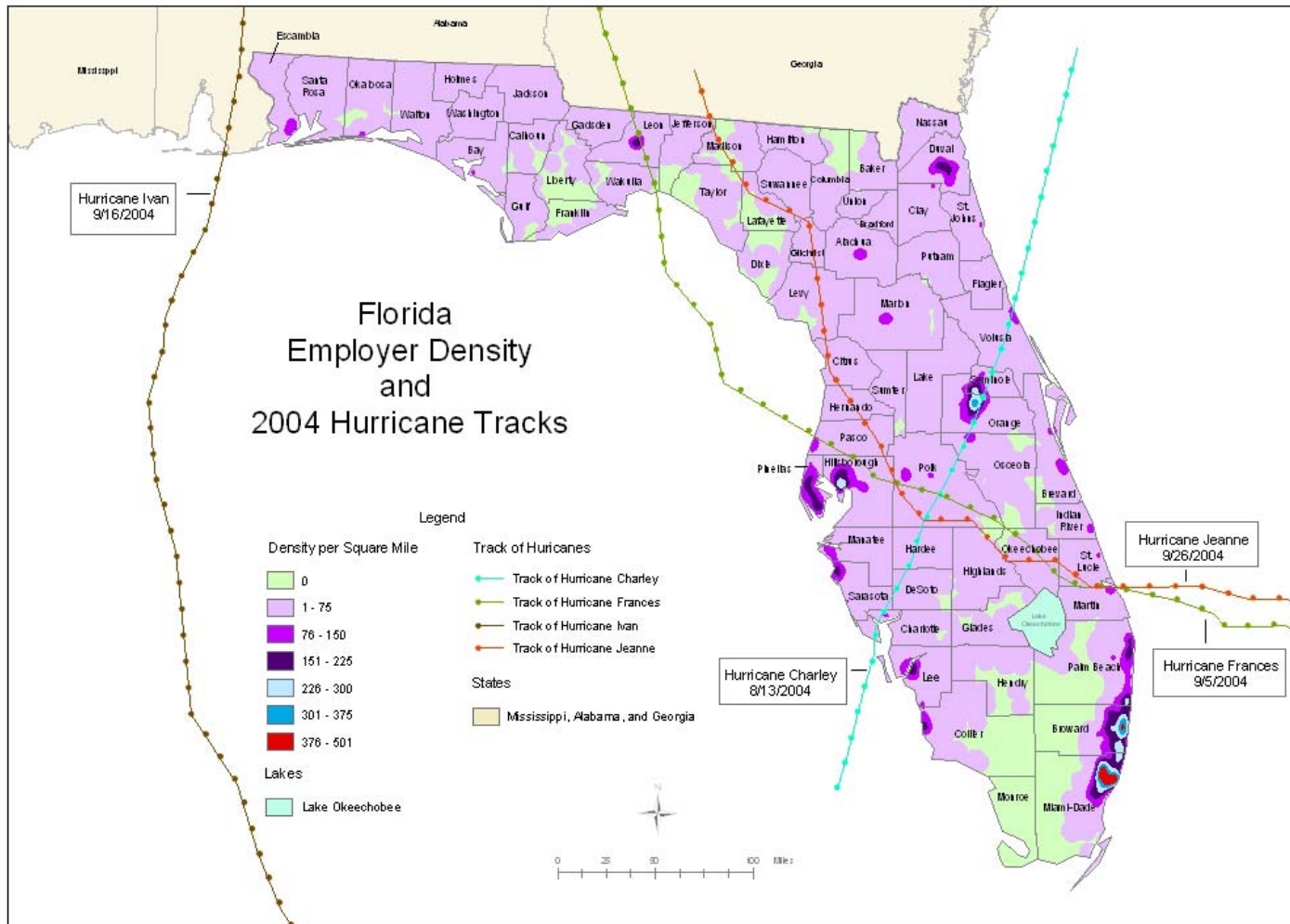
Hurricane Ivan made landfall on September 16, 2004, with measurable impacts only in Escambia and Santa Rosa counties in Florida. Escambia County was the hardest hit of the two counties. In Escambia, there were job losses primarily in food services and accommodation, and job gains in employment services, specialty trade contractors, and building contractors. Escambia County's initial claims for unemployment insurance spiked to a level of 5,781 claims in October 2004, but dropped back to normal seasonal levels by December 2004 (915 claims). The unemployment rate in Escambia increased to 6.2 percent in October of 2004, which was an increase of 1.7 percent from October of 2003.

Map 1 – 2004 Hurricanes Maximum Wind Speed by Census Tract



Note: All 67 Florida counties were declared disaster counties as the result of the 2004 Hurricanes. Hurricane Charley made landfall August 13, 2004. Hurricane Frances made landfall September 5, 2004. Hurricane Ivan made landfall September 16, 2004. Hurricane Jeanne made landfall September 25, 2004. Wind speeds are based on experimental simulations of sustained surface winds by the Main Housed Hurricane Research Division of the Atlantic Oceanographic and Meteorological Laboratory. Local officials estimated that wind speeds were higher in some cases.
 Source: Federal Emergency Management Agency; Florida Department of Environmental Protection; and Florida International University, Institute for Public Opinion Research.
 Prepared by: Agency for Workforce Innovation, Labor Market Statistics, November 2004.

Map 2 – Florida Employer Density and 2004 Hurricane Tracks



Note: Hurricane Charley made landfall August 13, 2004. Hurricane Frances made landfall September 5, 2004. Hurricane Ivan made landfall September 16, 2004. Hurricane Jeanne made landfall September 26, 2004.
Source: ALMIS Employer Database, InforUSA, and Florida Department of Environmental Protection.
Prepared by: Agency for Workforce Innovation, Labor Market Statistics, November 2004.