

Indianapolis-Marion County Hazards

Marion County is 396 square miles with nine townships (Center, Decatur, Franklin, Lawrence, Perry, Pike, Warren, Washington, and Wayne), three incorporated cities (Beech Grove, Lawrence, and Southport), and the Town of Speedway.

Marion County is located in the center of the State of Indiana and Indianapolis is the site of the State Capitol. It is bounded on the north by the cities of Zionsville, Carmel, and the Town of Fishers; south by the City of Greenwood. Decatur and Franklin Townships remain rural areas with continuous growth toward urbanization. The population of Indianapolis-Marion County is 860,454 with a population of 1,536,665 in the metropolitan area according to the 2000 census.

A total of five Interstate highways (I-65, I-69, I-70, I-74, I-465) and eight state highways (US 31, US 36, US 40, US 52, US 136, SR 37, SR 67, and SR 135) converge on the City. I-465 is almost entirely situated in Marion County. Five rail lines also serve the area; Consolidated Rail Corporation, CSX Corporation, Louisville and Indiana Railroad, Indiana Southern, and Indiana Railroad. Nuclear waste from Ohio travels through Indianapolis both by rail and truck transport on a regular basis.

Major petroleum pipelines which pass through Marion County are operated by Amoco Pipeline, Buckeye Pipeline, Marathon Ashland, Panhandle Eastern, Shell Oil Products and Texas Eastern Products.

The Indianapolis International Airport is a Class C facility with three runways in southwest Marion County. It is served by 21 airlines and handles approximately 7.3 million passengers with 719 takeoffs and landings per day. It is the third busiest cargo hub in the United States.

Eleven major hospitals provide medical care for Marion County and the metro area.

HAZARDS

The following hazards have been identified as having the possibility of occurring within Marion County as a result of our infrastructure, climatic patterns and population. Hazards are listed according to the likelihood of their occurrence and/or the seriousness of their effect on the community, as determined by historical record or analysis of the conditions which might cause them:

- ? Hazardous Materials Incident-Highway Transport
- ? Hazardous Materials Incident-Fixed Facility
- ? Tornado (March-July)
- ? Hazardous Materials Incident-Rail Transport
- ? Flood
- ? Earthquake (New Madrid fault, Wabash Valley fault)
- ? Winter Storm (December-March)
- ? Hazardous Materials Incident-Pipeline
- ? Transportation Accident-Aircraft
- ? Large Urban Fire
- ? Utility Failure

- ? Wildland Fire (May-October)
- ? Civil Disorder
- ? Drought/Heat Wave (May-September)
- ? Dam Failure
- ? Tornado (January-February and August-December)
- ? Nuclear Incident
- ? Biological-Chemical terrorism

SEVERE WEATHER

The entire population of Marion County is vulnerable to the consequences of severe weather. The county has experienced damage associated with severe thunderstorms, tornadoes, straight-line winds, hail, flooding, severe winter storms, blizzards, and ice storms. Indiana leads the region in damage caused by straight-line winds. Severe weather can cause home and business structural damage, power loss, street blockages, and local and generalized flooding.



Heavy rains over a period of days may cause flooding along the White River, Eagle Creek, and Fall Creek areas. Areas most frequently effected by river and stream flooding are generally along the White River from the northern County Line to approximately 6200 North (The Ravenswood area), approximately 2700 to 3600 S. Harding Street (Perry Township), and the area bounded by 4300 south to 5500 south and Mann Road to Harding Street (Decatur Township). Flooding along Fall Creek historically has occurred in the vicinity of 56th Street and Fall Creek Parkway (Washington Township).

The county has not experienced a drought in recent memory, although it has gone through heat waves in 1987 and 1993. A drought could cause economic hardship as crops in the area might fail; it could also cause an increased danger of Wildland fires and water shortages.

HAZARDOUS MATERIALS INCIDENTS



Most serious hazardous materials incidents occur at fixed facilities within the county. There are in excess of 175 facilities in the county which stock reportable quantities of substances on the EPA Extreme Hazardous Substance notifications list. These facilities are located throughout the county.

Rail carriers routinely transport EHS materials through the county, and especially through the downtown area in close proximity to the primary Public Safety Answering Point, the seat of county government and, and downtown sports, convention,

and entertainment venues.

Hazardous materials incidents may cause small to large sections of the county's population to be evacuated or the shelter-in-place. Notification, evacuation, evacuation routes, and transportation can be major problems in the event a large segment of the population must be relocated.

Hazardous materials carriers frequently travel along the major highways through the county. A Hazardous Materials Ordinance restricts carriers which do not originate or terminate in Marion County to I-465 for travel through the county. At present there is no estimate of the amount of hazardous materials traffic which traverses the county, however, incidents of EHS escaping from their transporters are relatively few.

A number of petroleum pipelines transport a variety of products through the southwest, northwest and north/northeast portions of the county. Products transported are fuels and flammable gases. There has been one major pipeline explosion in Marion County in the past ten years.

AIRCRAFT ACCIDENTS

The majority of standard instrument approaches to the Indianapolis International Airport bring traffic across the county at distances of five, ten, and fifteen miles from the airport. These patterns cover approximately half the geographical area of the county on a line stretching from the northwest to the southeast corners of the county. Straight-in approaches bring aircraft traffic over the Castleton area and just north of the downtown mile square. Air cargo operations depart and arrive mainly between 10:00 PM and 4:00 am on weekdays.

According to the Airport Authority, Indianapolis International Airport experiences approximately 400 passenger aircraft cycles per day; air cargo operations account for approximately 100 more cycles at night. Additionally, an unknown number of air courier flights take place daily.

In addition to Indianapolis International Airport, there are four other airports either in Marion County or in close enough proximity to affect the county. These are: Eagle Creek Airport in Indianapolis, Greenwood Airport in Johnson County, Mount Comfort Airport in Hancock County, and Indianapolis Metropolitan Airport in Hamilton County. These airports serve both private and corporate flight operations.



FIRES



Marion County has a significant number of multiple story structures which present special problems during a fire or other emergency on the premises. "High-rise" fires are defined as occurring in structures four or more stories tall.

Eagle Creek Park and Fort Harrison State Park have the potential to be sites of wildland fires under conditions of drought. This type of fire can be a problem because water supplies in affected areas may not be sufficient to extinguish fires in the same manner as structure fires. Eagle Creek Parks has good roads, fire breaks, and hydrants on the eastern side of the reservoir, however, the western side is

not as well equipped with hydrants and has homes adjacent to it which could be a risk under wildland fire conditions. Fort Harrison State Park has some access trails and some fire trails, but no firefighting capabilities beyond some hand pumps. Water sources are available in the park but difficult to access.

UTILITY FAILURES

Power failures are a possibility, especially in the event severe weather such as high winds or ice storms cause widespread failure of power lines. Indianapolis Power and Light has mutual aid agreements with other local and regional power companies to share resources and repair capabilities. Redundancies in the local power distribution systems decrease the likelihood of prolonged power disruptions in the county.

Citizens Gas and Coke provides natural gas products for commercial and residential use throughout the county.



Ameritech provides local telephone services to the county. Its distribution network is redundant and capable of being rerouted around local failures. The system is capable of being overloaded during an emergency and can also be affected by and affect cellular phone communications.

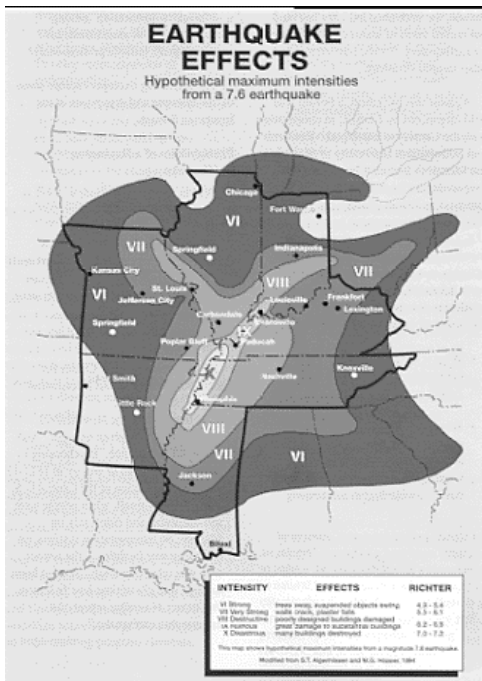
The Indianapolis Water Company provides drinking water for most of the county. It maintains water treatment facilities, as do the towns of Cumberland, Lawrence, and Speedway. Main water sources are the White River, regulated by the Morris Reservoir; Fall Creek, regulated by Geist Reservoir; Eagle Creek, regulated by Eagle Creek Reservoir; and ground water wells.

American Cablevision and Indianapolis Comcast provide cable television services to the county. They both have agreements to provide Emergency Alert System information as necessary.

CIVIL DISORDER

Although all areas of the county are vulnerable to civil unrest, Center Township is the most likely area for acts of civil disorder due to the locations of state and local government offices and the abundance of sports, convention, and entertainment venues. A civil disorder spanning three days occurred in the vicinity of the Indianapolis Police Department's North District station at 42nd Street and College Avenue in July of 1995. The rioters threw rocks, bottles, and bricks at police, neighbors and media reporters. 15 police vehicles were damaged, several area business were looted, and a number of private residences were damaged.





EARTHQUAKES

Marion County is located in a zone which will experience damage and injuries in the event of a Richter 7.0+ earthquake with an epicenter located in the New Madrid fault which will have the effect of a Richter 5.5-6.1 earthquake in Indianapolis. While the last major earthquake in the New Madrid fault was in 1811 there have been smaller earthquakes affecting Marion County in 1895 on the New Madrid fault, and in 1899 and 1987 in the Wabash Valley fault. The best estimates of the Central United States Earthquake Consortium indicated a Richter 7.0+ New Madrid earthquake would result in 157 fatalities, 787 serious casualties, and over 78,000 displaced persons in Marion County. Seismologists at the University of Memphis predict an 86% to 97% chance of a major earthquake occurring in the New Madrid zone within the next 50 years.

WEAPONS OF MASS DESTRUCTION

There have been over 36 anthrax hoax incidents in Indianapolis since 1998. Although the "Cold War" between the United States and the former Soviet Union is over, the threat of the use of weapons of mass destruction against the United States has not diminished. Russia, China, India, and Pakistan have demonstrated the use of nuclear weapons. North Korea, Iraq and Iran have well developed biological and chemical weapons capabilities. The collapse of the former Soviet Union and its resulting need for foreign capital has increased the likelihood of the illicit sale of nuclear weapons and weapon making technology.



Chemical and biological weapons are becoming the "poor man's" weapon of mass destruction with a dramatic increase in chem-bio incidents in the last few years including: 1995 bubonic plague incident in Ohio, 1995 ricin incident in Arkansas, 1997 anthrax incident in Washington, D.C., and the 1998 anthrax incident in Las Vegas. As the World Trade Center and Oklahoma City bombings have demonstrated, we are not immune to home grown terrorism. Marion County is a target because it is the State Capitol. Additionally, Hughes Technology Services (formerly the Naval Air Warfare Center) and the U.S. Army Finance Center at Fort Harrison remain strategic targets. Indianapolis is home to a number of groups unhappy with various levels of government including the Skinheads, Black Panthers, and the Unorganized Militia of the United States. There are a number of Ku Klux Klan and militia groups located throughout Indiana and nearby in Ohio.