

January 1999 Blizzard

IMPACTS OF THE NEW YEARS 1999 BLIZZARD IN THE MIDWEST

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A major blizzard struck portions of the Midwest on January 1-3, 1999. The storm produced 22 inches of snow in Chicago and was rated by the NWS as the second worst blizzard of the 20th century, ranking behind the blizzard in January 1967. Soon after the snow ended, record low temperatures occurred with values of -20 degrees or lower in parts of Illinois and surrounding states on January 3 and 4. The areas with the heaviest snows, 15 inches or more, included Illinois (central and north), Wisconsin (southern), Indiana (central and north), Michigan (southern), and Ohio (northern).

Estimates of losses and recovery costs are between \$0.3 and \$0.4 billion with 73 dead as a result of the storm. The governor of Illinois declared the entire state a disaster area on January 4, and on January 20, President Clinton declared 45 Illinois counties disaster areas (half the state) and subject to receiving federal relief. Areas of Indiana were also declared disaster areas.

Any such large-scale record winter storm creates numerous serious impacts on human life and property. Many of the worst impacts were associated with the storm's effects on transportation. Every form of Midwestern transportation was either halted and delayed by 2 to 4 days, or greatly slowed, and transportation problems were the source of many accidents and deaths. Auto and train-related deaths totaled 39 with 5 more dead due to snowmobile accidents.

Railroad trains in the storm's heart were stalled or delayed by 12 to 24 hours, and since Chicago is the Nation's rail hub, many priority shipments for the East and West Coasts were delayed, at great expense, by 1 to 4 days. The suburban train service of Chicago, one of the nation's finest, was overwhelmed by travelers who were unable to use normal vehicular transport, and 3 separate train accidents killed 3. These and many other operational problems greatly slowed train service for 3 days.

Major auto accidents involving numerous vehicles occurred on major highways and interstates, causing more than 2,500 auto and truck accidents. Snow removal on city streets buried thousands of cars and driveway entrances, trapping many motorists without transportation, and it took up to a week after the storm before most vehicles had been extracted from these man-made snowbanks. Many traveling motorists became trapped on highways and thousands were housed in emergency shelters (churches and city buildings) for 1 to 3 nights.

The storm's impact on commercial aviation was staggering at Chicago and Detroit. Northwest Airlines reported that more than 1,100 flights were canceled during January 2-4, and United Airlines canceled 60% of its O'Hare flights during the 2-day storm. O'Hare

Airport had 300,000 travelers stranded for periods of hours up to 4 days. Costs were staggering, in the millions of dollars, and the stress on travelers was immense, particularly since the storm occurred on the weekend a day after New Year's Eve.

Navigation on the major Midwestern rivers was reduced by 50%. The cold temperatures during and after the storm created large ice floes on the Illinois and Mississippi Rivers, and these limited safe barge movement and the operation of locks and dams.

Human health was another area of major impacts. There were 39 known deaths due to vehicle and train accidents. Five died in snowmobile accidents, 2 froze to death, and another 32 lost their lives due to heart attacks resulting from over exertion and mainly snow shoveling. The Midwestern total, still considered incomplete, is 73 persons killed. Study of past major winter storms in the Midwest show the conditions typically create numerous illnesses with the number afflicted averaging forty times the number killed. If this ratio is applied to the January Blizzard of '99, then nearly 2,800 persons came down with storm-induced illnesses. The storm created a blood shortage in the nation since the Midwest is the prime source of fresh blood supplies and many donors could not reach hospitals to give blood.

Cities in the storm's main track experienced enormous problems and costs in achieving snow removal. Fortunately, the storm was accurately predicted several days in advance and some cities such as Chicago made major preparations that lessened the storm's long-term impacts. Most Chicago streets had been cleared by January 3, whereas other cities with less advance preparation like Detroit, were still digging out a week after the storm. It is also important to realize that it had been nearly 20 years since a major winter blizzard had struck the area and complacency coupled with storm inexperience existed in many locations. However, Chicago was prepared. The city put 850 snow removal trucks on the streets (240 is the normal number for heavy snow). The cost of the snow removal and salt in the Chicago metropolitan area stands at \$44 million (\$14 million for snow removal at O'Hare Airport) with many costs yet to be reported. Communities of 100,000 population typically reported storm costs of \$250,000.

The huge effect on transportation produced major impacts on retail business and school openings. Most retailers were closed for 1 to 2 days, and lost business for several days after the storm, but those selling snow removal equipment typically sold out their supplies. The blocked streets and country roads led to multi-day school closings throughout the 5-state area where the storm struck. Even by January 9, a week after the storm, only 47% of the students in Chicago schools were able to attend classes. The school closings in the storm area, which ranged from 3 to 7 days, will produce extended school openings into June.

Follow-on impacts were also sizable. Warm weather returned to the Midwest by mid-January and the melting of the deep snow cover began. However, heavy rains with thunderstorms in the heavy snow areas occurred on January 17 and on 20-22. This precipitation coupled with above-freezing temperatures brought new types of weather problems. There was rapid melting, dense fogs, and major flooding.

Citing the Article

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