

Lianne Lajoie, "The 1953 Worcester Tornado in its Time: Panic and Recovery" *Historical Journal of Massachusetts* Volume 36, No. 2 (Summer 2008).

Published by: Institute for Massachusetts Studies and Westfield State University

You may use content in this archive for your personal, non-commercial use. Please contact the *Historical Journal of Massachusetts* regarding any further use of this work:

masshistoryjournal@westfield.ma.edu

Funding for digitization of issues was provided through a generous grant from MassHumanities.



Some digitized versions of the articles have been reformatted from their original, published appearance. When citing, please give the original print source (volume/ number/ date) but add "retrieved from HJM's online archive at <http://www.westfield.ma.edu/mhj>.



The Worcester Tornado in Its Time: Panic and Recovery

By

Lianne Lajoie

The city of Worcester, Massachusetts is located in central Massachusetts. Today, experts are aware that the city is part of New England's severe weather corridor. In fact, Worcester County is regarded as the most tornado-prone region of the northeastern United States.¹ However, this fact was unknown in the 1950s.

This paper explores the violent tornado that devastated Worcester, Massachusetts and surrounding towns in 1953. By looking at the aftermath and the rebuilding of the city, this paper will explain how the Worcester Tornado was unique to the 1950s, in terms of both human response and existing technology.

In his work *Acts of God: The Unnatural History of Natural Disasters in America*, environmental historian Ted Steinberg looks at the history of tornadoes and other natural disasters in America. Steinberg believes that the amount of death and destruction caused by natural disasters is influenced by socioeconomic factors and that some of America's worst natural disasters were made more damaging through poor economic decision-making. Oftentimes, these decisions leave minorities, the elderly, and the impoverished vulnerable. Through the study of the ten costliest natural disasters, Steinberg shows that while nature may produce such occurrences as tornadoes, hurricanes, earthquakes, and floods, it is through the decisions of government officials and business leaders that turn them into disasters.

¹Barlow, Ken, "Why Worcester Sees Such Severe Weather," CBS 4 Boston, May 10, 2006, 20 October 2006, http://cbs4boston.com/weathernews/local_story_130100641.html.

While Steinberg reaches compelling conclusions, his arguments do not hold up in the case of the Worcester Tornado. The path of this storm truly was random, and the actions and the decisions in the aftermath were based on humanitarian, rather than economic, aspects. This paper will discuss these factors in-depth and relate them to the character and technology of the 1950s.

Today, the U.S. Census Bureau estimates that Worcester's population is around 176,000; in 1953, this number was higher: over 200,000.² This was mainly due to the baby boom that occurred after World War II. While some couples were moving to the suburbs of Worcester, such as Holden, many families were also settling in the newly developed areas of Worcester, like the Great Brook Valley housing project and the Burncoat Hill residential area.³ These areas provided an abundance of housing options for Worcester's post-war population.

Worcester is also known for its many colleges, one of which is Assumption College, founded in 1904. The site was home to both Assumption College and Assumption Preparatory School.⁴ On June 9, 1953, there were fewer people on the campus than was originally expected. When looking at the academic calendar a few weeks before, the administration had noticed the students were scheduled to stay a week longer than was legally necessary. Thus, many of the students who would have been at the college during the tornado had left campus. Graduation had been held the previous day, so the individuals present

² Present statistics from "Worcester, Massachusetts," *U.S. Census Bureau*, June 8, 2006, October 21, 2006, <http://quickfacts.census.gov/qfd/states/25/2582000.html>. 1953 statistics from John M. O'Toole, *Tornado! 84 Minutes, 94 Lives* (Worcester: Databooks Publishing, 1993), 2.

³ O'Toole, 2.

⁴ "Centennial Celebration," *Assumption College*, October 21, 2006, <http://www.assumption.edu/100/history.php>.

at the school on June 9th were faculty members and the few working at the college for the summer.⁵

The date of June 9th, 1953 was an ordinary morning for the residents of Worcester and its surrounding towns. They were informed by the morning paper about a possible end to the Korean conflict depending on the peace talks in Panmunjom.⁶ The men set out for work, while the majority of the women ran errands and went about their daily tasks. Children of all ages departed for school, team practices, and newspaper routes.

Area meteorologists, however, were forced to make a difficult decision on this morning. Worcester had been experiencing an early summer heat wave, with temperatures reaching ninety degrees just days before. A tornado had hit Flint, Michigan the previous day, and the cold front and low-pressure system responsible for this twister had moved into central Massachusetts.⁷ Conditions were favorable for storms, and some meteorologists felt that the warm, unstable air may produce more than just a summer thundershower.

However, the terms “severe thunderstorm” or “tornado” had never been issued in a New England forecast in U.S. Weather Bureau history, on the grounds that the public would become unnecessarily alarmed.⁸ The decision was made to include the likelihood of severe thunderstorms in the forecast, but not the possibility of a tornado. The first ever New England severe thunderstorm forecast was issued at 11:30 a.m. on June 9, 1953, reading “windy, party cloudy, hot and

⁵ Classes were originally scheduled to run through June 12th. Personal interview with Father Joseph Loiselle, conducted on October 7, 2006.

⁶ O’Toole, 2-3.

⁷ Keith C. Heidorn, “The Worcester Tornado of 1953,” *Weather Almanac*, June 1, 2003,
<http://www.islandnet.com/~see/weather/almanac/arc2003/alm03jun.htm>.

⁸ William F. Chittick, *The Worcester Tornado: June 9, 1953* (Rhode Island: W.F. Chittick, 2003), 5.

humid, with thunderstorms, some locally severe, developing this afternoon.”⁹

The tornado touched down at approximately 4:25 that evening, with no warning for the general population. This massive funnel was nothing like the “typical” representation of a tornado. William F. Chittick describes,

When one hears the word tornado, the likely image is that of a rope, snake, or finger descending from the sky, carving a narrow but destructive path along the ground for a few miles before lifting back into the clouds. The historical literature of the Worcester Tornado, though, tells of a much different type of storm, a leviathan whose dimensions were simply unfathomable by any normal standard...¹⁰

Survivors remember the moments before the tornado hit as an “eerie silence.” Glancing at the sky, they noticed that it was a strange yellow color. Next came the hail; some were the size of baseballs. Then came the loud, roaring noise as the tornado descended upon them with winds exceeding three hundred miles per hour.¹¹

From all available sources, it appears that the Worcester Tornado was an incredibly violent one from the start. It formed over the northern part of the Quabbin Reservoir before touching down in Petersham, northwest of Worcester. Luckily, in Petersham, the area hit by the tornado was the heavily forested region in the south. From there, the tornado traveled southeast, striking the small town of Barre.

⁹ Ibid. There was a general feeling of “it can’t happen here” at the time. Even though the meteorological conditions indicated a tornado, no one believed one would actually hit the area.

¹⁰ Ibid., 9.

¹¹ Personal interview conducted on October 7, 2006 with Richard Loiselle, a Worcester resident in 1953.

It was here that the tornado's first fatalities: eighteen-year-old Beverly Strong and eleven-year-old Edward White. Continuing to move southeast at thirty-five miles per hour, the tornado next tore through Rutland. Fortunately, the population of this town was relatively small and well-spread out. However, there were two more deaths and quite a bit of property damage. Some homes were completely destroyed; others were severely damaged.¹²

By 5:00, the tornado had crossed into Holden. This suburb of Worcester had been growing for the past decade as a result of the post-World War II baby boom and the general migration to the suburbs that occurred in the 1950s. Nine were killed by the tornado in this town, including one of the most heartbreaking incidents. Mrs. Charles Oslund, terrified by the approaching tornado, ran from her Holden house carrying her two-week old son, Charles Oslund, Jr. Both were picked up by the twister and carried for four hundred feet. As they slammed back to the ground, Mrs. Oslund involuntarily let go of the baby, who was picked up and carried several hundred more feet. His body was found under the wreckage of a Holden home on June 12, three days after the tornado struck.¹³

After tearing through Holden, the tornado entered the Worcester city limits at about 5:08 p.m. By this time, it was nearly a mile wide. The northern end of Worcester, which was the most densely populated, received the brunt of the storm. The main parts of this area that were hit include Assumption College, the new Great Brook Valley public housing projects, and a Burncoat Hill residential area. The new Norton Company plant was also in the direct path of the tornado.¹⁴

Norton Company, a huge plant complex, was the first major area hit in Worcester. Professor Andrew E. G. Jonas describes Norton as "a multinational manufacturer of abrasives and Worcester's largest private

¹² O'Toole, 9-12.

¹³ Ibid., 14-15, 246.

¹⁴ Larry Pletcher, *Massachusetts Disasters* (Guilford, CT: Globe Pequot Press, 2006), 160-161.

employer.”¹⁵ Two months earlier, the company had dedicated a new, six million dollar Machine Tool Division. This was the site the tornado chose as its target. The roof was torn off, windows shattered, and the heavy machinery flew through the air, much of it landing a considerable distance away. Fortunately, most employees had recently gone home for the night; those present were working the second shift from 3 p.m. to midnight. No one was killed at Norton, most likely because the strong brick walls of the complex remained intact. There were, however, a number of injuries, and the company itself suffered a large amount of damage.¹⁶

Next in the tornado’s path of destruction was Assumption College. This is the section that many consider to have suffered the most damage. In 1953, Assumption College was located in the Greendale section of Worcester. Assumption Preparatory School shared the campus. By June 9, the students had left for the summer, but the religious community that ran the school was present. Father Joseph recalls that when the tornado hit,

...we were all supposed to be in chapel. We would have had a lot of people hurt if we had been. The preacher had really spoken much too long before [laughs], so they cancelled that particular service. So we were all separated when it hit. All of a sudden, I heard a noise – like a train I thought. And there were trains that went by across the street, and that’s what I thought it was. Only this time, they were coming closer and closer and closer...I went to the window...and one of the Fathers’ brothers was visiting there. And he had a convertible. I couldn’t believe my

¹⁵ Andrew E. G. Jonas, “Corporate Takeover and the Politics of Community: The Case of Norton Company in Worcester,” *Economic Geography*, Vol. 68 (1992): 348-372.

¹⁶ O’Toole, 27-30. A church located across the street also lost its roof.

eyes. It was about six feet in the air...I looked a little bit to the right, up the hill, and all the leaves were gathering and popping off the trees. So I said, I better get out of here! [laughs]¹⁷

Assumption campus suffered a direct hit. Fr. Devincq, an Assumption professor, was crushed by granite and brick before the floor of his room gave way and he fell to the room below. Efforts to liberate him from the debris started immediately, but he died before he was freed. Two religious sisters were also instantly killed: forty-eight year old Mary Alice Simard (Sister Mary St. Helen) and twenty-seven year old Jacqueline Martel (Sister St. John of God). Many Sisters were seriously injured because the convent, as a whole, was one of the worst-hit areas at Assumption College. It was lifted several feet off the ground, turned around almost one hundred and eighty degrees, and slammed back down to earth. It was completely flattened.¹⁸

The entire campus of Assumption also lay in ruins. The top floors of the main building collapsed and numerous buildings were demolished. City resident Roland Lajoie, who walked up to the college directly after it was hit describes, "The whole front of the college was all gone...the floors were gone, but all the plumbing was still there." Father Loiselle adds, "There was debris all over. Part of the building had come down; the whole tower had come down, and that was a big, big tower. What had been the fourth floor of a building was now the

¹⁷ Personal interview with Father Joseph Loiselle, conducted on October, 7, 2006.

¹⁸ Neil Isakson, "Reminisces of a Killer Tornado, 35 Years Later," *Catholic Free Press*, June 10, 1988, page 9 (1-5).

second.”¹⁹ The damage caused at Assumption by the tornado was estimated at \$4 million. Trying to rebuild the original campus was deemed too difficult, which is why, presently, the Assumption College campus is located on Salisbury Street, a few miles southwest of the original site.

After Assumption, the deadly twister struck the Burncoat Hill region. At the time the tornado hit, those at their homes in this residential area were mostly women and children. Many of the men were on their way home from work and heard of the catastrophe from a news bulletin on their ear radio. For those that were home, many were saved by running down to the cellar as soon as the funnel was spotted. Unfortunately, the tornado was extremely fast-moving; it averaged thirty-six miles per hour in forward speed. As a result, individuals only had two to three minutes from when they saw the funnel to gather their children, warn the neighbors, and seek shelter.²⁰

For those unfortunate families at Burncoat Hill who only noticed the tornado as it bore down on them, the end results were usually not positive. In one case, a mother was in her two story house with her two young sons. When the tornado hit, she was on the second floor. As she rushed down to her sons, all of the windows shattered and the door blew in with incredible power, crushing little Bobby, one of her sons,

¹⁹ Personal interviews conducted with Roland Lajoie and Father J. Loiselle, October 7, 2006.

²⁰ Chittick, 10.

to the floor with such force that he was killed instantly. She was also struck by the door and suffered serious injuries.²¹

The last main area hit in Worcester before the tornado crossed into Shrewsbury was the Great Brook Valley public housing projects, largely made up of the Great Brook Valley Gardens and the Curtis Apartments. Over 3,000 people lived here, including the DeFosse family, which included a two-year-old boy and two young girls, Diane and Nancy. When the tornado hit, the roof above the the DeFosses' apartment was torn off, causing a heavy steel beam to fall into one of the rooms. This beam fell across the legs of seven-year-old Diane, who had fallen on the kitchen floor. Her right leg was severed just above the knee, and her left leg only remained attached by a shred of cartilage. Quickly, Diane's mother tore the remnants of the kitchen curtains and turned them into makeshift tourniquets. This saved her daughter's life. Diane lost both her legs, but became an inspiration for many Worcester tornado survivors.²²

From Worcester, the tornado continued into Shrewsbury and Westboro, then ended in Southboro, eighty-four minutes and forty-six miles after it began. Ironically, around the time the tornado reached Southboro, at 5:45 p.m., a tornado warning was issued, but by this time, it was too late.

²¹ O'Toole, 110-111.

²² *Ibid.*, 141-142.

When the storm ended, the city was devastated. Ninety-four were killed, and thousands were injured. Winds were estimated at 328 to 338 miles per hour -- some of the strongest ever recorded. In addition, over 4,000 homes were destroyed, leaving 15,000 homeless. In 1953 dollars, the damage totaled over \$53 million. Today, this cost is estimated at \$1.3 billion.²³

The residents of Worcester and the surrounding towns had just experienced the most powerful tornado to ever hit the east coast, although its technical severity is debated. The National Weather Service classifies the storm as an F-4 on the Fujita Scale, although efforts continue to reclassify the storm as an F-5. An F-5 tornado can blow a house off its foundation and rip bark from trees. It can also blow a 12-ton bus into the side of a building, which the Worcester tornado did in Great Brook Valley in Worcester. Tornado research meteorologist and historian Thomas Grazulis asserts, "It was an F-5 in places, no question...there are numerous aerial shots of that kind of damage, especially in...the Great Brook Valley Gardens in Worcester."²⁴

Following the tornado, Worcester's City Manager Francis J. McGrath immediately declared a state of emergency. There were still three hours of daylight left, which was long enough to free the victims and rush them to the hospitals. Trucks, bulldozers, and power shovels were redirected from state and local construction to dig through the ruins in search of victims. Neighborly assistance was also quite common. Once it was realized that their own family was safe, energy was often then diverted to bandaging victims, helping neighbors dig out their family members, and helping children locate their parents.²⁵ Still others took their trucks and other vehicles and used them as makeshift

²³ "Memorial Recalls Devastating Twister," *Boston Globe*, June 7, 1998, C12 (1-2). Estimate of today's cost from Bill Fortier's "When Chaos Reigns," *Worcester Telegram & Gazette*, June 8, 2003, p. 3 (1).

²⁴ Fortier, 3 (3-4). The Fujita Scale ranks tornadoes from 0 to 6, with a 6 being the most powerful. Such a rank exists only in theory, for no tornado above an F-5 has ever been recorded. The Fujita Scale was not used until the early 1970s. Pictures were used to determine the rating of storms previously.

²⁵ Pamphlet *Tornado! Worcester County June 9, 1953* (Worcester, MA: Davis Press, Inc., 1953).

ambulances. It was extremely difficult for the actual emergency vehicles to make it through all the debris to the victims, and even if they were successful, it was impossible to tend to the thousands of individuals all in need of medical attention.

Lucille Lajoie recalls that, immediately following the storm, one of her relatives, Ovilla, returned to the house; he had six tornado victims with him. None were seriously injured, but they needed bandages, food, and shelter. Ovilla continued to bring his truck out that evening, making quite a few trips. He would bring the injured parties to hospitals and other survivors to the homes of relatives. Many men took this same course of action on the night of June 9th.²⁶

While these residents were extremely helpful in getting victims the medical attention they needed, they also unknowingly worsened a minor problem that developed immediately following the tornado: there was a huge increase in the number of people attempting to make phone calls or send telegrams. Apprehensive about the fate of family members, individuals wasted no time trying to contact them. Unfortunately, with the separation of family members during the twister and the move to the hospitals, and occasionally the morgue, provided by many good Samaritans, this was often quite difficult.

As a result, the next morning, on June 10th, the New England Telephone and Telegraph Company issued a bulletin asking that only the most necessary calls be made to Worcester and its surrounding communities, as telephone circuits were already heavily loaded. In addition, since telegrams were still pouring into the city by hundreds, the manager of Western Union in Worcester sent an emergency call, carried by the radio station WTAG, for boys to help deliver the overabundance of telegrams. Later that day, more than 120 boys and several girls were assisting the staff.²⁷

²⁶ Personal interview with Lucille Lajoie, conducted on October 7, 2006.

²⁷ "Telegrams Pour Into City By Hundreds," *Worcester Evening Gazette*, June 11, 1953, p. 1 (1).

Like the telephone and telegraph workers, the hospital staffs were also inundated. The first victims arrived at Hahnemann Hospital, the closest hospital to the northern Worcester tornado area, at approximately 5:30. Within minutes, cars and trucks were filling the hospital driveway, with victims being carried into the hospital on boards, mattresses, doors -- whatever could be used as a makeshift stretcher. According to John O'Toole, "The notes of the hospital's superintendent indicate that more than eighty persons in need of medical attention arrived within ten minutes." Inconveniently, only three physicians were on duty when the flood of tornado victims arrived, but within an hour, there were over forty doctors present.²⁸

The doctors and nurses present worked at full speed, but the area was in a state of chaos. O'Toole describes the scene:

Casualties were lying on the floor, desks, and stretchers. Whole swarms of people were moving about, some working, some with looks of desperation stepping over bodies, peering under blankets, looking for loved ones. In one room, used as an office and workroom for hospital volunteers, were a variety of casualties. One woman with a broken arm and dislocated hip, appeared to stare though one open eyeball, glazed as if hit by a sandblast. One woman was dead...Many had needles in their arms attached to intravenous solutions.²⁹

Every available inch of the hospital was used, including the dining room, the library, and the hallways. Surgical and delivery rooms were quickly changed into operating rooms, stocked with all necessary instruments. A system was quickly organized that determined that patients with head injuries were to be taken to City Hospital for treatment, and other serious cases were to be sent to one of the three

²⁸ O'Toole, 189.

²⁹ *Ibid.*, 195.

larger hospitals in the city, as Hahnemann was smaller and less well-equipped.

While Hahnemann was the first hospital treating the influx of victims, shortly all of the hospitals were overflowing. Hahnemann Hospital treated 250; City Hospital, 240; Memorial Hospital, 228; Doctors Hospital, 124; and St. Vincent's Hospital, 108. However, one should keep in mind that these numbers only reflect the documented cases. Many doctors and nurses quickly treated minor wounds and immediately sent the individuals on their way to make room for the rest of the injuries that needed treatment. These were not recorded.³⁰

Other volunteers, such as the Red Cross, also hurried to help. After the tornado struck, radio bulletins asked for any available residents to donate blood. So many responded that the Red Cross collected two hundred and sixty pints that same night. In fact, less than twenty-four hours after the tornado, the local Red Cross chapter found itself turning potential donors away. Red Cross volunteer teams in the hospitals also helped prepare, check, and cross-check casualty lists.

The Red Cross volunteers staffed the newly opened shelters for disaster victims, including Holy Cross College, Worcester Polytechnic Institute, and the National Guard Armory as well. These volunteers also began operating mobile canteens, providing coffee and sandwiches to those in the stricken areas. Shortly, the Red Cross would also become responsible for passing out vouchers to replace lost household items. Later in June, while speaking at a Red Cross convention, President Eisenhower read a telegram he received from the Mayor of Worcester, thanking the Red Cross for their continued assistance. It stated,

The true American spirit of people helping people through the Red Cross is being demonstrated here in the Worcester tornado area. As you address the Red

³⁰ Ibid., 190. The numbers treated in each hospital listed in pamphlet *Tornado! Worcester County June 9, 1953*.

Cross Convention tonight, please express to the delegates our sincere thanks for their timely aid...³¹

The Red Cross played a huge role, not only in providing aid for the victims after the tornado hit, but also in the subsequent rebuilding of the city.

In addition to the Red Cross, the Salvation Army was also crucial in providing disaster relief. Two hours after the tornado struck, the Salvation Army's Greendale headquarters was operating as an around-the-clock disaster relief center. In Boston, the Salvation Army's state headquarters broadcasted a request for Salvation Army workers in other communities to travel to Worcester to offer support, which many did. Food and clothing was donated to the Salvation Army which was distributed to the residents based only on need.³²

Within an hour of the tornado, all National Guardsmen in Worcester were ordered to immediately report to the armory. These were the men of the First Battalion of the 181st Infantry Regiment. These troops reported to the major disaster area in the city: Great Brook Valley. At these housing projects, a civil defense operation had begun to be established under the city's director of civil defense, and former National Guardsman, Lieutenant Fred Maloney. When Colonel Bigelow, commander of the 181st Regiment arrived, the two men consulted on how to coordinate their disaster recovery efforts. It was decided that Civil Defense authorities would supervise relief efforts as best it saw fit, and the Guardsmen would provide the manpower necessary to implement the policies.³³

Soon, Lieutenant Colonel John J. Pakula had arrived at Great Brook Valley to meet with Colonel Bigelow, and the two men were

³¹ Dwight D. Eisenhower, "Remarks at the American Red Cross Convention, 1953 American Red Cross Convention, Washington, D.C., June 24, 1953. <http://www.eisenhowermemorial.org/speeches/index.htm>.

³² O'Toole, 184-185.

³³ *Ibid.*, 211-213.

approached by City Manager Francis McGrath and Joseph P. Benedict, executive secretary of the Worcester Housing Authority. These two municipal officials gave the National Guard supreme authority in directing the recovery efforts in Great Brook Valley for the remainder of the emergency. Pakula, as a result, set up a fully operational battalion command post in a maintenance building before sundown that night.³⁴ Throughout the night, and in the days following the tornado, the Guardsmen searched for trapped survivors and buried victims, discouraged potential looters, established security around the housing projects, and regulated and restricted traffic, both of vehicles and pedestrians. A pamphlet printed later in 1953 describes, "The disaster area had the look of a war zone as uniformed Guardsmen with rifles ...moved in."³⁵

McGrath was so pleased with the work of the National Guard in Great Brook Valley that the next night, June 10th, he offered to grant Colonel Bigelow, Commander of the 181st Battalion, and the National Guard authority over the other devastated areas in the city, like Burncoat and Greendale. Bigelow had misgivings about this, so he declined.³⁶

However, Colonel Bigelow did assume operational control of all mobilized forces. Since the First Battalion of the 181st was already stationed in Great Brook Valley, the remaining two battalions were deployed into different areas of devastation. The Second Battalion, which came from towns north and northwest of Worcester, was assigned to the Burncoat-Greendale section, and later, the town of

³⁴ *Ibid.*, 213-214. In the Military Laws of Massachusetts it is stated that in the case of a public catastrophe or natural disaster of such enormity that state police and police departments are inadequate to meet the emergency, the sheriff of a county or the mayor, city manager, or board of selectmen of a city or town may direct the commanding officer of a military unit to order his command to mobilize and to aid the civil authority in preserving order.

³⁵ Pamphlet *Tornado!*, 9.

³⁶ O'Toole, 233.

Holden as well. The Third Battalion, from the areas to the east of Worcester, reported to nearby Shrewsbury. Other military divisions were also mobilized and sent to Worcester that first night, including the 726th Ordinance Battalion, Boston's 101st Field Artillery Battalion, and the Air National Guard.

With the National Guard and the rest of the military presence came a sense of order after the chaos that had initially ruled the city. Roadblocks were established, property, or what was left of property, was protected, and a system of passes to residents and others necessary in the devastated areas was begun before the sun came up the next morning, June 10th.³⁷

Christian Herter, Governor of Massachusetts, wired the president on June 10th, asking for \$10 million in relief funds. This telegram stated:

Tornado caused damage hardship and suffering so severe that federal assistance is required. Local and state civil defense organizations producing maximum efforts. Red Cross and other charitable institutions rendering full assistance. Available state, county, city funds now committed. Suggest allocation of 10 million dollars from funds available under authority of public law 875 of 81st Congress to assist state and local effort.³⁸

On Friday, June 12th, he addressed a joint session of the Massachusetts legislature, addressing the needs of the devastated areas in central Massachusetts.

After Herter described the horror and devastation he had observed while visiting the disaster area to the legislature, he read an emergency act to make \$5 million available to aid cities and towns in the tornado disaster area. This bill was quickly put through both branches and signed into law by the governor. Under the law, the money could only be used

³⁷ Over 1,200 National Guardsmen patrolled the area the first night. "Troops Guard Worcester Tornado Area," *The Lowell Sun*, June 11, 1953, p. 1 (1-2).

³⁸ "Will Ask Aid of \$35 Million," *Worcester Evening Gazette*, June 10, 1953, p. 1 (1-2).

as reimbursement for immediate emergencies of victims, such as medical care; it could not be used for reconstruction.³⁹

Early on Thursday, June 11, 1953, the day before the Herter Bill was passed, President Eisenhower designated the path of the Worcester Tornado a major disaster area. This action made it possible for the Housing and Home Finance Agency to provide one hundred per cent mortgage loans on wrecked dwellings and the Farmers Home Administration to make loans on property and crop losses.⁴⁰ In addition, it opened the door for federal relief funds for the area, but a specific amount of money was not allocated by the president. Instead, a representative of the federal civil defense administrator was to contact the governor and make a survey of their needs. Catherine Howard, deputy civil defense administrator from Boston, arrived in Worcester the same day.⁴¹

Also on June 11th, Massachusetts Senator Leverett Saltonstall introduced a resolution that would authorize President Eisenhower to distribute \$25 million in disaster relief funds for the Worcester area.

³⁹ Thomas C. Gallagher, "Herter Bill for \$5,000,000 Tornado Aid Passes Quickly," *The Lowell Sun*, June 12, 1953, p. 17 (3-4).

⁴⁰ "Saltonstall Asks \$25 Million Aid," *New York Times*, June 11, 1953. At the time of the tornado, Massachusetts' two senators were Republican Leverett Saltonstall, and Democrat John F. Kennedy, who was at the beginning of his political career, having been elected to the Senate less than a year before.

⁴¹ "Ike Designates Devastated Region Major Disaster Area," *The Lowell Sun*, June 11, 1953, p. 1 (5-6).

He appealed to the Senate that a special resolution was necessary because the President's emergency fund did not have enough money to take care of the situation. He estimated that the tornado caused approximately \$50 million in damage just inside the Worcester city limits.⁴²

Later in the month, both Massachusetts senators sponsored the Kennedy-Saltonstall bill for surplus federal supplies and equipment to be donated and lent to individual tornado victims throughout the country instead of only those public institutions, health facilities, and schools in need. The Senate Public Works Committee approved the bill at the end of June, and the Senate passed it in the beginning of July.⁴³ In spite of this, the bill did not pass the House.

With 15,000 people homeless in Worcester alone as a result of the twister, the funds requested from the government did not come fast enough. These families did not need money; they needed protection. Utility crews -- power, telephone, and natural gas -- made repairs in Worcester almost immediately, with crews arriving from all over Massachusetts and New England. In one instance, a power crew came

⁴² "Saltonstall Asks...Aid," (2).

⁴³ "Senate Passes Bill for Tornado Relief," *Worcester Evening Gazette*, July 6, 1953, p. 1 (4).

to Worcester from the Midwest.⁴⁴ However, many families were not only out of power, they were out of a home.

For the first few days following the tornado, most individuals and families stayed in the shelters that sprung up around the city: the National Guard Armory, Municipal Auditorium, Holy Cross College, and Worcester Polytechnic Institute. By the time the weekend arrived, though, it had become obvious that something more permanent was necessary.

There were many calls from individuals in neighboring states such as Connecticut and Rhode Island that offered spare rooms to the homeless. Area residents that owned summer homes in the area also donated space for interim housing. Some had cottages at the lakes in Worcester County, others had summer homes in Cape Cod. These spaces were offered rent-free. In addition, many area camps allowed children affected by the tornado to attend for free.⁴⁵

However, it was Raymond P. Harold, chairman of the Worcester Housing Authority, that had the largest impact on available housing for those who were left homeless. First, the evacuation of all the

⁴⁴ O'Toole, 235.

⁴⁵ *Ibid.*, 243.

inhabitants of the windowless and roofless houses in Great Brook Valley was coordinated. Next, Harold gave the go-ahead for the contractors who had built the apartments in Great Brook Valley to begin temporary repairs. Beginning just two days after the tornado hit, hundreds of workmen reported to the site from all over the northeast. They worked by daylight during the day, floodlights at night. Within four days, 2,500 tons of debris was moved from the area, apartments were temporarily re-roofed, and window openings were closed. These repairs were not permanent, but the damaged property was fixed enough for people to live in again. Just six days after the tornado, 800 out of 1000 apartments had been re-occupied.⁴⁶

At the same time, Harold struggled to obtain temporary housing for as many of the homeless as possible. His solution was the “trailer plan” -- trailers would be acquired to house families while their houses and apartments were being rebuilt. Fifty percent of the trailers would be allotted to owners of private homes that have been destroyed. The remaining fifty percent will go to tenants of the Curtis Apartments and Great Brook Valley Gardens in the devastated Great Brook Valley.⁴⁷

Through Harold’s efforts, 450 trailers were brought to Worcester from Rhode Island, and from Wichita, Kansas, where a large number of government trailers were located. Volunteer drivers made the journey. The first of the trailers arrived around June 20th, and by early July, clusters of trailers had sprung up. Some trailers were large enough to fit six people; others could only fit four. Either way, they were stuffy

⁴⁶ Ibid., 247.

⁴⁷ Pamphlet *Tornado!*.

and hot during the summer, and became chilly and damp as summer turned into fall. Some families were able to move out of the trailers and into their rebuilt homes by the end of August, and most had moved out by Thanksgiving.⁴⁸

Those who lived through this tornado will never forget it. As Jim Calogero wrote on the thirtieth anniversary of the storm, “For many people in central Massachusetts, June 9, 1953, ranks in memory with the day Pearl Harbor was bombed and the day President John F. Kennedy was assassinated.”⁴⁹ Today, September 11, 2001 would also be included in this list. However, it is not just the fact that this was the costliest and deadliest tornado to ever hit the New England that makes this tornado historically unique. It is also due to the context in which the tornado occurred. Since the tornado struck in the early 1950s, the human response and existing technology were distinctive to the time period.

On the morning of June 9, 1953, meteorologists had decided not to issue a tornado warning for the day. Their reasoning was that they did

⁴⁸ O’Toole, 243.

⁴⁹ Jim Calogero, “Worcester’s Terrible Fury of ’53,” *Boston Globe*, June 9, 1983. Ten years earlier, on the 20th anniversary of the twister, something highly unlikely happened. Another twister struck Worcester. This tornado was maybe an F-2 or an F-3, not like the extremely powerful tornado of 1953, but it was enough for painful memories of the residents to resurface.

not want to alarm the public. However, this critical warning was not issued for another reason as well: existing weather technology was not equipped, especially in the northeast, to detect tornado formation, and forecasters were not yet aware of all the meteorological conditions that combine to form tornadoes.

The first tornado forecasts had begun just a year earlier, in March, 1952, with the formation of a specialized unit as part of the Weather Bureau Analysis Center in Washington, D.C. In early 1953, this became the Severe Local Storms (SELS) Center. When SELS first came about, the relationship between the environment and tornadoes was not recognized, so forecasting was experimental.⁵⁰

Forecasters knew that certain meteorological elements, like static instability, convergence boundaries, and low-level moisture, were present in tornado formation, but it was problematic for them to make a direct connection between what they saw in the weather data and what was actually occurring in the storms responsible for producing the tornadoes.⁵¹

⁵⁰ C. Church, et. Al, *The Tornado: Its Structure, Dynamics, Prediction and Hazard* (Washington, DC: American Geophysical Union, 1993), 558.

⁵¹ *Ibid.*, 559.

On a weather map, a tornado is just a microscopic dot; there is no information to distinguish a tornadic from a non-tornadic storm. It is when the connection between the storm and its environment is made that successful warnings can be made. At this point in the 1950s, though, cause and effect in tornado formation was not yet understood.

The use of radar in weather forecasting was also extremely new. Radar was developed in the 1930s, and came into use during World War II, but it was not until the 1960s that meteorological radar was widely used. It was this radar research in the 1960s that connected tornadoes with “supercells” detectable with radar. These supercells did not always produce tornados, but they did reveal the radar structure and evolution probable for tornado formation.⁵² Unfortunately, at the time of the Worcester Tornado in 1953, this technology was not yet available.

These factors greatly impacted the forecasting of the Worcester Tornado. Bill Fortier explains, “[There’s] an old weather proverb that says that the weather in Michigan one day is frequently the weather the next day in Central Massachusetts.” This, combined with the warm, unstable air in the area, is what caused meteorologists to believe that there was a possibility of strong storms in central Massachusetts on June 9, 1953.⁵³ Technology was not a significant factor. In fact, a photograph of a radar screen taken at Massachusetts Institute of Technology at approximately five minutes before five, when the

⁵² Charles Susskind, “Radar,” *Dictionary of American History* (1976) . December 1, 2006. <http://galenet.galegroup.com/servlet/HistRC/>.

⁵³ Fortier, (3-4).

tornado was between Rutland and Holden, shows the twister as a vague disturbance identical to a small thunderstorm. The radar used in 1953 simply could not distinguish between the two.⁵⁴ Since this was an extremely fast-moving storm, a warning would have been infinitely valuable in saving the lives of the many individuals that had no idea a tornado was likely that afternoon, and therefore did not believe they were in danger.

The Cold War and the cultural impact of nuclear weaponry greatly impacted the human response to the 1953 Worcester Tornado. The atomic bomb was the main danger Americans feared at the time the tornado struck. Tornadoes may have been rare in New England in 1953, but taking shelter was something Americans all over the country were well-trained to do. With Cold War tensions rising and U.S. troops fighting in Korea, students were trained to “duck and cover” in schools during air raid drills, and many citizens even built private bomb shelters on their property.

When the tornado struck, these well-trained U.S. citizens ran for their basements, as they had been trained to do in the case of a nuclear attack. If their houses had no basements, they crouched in interior bathrooms or closets, ducked underneath stairwells, or turned over

⁵⁴ O’Toole, 274.

sofas and crawled underneath them.⁵⁵ This quick action saved the lives of many.

After the tornado passed by, and survivors came out of their homes, some believed they had experienced a nuclear blast, as the landscape looked shockingly like photographs they had seen of Hiroshima after the bomb was dropped. Some individuals remember that perfectly sane adults were running around saying the Russians had attacked.

And it was not just the tornado survivors that feared a link between the tornado and a nuclear blast. Author Larry Pletcher asserts,

Atomic bombs and nuclear testing were hot topics in 1953, but it was a year that also saw more than its share of violent tornadoes. Politicians were quick to suggest a connection. While the United States Weather Bureau and the Atomic Energy Commission denied that A-

⁵⁵ "The Cold War and U.S. Popular Culture," *American Journey Online* (2000).

bomb tests were to blame for the nasty weather, at least one congressman called for an investigation.⁵⁶

This congressman was Representative James E. Van Zandt of Pennsylvania. The day after the tornado hit Worcester, newspaper stories began declaring that Rep. Van Zandt, a member of the joint congressional atomic energy committee, said that current tornadoes can definitely be traced to the series of nuclear tests in Nevada.⁵⁷

The next day, June 11th, the atomic bomb was “acquitted” by the experts of any responsibility in causing tornadoes or severe weather. Newspaper coverage of this in *The Lowell Sun* read,

...the atomic energy commission and the weather bureau’s top scientists have asserted there was no connection between the big bomb and the big winds which so far this month have cost at least 248 lives. Meteorologists have explained often since the advent of

⁵⁶ Larry Pletcher, *Massachusetts Disasters* (Guildford, CT: Globe Pequot Press, 2006), 157-158. The 1953 tornado season was especially deadly. The Worcester Tornado and the tornado that struck in Flint, MI the day before were extremely violent. A month before, an F-5 tornado had hit Waco, TX, killing over 100 people.

⁵⁷ “A-Bomb Causing Tornadoes Says Rep. J.E. Van Zandt,” *The Lowell Sun*, June 10, 1953, p. 1 (6).

the atomic age that A-bombs lack the power to produce anything but extremely local weather events.⁵⁸

Even after it had been proven that nuclear testing had not caused the violent weather, individuals were still suspicious, and more connections were made between the two. One of the most common was the similar types of injuries. While this seems ridiculous in this day and age, knowing that the devastation caused by atomic weapons would be far worse -- beyond comprehension for Americans in the 1950s -- it was a legitimate fear for many following the tornado. A newspaper article in *The Lowell Sun* on June 12th reads, "A lung specialist says victims of Tuesday's tornado suffered the same kind of blast injury to their lungs as that caused by an atom bomb explosion..."⁵⁹ The same day, in the *Worcester Evening Gazette*, a story announced, "We now have some idea of what we ought to do in case of an atomic attack. We had organized disaster teams in every hospital."⁶⁰

The conspiracy theories began to die down as Worcester and surrounding towns began to rebuild, but governmental studies examining the connection between tornadoes and nuclear testing continued into 1954. Correspondence between Carroll Tyler of the U.S. Atomic Energy Commission and Lester Macha of the U.S. Weather Bureau shows the nature of these studies:

The U.S. Weather Bureau has tracked the atomic clouds from the Nevada tests in cooperation with the Atomic Energy Commission. Some unusual

⁵⁸ "Atomic Bomb Not to Blame for Tornadoes," *The Lowell Sun*, June 11, 1953, p. 1 (6).

⁵⁹ "Tornado Victims Suffered Same Kind of Lung Injury as Caused by A-Bomb Blast," *The Lowell Sun*, June 12, 1953, p. 1 (7-8).

⁶⁰ "How We'll Handle Atomic Attacks," *Worcester Evening Gazette*, June 12, 1953, p. 23 (3).

meteorological phenomena, coinciding in time with the test series, have suggested to the public that there may be a connection between the two events. We have examined many of these instances, and have found no basis for believing the atomic detonations or clouds to be related to weather occurrences. However, in view of the importance of the subject, we feel that every effort should be made to investigate it as completely and thoroughly as possible...⁶¹

The culture and attitude of the 1950s had an enormous impact on the rebuilding of Worcester after the tornado. It is safe to say, without romanticizing the 1950s, that the mind-set was different at this time. Life during the 1950s was not perfect; there were many problems. However, it is accurate to say that individuals and businesses were more helpful during this decade, and, in the case of the Worcester Tornado, this can be seen in the generosity of the residents in rebuilding and in making donations.

Immediately after the twister hit, neighbors began helping each other -- digging family members out, bandaging injuries, bringing the wounded to the hospital, anything that was needed. Individuals, such as doctors, nurses, civil defense workers, utility workers, and public officials, from surrounding communities also rushed to the scene to help. At the hospitals, so many responded to the call for blood donors that some were turned away. One survivor recalls,

At one point in that hectic evening, [I] was driving past Hahnemann Hospital when a running figure caught [my] eye. A man was hurrying across the hospital lawn toward the end of a line of would-be blood donors. As he ran, the man was rolling up one of his sleeves. The hurrying figure seemed to...embody the spontaneous

⁶¹ Lester Machta, Letter to Carroll L. Tyler of the U.S. Atomic Energy Commission, December 23, 1953.

volunteerism which began immediately and everywhere to manifest itself.⁶²

The next morning, hundreds of volunteers reported to the ravaged areas to help clear away debris and clean up as much as possible. Roland Lajoie recalls, "I'd go to Assumption College in the morning and help clean up until 2:30 or 3 in the afternoon, then I'd start working at the shop." This was quite common during this time in Worcester. Individuals, mainly men, would volunteer during the mornings or evenings and then go to their jobs for the other part of the day. High school and college students also pitched in. This is one of the reasons many areas of Worcester were cleaned up so quickly.⁶³

In addition, many institutions and businesses would not accept repayment for services or goods provided. Right after the tornado hit, neighborhood pharmacies provided bandages, gauze, and medical supplies for free. When Father Dion and a number of his colleagues from Assumption College went to buy work clothes the day after the tornado, they were not charged for their purchases. In addition, less than two days after the disaster, the Worcester District Medical Society announced that no one that received treatment for an injury related to the tornado would be billed for medical or surgical procedures, and the County Bar Association guaranteed the assistance of its lawyers, free of charge, to any tornado victim requiring legal help.⁶⁴ Tornado survivor Gustav Karlson describes, "It was like that after the storm. Everybody helped. The doctors, they didn't take any money. They wrote it all off."⁶⁵

⁶² O'Toole, 242. Since there was a great deal of blood on hand, all hospitals on the morning after the tornado referred donors to the Red Cross Chapter House in Worcester. Blood that was collected there was packed and shipped to Boston, where the emergency blood had come from the day before.

⁶³ Interview with Roland Lajoie, conducted on October 7, 2006.

⁶⁴ O'Toole, 239.

⁶⁵ Fortier, (3-4).

Catholic Charities distribution centers popped up immediately following the disaster, which were soon flooded with donations from around the country. Many individuals donated food and clothing, but some also donated cribs, bedding, furniture, and baby supplies as well. Some potential donors offered cash to these charities, but it was only merchandise that could be accepted. Scores of these individuals then rushed out to buy merchandise to donate with the cash they had.⁶⁶

It was the disaster relief efforts of the Red Cross, however, that surpassed all others. They opened stationary and mobile canteens, open eighteen hours a day, to provide food and beverages, used clothing and furniture distribution centers, and organized a system of food vouchers for needy disaster victims. In addition, the Red Cross distributed more than \$900,000 in aid to those in need. In one specific instance, a tornado survivor was told by his bank that he could not get a mortgage to rebuild his home. A few days later, as he was walking around his property, a Red Cross official stopped and, after some discussion, agreed to provide the family with \$5,500 for a new home.⁶⁷

Monetary donations from other sources were also very generous. A few days after the tornado struck, Governor Herter formed the Central Massachusetts Disaster Relief Committee. Three men were appointed to the committee: former mayor, Everett F. Merrill, publisher and editor of the *Worcester Telegram*, George F. Booth, and Bishop of the Diocese of Worcester, John J. Wright. This committee was to receive all donations for tornado relief offered by organizations, businesses, and individuals. By late July, donations to this fund, sent to Worcester from around the United States, totaled over a million dollars. A Community Council Disaster Relief Committee was then formed to review cases and allot the funds.⁶⁸

⁶⁶ O'Toole, 251.

⁶⁷ Fortier, (3-4).

⁶⁸ O'Toole, 253-254.

On June 9, 1953, Worcester, Massachusetts and surrounding towns were devastated by a massive storm that no one saw coming. The unsophisticated weather technology coupled with the belief that such a storm simply could not happen there increased the amount of injuries and fatalities. After the tornado struck, immediate connections to atomic weaponry were reached, as the Cold War was underway. However, these same Cold War fears most likely saved the lives of many residents who were familiar with seeking shelter to protect themselves and their families. Fortunately, rebuilding after the tornado was facilitated due to the generosity of many and the general goodwill of the age. Both the media and disaster relief teams later observed that, in Worcester, it took the community less than 24 hours to pick itself up. The response was incredible. In many cases, no one needed to ask for help. It just happened.