



NEW YORK STATE ASSEMBLY

TORNADOES RISING

*The Increasing Rate of Tornadoes in New York State:
An Overview of Their Frequency and Their Destruction*

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*Prepared by Guillermo A. Martinez, Edward Pagan, and Jonathan Rojas
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Preface

There is no doubt in my mind that New Yorkers are now at the highest level of risk from severe weather in our entire history. An examination of tornado activity in our State shows an increasing frequency with closer proximity to population centers that should raise a warning signal of this growing danger. Policymakers, first responders and all New Yorkers alike now need to take this issue seriously.

Data shows 69% of 407 tornadoes impacting New York State being reported since 1986. New York City alone has seen a more than 300% increase in tornadoes since 2002. Without a tornado warning system in place, it is time that a full review of the need for such a system is begun.

Too often our society has settled into a comfortable behavior of responding to emergencies and disasters after they have occurred. The data highlighted in this report should serve to unnerve elected leaders and prompt them to take diligent action to protect our residents and vital health and safety infrastructure.

The urgency to address this problem is also highlighted by a Federal Emergency Management Administration (FEMA) study which has found that on average only 14% of individuals had participated in school-based shelter-in-place drills and 10% in home-based shelter-in-place drills, while only 14% have participated in a home evacuation drill.

Earlier this year, my proposal to establish the framework to provide uninterrupted power during a severe storm or other emergencies to our hospitals, first responder headquarters, water, sewage and nursing homes was included in the adopted 2013-2014 State Budget. Included in this report are other policy proposals I have introduced in the State Assembly to ensure public safety in the face of the ever- growing threat we all now face from severe weather.

I would like to thank my Legislative Director Guillermo A. Martinez for writing and editing this report and my Legislative Intern Edward Pagan for his research and data illustrations as well as my Legislative Intern Jonathan Rojas for his research and editing support on this project.

Copies of this report are also available online at the New York State Assembly website at www.assembly.state.ny.us.

A handwritten signature in black ink that reads "Marcos A. Crespo".

Marcos A. Crespo
Member of Assembly
85th Assembly District, The Bronx



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Introduction:

It would be a tremendous understatement to declare that the weather patterns impacting New York State have changed.

Severe weather has always been a fact of nature all across our planet. Yet for most New Yorkers the devastation of severe weather has only been experienced in the comfort of their homes while watching news accounts and video images of the damage to life and property elsewhere.

In 2012 Super Storm Sandy changed this dynamic as it impacted, at different levels, almost 90% of the population of New York State. With its more than \$30 billion dollars in damage to property and critical infrastructure, this storm highlighted in the starkest of ways how unprepared the State and local governments are when it comes to emergencies of such magnitude.

While Super Storm Sandy and Hurricane Irene in 2012 were considered uncommon occurrences, New Yorkers need to understand that they will be increasingly impacted by severe weather, including tornadoes.

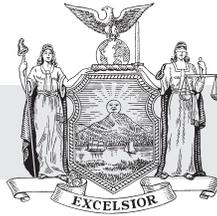
According to the National Oceanic and Atmospheric Administration, changes in the planet's weather now place an additional 100 million Americans in the path of tornadoes during winter months, including New Yorkers. A review of 62 years of data on tornadoes impacting New York indicates a disturbing pattern of increased frequency and devastation.

Over the past 15 years 146 tornadoes have hit our State, accounting for 35% of the 407 tornadoes impacting New York since 1950. Data shows 69% of the 407 tornadoes occurring since 1986, increasing in frequency over the past decade. Tornadoes now pose a tremendous risk to all of New York's more than 19 million residents.

This brief report should serve as a warning to policymakers across the State because most communities, households and individuals are ill prepared for such weather. As a state we are even less prepared to issue the warnings communities need when a tornado is imminent.

According to the researchers, the chances of a hurricane hitting New York has doubled in 2013. Such severe weather as hurricanes increases probability for the formation of tornadoes. With a projected 20 Atlantic Ocean storms, of which 3-6 are forecasted to become major hurricanes impacting the East Coast of the United States, New Yorkers are increasingly in harm's way.

The data in this report is accompanied by proposed initiatives authored by Assemblyman Marcos A. Crespo to protect life and vital infrastructure from tornadoes and other severe weather. Introduced in the State Legislature, these initiatives are part of his ongoing work to ensure the safety of New York children and families.



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Key Findings:

In 1935, tornado reporting and verifying systems were established in the United States. Since 1950 when New York began accurate reporting into the data collecting system, it has been impacted by 407 tornadoes.

Virtually every county in the State has had an experience with this natural severe weather phenomenon. Loss of life and damage to property have been caused by these high wind storms, which have ranged in intensity from Enhanced Fujita Scale Category EF0 to EF4, or winds ranging from 65 to as high as 200 miles per hour.

A review of 62 years of data on tornadoes impacting New York indicates a disturbing pattern of increased frequency and devastation. Nine of the 12 tornadoes ever recorded in New York City have occurred in the past 10 years, while 97% of all tornadoes have occurred outside NYC.

Since 1986, a total of 278 tornadoes have hit New York, injuring over 168 residents. These tornadoes account for 69% of all tornadoes recorded in the State since 1950.

In comparison, between 1950 and 1970 there were 47 tornadoes that impacted New York, accounting for only 12% of all such occurrences and affecting 24 counties in the State.

The majority of injuries to New Yorkers have occurred over the past 26 years as the number of tornadoes impacting New York has risen and reported in communities with higher population densities.

Over the past 15 years alone, 146 tornados have hit our State, accounting for 35% of all tornadoes impacting New York since 1950, and increasing in frequency over the past decade.

Tornadoes now pose an increasingly tremendous risk to all of our more than 19 million residents.

Since 1997, 63 Enhanced Fujita Category EF1, 20 Enhanced Fujita Category EF2 and 3 Enhanced Fujita Category EF3 tornadoes have hit New York State, impacting 61 counties in the State.

Three Enhanced Fujita Scale Category EF4 tornadoes have been reported in New York State since 1973 when an EF4 hit Columbia County. Then in 1985 an EF4 tornado hit Chautauqua County. The last EF4 to impact New York State was in 1989 in Montgomery County, with 29 injuries reported.

However, EF4 tornadoes are not the only dangerous category that has impacted New York. Lower category tornadoes have caused tens of millions of dollars in property damage and hundreds of injuries since 1950.



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Key Findings:

Since 2000, there have been 53 category EF1 tornadoes in New York State.

Since 2000, there have been 14 category EF2 tornadoes in New York State.

There have been a total of 16 EF3 tornadoes which have impacted New York from 1950-present.

There have been 3 category EF4 tornadoes in NYS. The first one was in Columbia County on August 28th, 1973. The second was in Chautauqua County on May 31st, 1985. The third was in Montgomery County on July 10th, 1989.

Since 1950, there have been a total of 248 people that were injured due to these tornadoes.

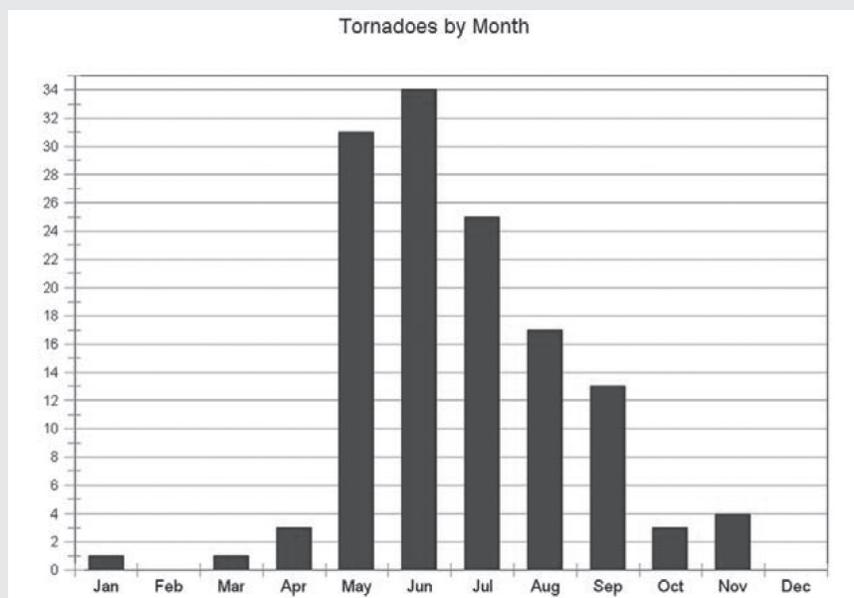
1950-1970= 47 Tornadoes

1971-1985= 82 Tornadoes

1986-1996= 134 Tornadoes

1997-Present= 144 Tornadoes

(Source: NOAA, Binghamton, New York County Warning Area. Tornadoes have occurred in every month of the year in the CWA with the exception of December and February. The greatest number occur during the late spring and summer warm seasons with the peak occurring in June, a bit later than the May peak shown by national statistics)





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Tornadoes in New York City:

According to the researchers, the chances of a hurricane hitting New York has doubled in 2013. Such severe weather as hurricanes increases the probability for the formation of tornadoes. This year scientists have projected 20 Atlantic Ocean storms, of which 3-6 are forecasted to become major hurricanes impacting the East Coast of the United States; New York City residents are increasingly in harm's way.

- Since 2003, a total of 9 tornadoes have hit in New York City, an increase of 300% in a decade
- Of the 9 tornadoes reported in New York City, four impacted Staten Island
- From 1985 to 2002, only 3 tornadoes were reported in New York City

Yet according to the New York City Office of Emergency Management, "Tornadoes are rare in New York City, and the City has no specific response plan like it does for hurricanes." Yet, based on the failure to evacuate the disabled and infirmed elderly from flood prone areas of the City and the billions of dollars in damage to unprotected critical infrastructure, New York City's cavalier attitude towards tornadoes needs to be questioned as well.

On September 8, 2012, a tornado occurred in Queens and Brooklyn, yielded by an isolated severe storm in the morning. The tornado originated as a waterspout about 1 mile south of the tip of Breezy Point, Queens, and came onshore as an EF0 tornado in Rockaway Beach. The waterspout made landfall as an EF1 tornado in Brooklyn, damaging the neighborhood of Canarsie.

On August 28, 2011, an EF0 tornado was confirmed in Cunningham Park, Queens. This weak tornado was spawned by a rotating thunderstorm rotating around then Hurricane Irene before it made landfall.

On September 16, 2010, two tornadoes ripped through New York City — an EF0 in Park Slope, Brooklyn, and an EF1 in the Bayside area of Queens.

On July 25, 2010, an EF1 tornado touched down in the Bronx.

On August 8, 2007, numerous thunderstorms produced two tornadoes across southern New York City. An EF2 tornado touched down in Brooklyn and an EF1 tornado occurred in Staten Island.

An EF0 tornado occurred in Staten Island's Bullshead and Willowbrook areas **on October 27, 2003**, during a severe thunderstorm. An intense EF1 tornado struck Staten Island again **in October 1995**, causing some property damage.

In August 1990, an EF0 tornado struck Staten Island, injuring three people. **In October 1985**, an EF1 tornado touched down in Queens, injuring six people.

(Source: New York City Office of Emergency Management)



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Tornadoes in Upstate and Long Island:

Exactly 90.3% of all of the 407 tornadoes reported in New York State have impacted Upstate communities:

Albany County has had 5 tornadoes since 1950. The first was on June 30th, 1973. Two people were directly injured and it was an EF1. The other dates of tornadoes were on July 11th, 1980, May 12th, 1984, August 28th, 1990, and May 31st, 1998. The tornado on May 12th injured 13 Albany County residents.

Erie County has suffered through 19 tornadoes since 1950. Five of the tornados were EF2 or above. The most severe was on August 19th, 1970 where an EF3 tornado injured 3 people directly. Eleven tornadoes have occurred in the past 30 years alone.

Monroe County has faced 3 tornadoes since 1950 and the most severe was on September 8th 1981, it was an EF1.

Nassau County was hit by 8 tornadoes since 1950. There were a total of 6 injuries. Three of the tornadoes were EF2's and 2 of them were EF1's.

Saratoga County has faced 7 tornadoes since 1950. The most severe was on May 31st, 1998 when an EF3 tornado occurred. 68 Saratoga County residents were injured. In 1989, two tornadoes hit on the same day as did in 1992.

Schenectady County has faced 2 tornadoes and the most severe was on June 24th, 1960 where an EF3 tornado hit and killed 9 people as well. On May 29th, 2013, Montgomery and Schenectady Counties were hit by a category EF2 tornado. One person was injured in this tornado. On that same Wednesday, Schoharie County was hit by a category EF1 tornado.

Suffolk County has faced 21 tornadoes. Twelve were classified on the Fujita Scale as 10 EF1 and 2 EF2's.

Ulster County has faced 11 tornadoes since 1950. Three out of the 11 were EF2 and 9 out 11 were EF1 or above. *The most severe was on September 20th, 1975 when 3 people were injured.*

Westchester County has faced 7 tornadoes since 1950. Three out of the 7 were EF1. On June 12th, 1991, one person was fatally injured and on June 2nd, 2000 two people were injured.

(Source: National Oceanic and Atmospheric Administration)

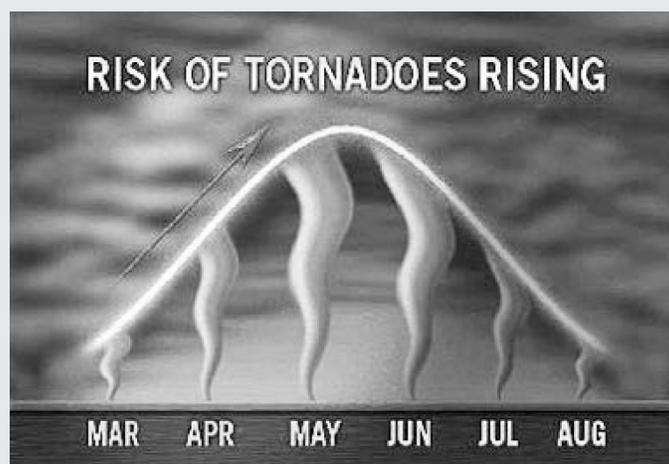


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Tornadoes: The Graphic Evidence

Data shows 69% of 407 tornadoes impacting New York State being reported since 1986. New York City alone has seen a more than a 300% increase in tornadoes since 2002. However, 97% of all tornadoes have been recorded in Upstate and Long Island counties. Without a tornado warning system in place, it is time that a full review of the need for such a system is begun (**Assembly Bill 7633**).

(Sources: NOAA and Weatherbug by Earth Networks. The first chart below is a sample of the tornadoes impacting Central New York from 1950-2001. During that period, there were a total of 130 tornadoes, 30 of which were category EF2 or greater.)





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Enhanced Fujita Scale

EF-Scale Number	Wind Speed/Intensity	Type of Damage
EF0	65-85 mph/Gale Tornado	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages sign boards.
EF1	86-110 mph/Moderate Tornado	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
EF2	111-135 mph/Significant Tornado	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
EF3	136-165 mph/Severe Tornado	Roof and some walls torn off well constructed houses; trains overturned; most trees in forest uprooted.
EF4	166-200 mph/Devastating Tornado	Well-constructed houses leveled; structures with weak foundations blown off some distance, cars thrown and large missiles generated.
EF5	Over 200 mph/Incredible Tornado	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel reinforced concrete structures badly damaged.



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Policy Initiatives & Recommendations Needed to Improve Public Safety:

Confronted with increased rates and intensity of devastating weather phenomena, New York State has failed to address major threats to its residents and critical health and safety infrastructure, with a few minor exceptions.

Currently New York State:

- Does not have a tornado warning system in place even though tornadoes are increasingly impacting all regions of our State (**Assembly Bill 7633 - Crespo**)
- Does not have nuclear power plant disaster preparedness plans for communities within a 50 mile radius of our State's six nuclear reactors (**Assembly Bill 2303 - Crespo**)
- Does not have a public policy mechanism to incentivize emergency preparedness of its residents that will help them cope with a natural or man-made disaster (**Assembly Bill 6532 - Crespo**)

New York has a history of being impacted by tornadoes. While that history is not as severe as other states, a review of data on tornadoes shows a clear pattern of increased tornado activity in New York. Over the past 26 years, a total of 278 tornadoes have hit New York, injuring over 168 residents. These tornadoes account for 69% of all the 407 tornadoes recorded in the State since 1950.

Other severe weather has become a normal occurrence in New York. Torrential rains, major flooding, high wind storms and hurricanes have all left scars on our State and our residents. With an increase of such events in rates never before documented, it is clear New York must do more to protect its residents, a vast majority who are unprepared to handle a major disaster or emergency.

Super Storm Sandy caused the emergency shutdown of three of the six nuclear reactors operating in New York, and over \$30 billion dollars in damage that included destruction to vital health and safety infrastructure. Other storms have flooded entire towns, washed away sections of major roads and created environmental hazards as billions of gallons of raw sewage spilled into our waterways.

There is much work that needs to be done to protect our residents and our critical infrastructure from the rising threat of severe weather including increasing rates of tornadoes near population centers.



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Policy Initiatives & Recommendations Needed to Improve Public Safety:

Our residents are also not prepared to deal with emergencies caused by severe weather.

This problem is highlighted by a Federal Emergency Management Administration (FEMA) study which has found that on average only 14% of individuals had participated in school-based shelter-in-place drills and 10% in home-based shelter-in-place drills, while only 14% have participated in a home evacuation drill. Nearly 80 % had not conducted a home evacuation drill, and over 70% did not know their community's evacuation routes.

- For millions of low-income New Yorkers, the FEMA study found, their income is a factor and they are less likely to have taken preparedness measures. This group also indicated an increased need for help in an evacuation.
- Individuals with lower household incomes were less likely to have been prepared for an emergency during the past six months, and they were more likely to cite cost as a barrier to preparing than were those with higher incomes.
- For individuals with a disability, 15% reported having a physical or other disability that would affect their capacity to respond to an emergency situation.
- Another 14% of survey participants indicated they lived with and/or cared for someone with a physical or other disability.

FEMA also found that individuals with household incomes of \$50,000 or more were more likely than those with a lesser income to have disaster supplies in their cars, a household disaster plan, communicated this plan with others, volunteered to help in a disaster, taken a preparedness training or CPR course, communicated the importance of preparing to someone else, and believe that preparedness would actually help them handle a disaster situation.

The combined double punch of a major natural or man-made disaster with the unpreparedness of our residents for such events is a red flag that needs to be addressed by policymakers.

Of immediate urgency to State lawmakers should be the implementation legislation that will increase the ability of our residents to protect themselves from severe weather and survive a major disaster. This includes the implementation of a tornado warning system (**Assembly Bill 7633**), a review of the nuclear power plant disaster preparedness plans of communities within a 50 mile radius of our State's six nuclear reactors (**Assembly Bill 2303**), and making sure that New Yorkers have the emergency preparedness to help them cope with a major disaster (**Assembly Bill 6532**).



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Policy Initiatives & Recommendations Needed to Improve Public Safety:

The following legislative bills, to help protect our residents from increasing rates of tornadoes and severe weather, have been introduced in the New York State Legislature and should be enacted without further delay:

- **Assembly Bill 7633 – Amends Executive Law: Requires the division of homeland security and emergency services to provide recommendations on the implementation of tornado warning systems** in the state; provides for installation of tornado sirens and use of firehouse sirens; authorizes the use for other technology available for notification of impending tornado.

Many states have established outdoor warning siren systems consisting of electromechanical sirens to protect their residents from tornadoes. **New York has not!**

The sirens are tested on a regular basis and the public is informed on their purpose and on individual actions to be taken to stay safe. When the sirens sound, shelter should be sought immediately. Rising rates of tornadoes in New York are clear evidence that such a system is needed, including the use of cellular technology to alert our residents.

- **Assembly Bill 2303 – Amends Executive Law: Requires a nuclear power plant disaster preparedness plans study by the Commissioner of the Division of Homeland Security and Emergency Services to review disaster preparedness plans as they relate to nuclear power plants for effectiveness within a 50 mile radius of the six nuclear plants** in New York State. Those nuclear reactors located near our largest cities: Rochester, Syracuse and New York City.

Indian Point nuclear power plant is located within 35 miles of 52% of New York's population, and only 24 miles from New York City. The oldest nuclear power plant in the nation is near the city of Rochester. Severe weather is now a growing risk to these facilities and their radioactive threat.

Any radiation discharged from those nuclear plants would quickly travel across the state, threatening the lives of most New Yorkers. In 2012, during Super Storm Sandy, three of the six reactors were shut down due to the severity of the storm. A stronger storm than Sandy could create major damage to a nuclear power plant in our State.

It took the radiation released from damaged nuclear reactors in Fukushima, Japan less than five days to travel 160 miles south to Tokyo. The radiation in the atmosphere was considered to be so dangerous that the United States Navy moved out ships stationed near Tokyo and issued potassium iodide pills to military personnel and their families.



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Policy Initiatives & Recommendations Needed to Improve Public Safety:

- **Assembly Bill 6532 – Amends Tax Law and creates the “disaster preparedness and emergency planning act”;** creates a sales tax exemption for emergency preparedness supplies; requires the division of homeland security and emergency services, in conjunction with the department of taxation and finance, to establish, promote and publish on the web a list of eligible items.

Super Storm Sandy was a clear indication of how unprepared localities and households were to deal with a major natural disaster. Tens of thousands remained in their home and in harm's way, hundreds of infirmed elderly were not evacuated and the NY National Guard and disaster relief organizations had to distribute food, water and temporary shelter during the low temperatures of October in New York.

It is obvious that government must do more to help the citizenry be better prepared to deal with emergencies. Therefore, creating two, one-week sales and use tax-free weeks for the purchase of emergency supplies will help promote emergency preparedness and make the items needed more affordable.

A recent national survey on disaster preparedness commissioned by the Federal Emergency Management Administration (FEMA) has highlighted the lack of preparations for an emergency by families and individuals and the role family/individual income plays in being prepared with emergency supplies to cope with a potential natural or man-made emergency. The survey also revealed that there is an over-reliance on the belief that first responders will be able to answer every call for help during an emergency.

This legislation, like other fiscal policy, aims at using the tax code to shape positive behavior. The fact is that in the event of a major disaster (Super Storm Sandy was only a Category 1 Hurricane at landfall) it will be impossible for first responders to address the urgent needs of countless residents.

According to FEMA, 82% of individuals feel that preparation, planning, and emergency supplies would help them handle a natural disaster, but that preparation has been made by roughly 50% of the population, with the percentage dropping significantly based on age, demographics and income levels.

In measuring preparedness, FEMA found the data indicated a direct relationship between income level and preparedness: as income increased so did measures of preparedness.

Injuries to New York State Residents by Tornadoes (1950-1970)

Total Tornadoes

47 Tornadoes

See Below

Property Damage/Crop Damage

Not Available

Injuries

28 Total Injuries

Between the years 1950-1970 there were:

F0: 11

F1: 16

F2: 8

F3: 6

N/A: 6

Breakdown:

Chautauqua County was impacted by 8 tornadoes between the years 1950 and 1970. There were a total of 11 injuries during these 8 tornadoes. Other counties that were impacted by tornadoes during these years were: Cattaraugus County, Cayuga County, Erie County, Essex County, Fulton County, Herkimer County, Jefferson County, Lewis County, Livingston County, Nassau County, Niagara County, Oneida County, Onondaga County, Oswego County, Putnam County, St. Lawrence County, Schenectady County, Schuyler County, Suffolk County, Sullivan County, Tompkins County, Wyoming County and Yates County.

Injuries to New York State Residents by Tornadoes (1971-1985)

Total Tornadoes

82 Tornadoes

See Below

Property Damage/Crop Damage

Not Available

Injuries

53 Total Injuries

Between the years 1971-1985 there were:

F0: 18

F1: 35

F2: 13

F3: 8

F4: 2

N/A: 6

Breakdown:

Ulster County and Chautauqua County were both hit by 7 tornadoes between the years 1971-1985. Ulster County had 3 injuries to residents meanwhile Chautauqua County faced 11 injuries to residents. Tornado occurrences nearly doubled from the years 1950-1970. Also tornadoes became a bit stronger as we see more of the tornadoes become stronger categorical tornadoes through the F-Scale numbers.

On August 28th, 1973, Columbia County was hit by a category F4 tornado. On May 31st, 1985 Chautauqua County was also hit by a category F4 tornado. Other counties that were impacted by tornadoes during these years were: Albany County, Cattaraugus County, Cayuga County, Chemung County, Columbia County, Dutchess County, Erie County, Essex County, Fulton County, Greene County, Hamilton County, Herkimer County, Jefferson County, Monroe County, Nassau County, Oneida County, Orange County, Oswego County, Otsego County, Putnam County, Queens County, Rensselaer County, St. Lawrence County, Saratoga County, Schenectady County, Steuben County, Suffolk County, Sullivan County, Tioga County, Tompkins County, Warren County, Washington County, Wayne County, Westchester County and Yates County.

Injuries to New York State Residents by Tornadoes (1986-1996)

Total Tornadoes

134 Tornadoes

See Below

Property Damage/Crop Damage

\$1,362,000/\$15,000

Injuries

100 Total Injuries

Between the years 1986-1996 there were:

F0: 64

F1: 55

F2: 13

F3: 1

F4: 1

Breakdown:

Erie County was impacted by 8 tornadoes between the years 1986-1996 which was the most of any county during these years.

The F-Scale numbers show that there has been a more significant amount of storms of more impact than we have seen in the previous 30 years.

On July 10th, 1989, Montgomery County was hit by a category F4 tornado. This tornado, besides causing damage to many structures and homes in the county, also injured 20 people.

Other counties that have been impacted by tornadoes between these years were: Albany County, Allegany County, Broome County, Cattaraugus County, Cayuga County, Chautauqua County, Chenango County, Columbia County, Cortland County, Delaware County, Dutchess County, Erie County, Franklin County, Fulton County, Genesee County, Greene County, Hamilton County, Herkimer County, Jefferson County, Lewis County, Livingston County, Madison County, Montgomery County, Nassau County, Niagara County, Oneida County, Onondaga County, Ontario County, Orange County, Orleans County, Oswego County, Otsego County, Putnam County, Rensselaer County, Richmond County, Rockland County, St. Lawrence County, Saratoga County, Schoharie County, Schuyler County, Steuben County, Suffolk County, Sullivan County, Tioga County, Tompkins County, Ulster County, Washington County, Wayne County, Westchester County and Wyoming County.

Injuries to New York State Residents by Tornadoes (1997-Present)

Total Tornadoes

142 Tornadoes

See Below

Property Damage/Crop Damage

\$143,408,000/\$305,000

Injuries

136 Total Injuries

Between the years 1997-Present day there were:

F0: 56

F1: 63

F2: 20

F3: 3

F4: 0

Breakdown:

On May 31st, 1998, Saratoga County was hit by a category F3 tornado which caused \$60 million dollars in property damage. The tornado also injured 68 people which is very devastating.

Suffolk County was impacted by 11 tornadoes between the years 1997-Present day.

Other Counties that were impacted by tornadoes during this time were: Albany County, Allegany County, Bronx County, Broome County, Cattaraugus County, Cayuga County, Chautauqua County, Chemung County, Chenango County, Clinton County, Columbia County, Cortland County, Delaware County, Dutchess County, Erie County, Essex County, Franklin County, Fulton County, Genesee County, Greene County, Herkimer County, Jefferson County, Kings County, Lewis County, Monroe County, Montgomery County, Nassau County, Oneida County, Onondaga County, Ontario County, Orange County, Oswego County, Otsego County, Queens County, Rensselaer County, Richmond County, St. Lawrence County, Saratoga County, Schuyler County, Seneca County, Steuben County, Suffolk County, Sullivan County, Tioga County, Tompkins County, Ulster County, Wayne County, Westchester County and Wyoming County.



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