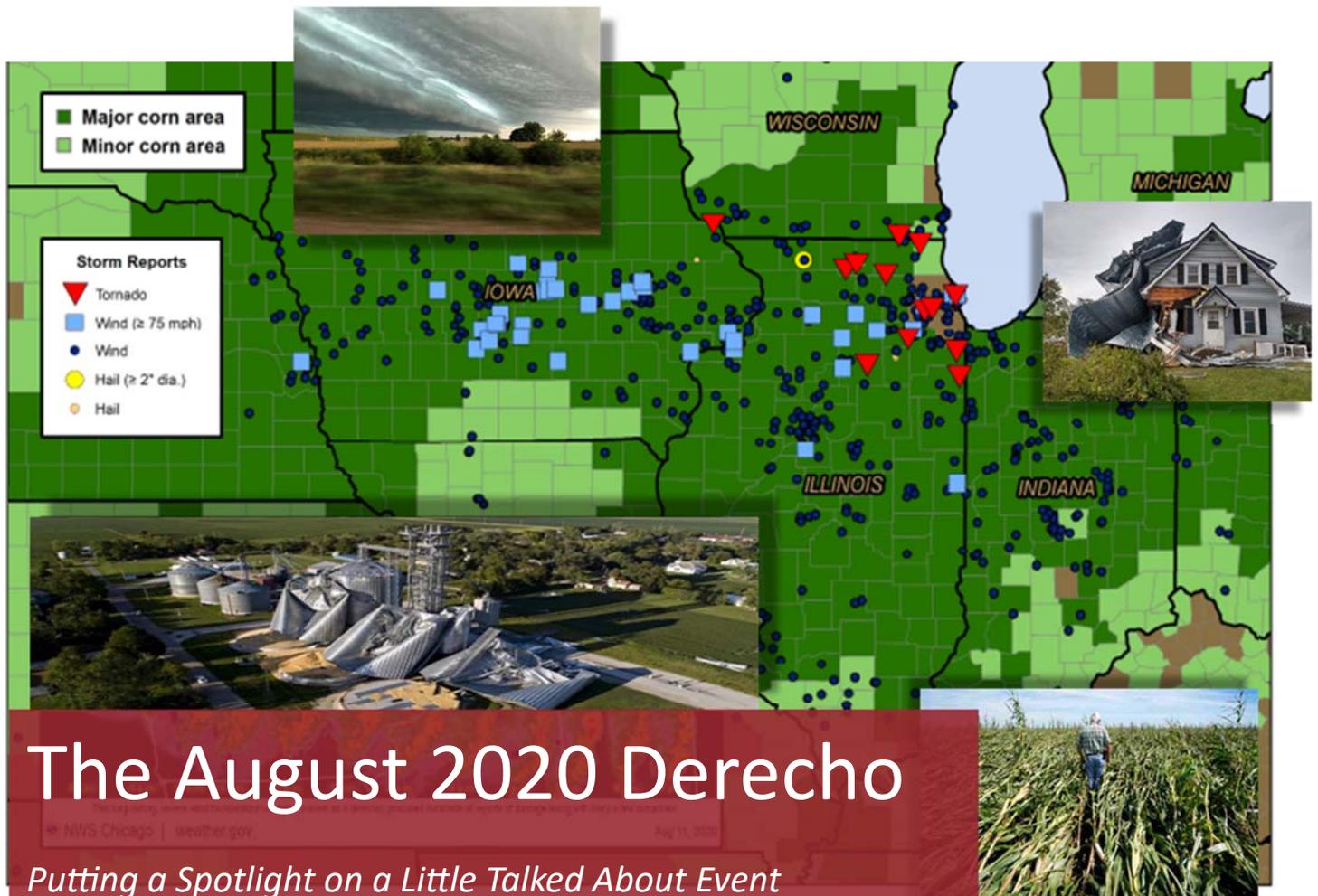




Our Independence. Your Advantage.

# ViewPoint

Analyzing Industry Issues from an Independent Perspective



## The August 2020 Derecho

*Putting a Spotlight on a Little Talked About Event*

It has been nearly two months since people in the **Midwest experienced a major Derecho event** creating substantial damage. Until now, many have not even heard of the word, derecho. But, this type of event is not a unique event. In 2020 alone, there have been 8 notable derechos thus far and there has been more than one per year for all but one year in the past decade. This particular event received limited press, but it was not just your run of the mill event. The maximum estimated winds were around 140 mph. That is as if a Category 4 hurricane touched down in Iowa.

### What is a Derecho

A derecho is a widespread, straight-line wind-storm produced by a complex of thunderstorms. Damage primarily is created by downbursts, a concentrated area of strong wind produced by a convective downdraft. Downbursts have horizontal dimensions of about 4 to 6 miles (8 to 10 kilometers) and may last for several minutes.

According to the current definition, derecho

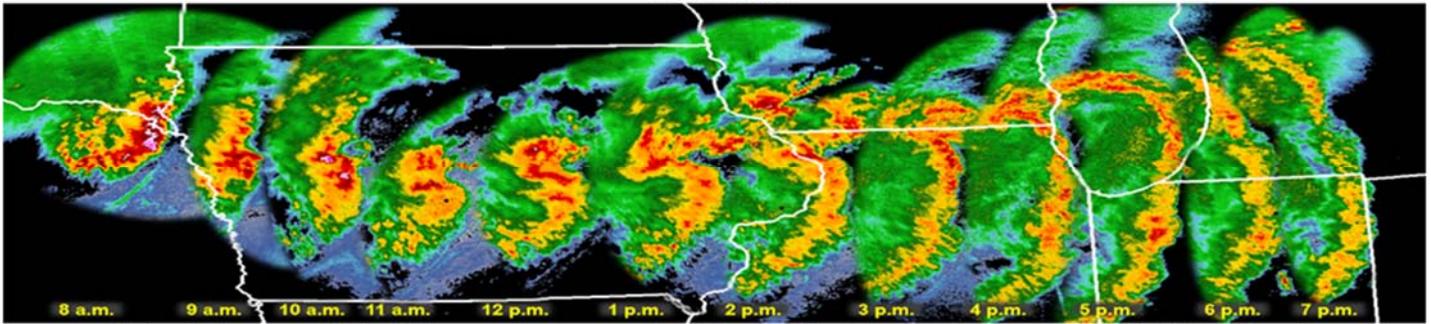
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**As if a Category 4 hurricane touched down in Iowa.**

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August 10, 2020 Derecho: Lowest Angle NWS Radar Reflectivity at One-Hour Time Steps

All times in CDT



This long-lasting, severe wind thunderstorm complex (known as a derecho) produced hundreds of reports of damage along with likely a few tornadoes.

NWS Chicago | weather.gov

Aug 11, 2020

winds must meet the National Weather Service criterion for severe wind gusts (greater than 57 mph) at most points along the storm path. But in stronger derechos, winds may exceed 100 mph.

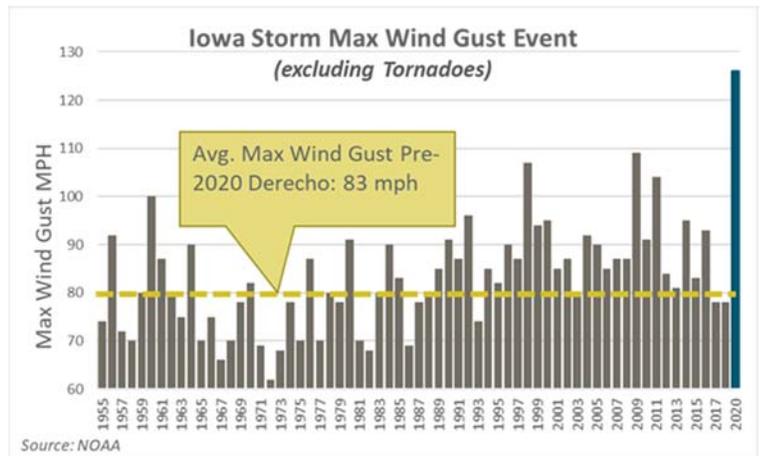
Damage occurs continuously or intermittently over a swath at least 400 miles long and 60 miles wide. The winds associated with derechos are not constant and may vary considerably along the derecho path, sometimes being below severe limits (57 mph), and sometimes being very strong (from 75 mph to greater than 100 mph).

**What do we know about the August 10, 2020 Derecho:**

A powerful line of severe thunderstorms known as a "Derecho" swept across the Midwest from Nebraska through the Ohio Valley on Monday, August 10<sup>th</sup>, producing widespread straight line wind damage.

Storms initially developed in northern Nebraska and southeast South Dakota early in the morning, and quickly intensified as they moved eastward into Iowa. Storms quickly became severe in western Iowa, and produced damaging winds near and around the Des Moines metro. Storms

began to tap into an extremely unstable environment, and began producing more widespread wind damage as they tracked through eastern Iowa. The most extreme winds, estimated at 110-140 mph, destroyed or damaged numerous outbuildings, barns, grain bins, homes, mobile homes, apartment buildings, trees, and power poles in parts of Benton, Linn, Jones, Cedar, and Clinton Counties.



With maximum measured gust at 126 mph, this event was nearly 4 standard deviations away from Iowa's historical average. Making it even more extreme -- the long duration of the high winds. Many locations experienced sustained high winds and damaging gusts for 30 to 45 minutes.

## Impact of the Derecho

This derecho caused substantial damage to property, crops and forestry, particularly throughout Iowa

- 3 fatalities, 2 in Iowa, 1 in Indiana; numerous injuries
- 1 million+ homes and businesses without power
- Destroyed or heavily damaged 8000+ homes
- Damage to corn and soy output during a Level D3 drought, making the corn not strong enough to sustain winds
- Lost forest canopy (still being assessed)

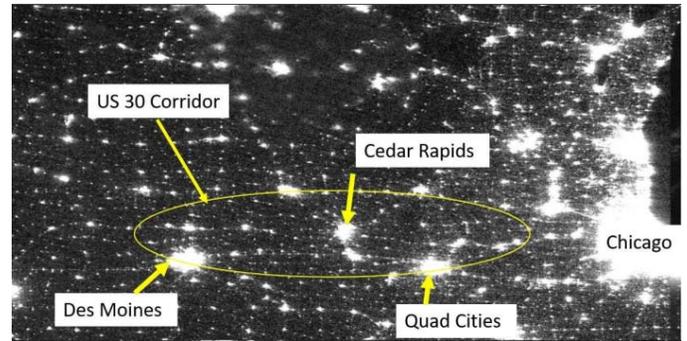
While we are already two months since the event occurred, estimating the real economic and insured impact is always difficult. In early September, Property Claims Service estimated the insured loss to be \$2.9 billion. This estimate includes losses of other severe storm activity in the region beginning on August 8 and inclusive of the derecho event.

Holborn currently represents approximately 25% of the property insurance market in the state of Iowa. Based on information received from our clients, we estimate the property insured estimate to be \$5 billion, substantially higher than

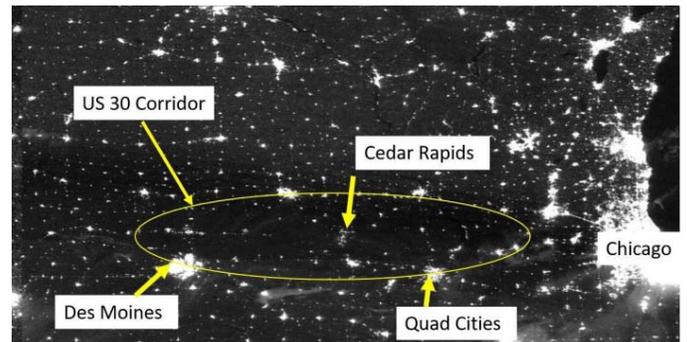
that of PCS. **With a 25% Market Share, Holborn's Estimate of Insured Loss is \$5 billion**

Commonly used catastrophe models suggest that a \$5 billion event like this, would occur only once in more than 1,000 years. With an historically large event such as this, the models will likely require further calibration.

Power Grid: BEFORE the Derecho



Power Grid: AFTER the Derecho

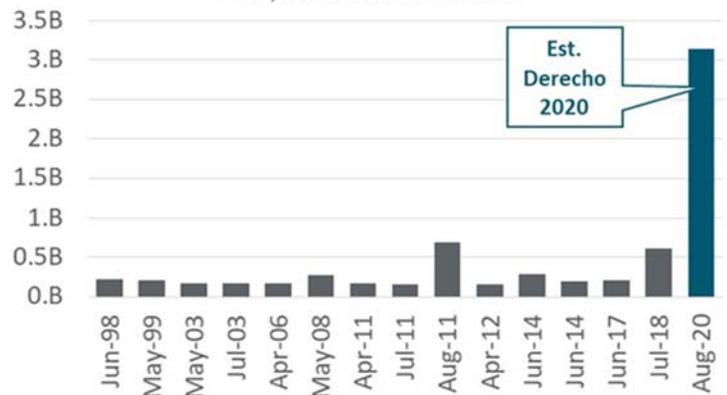


## How Does this Derecho Compare

While little has been mentioned in the national media about this event, it has been a substantial one both in the region and across the country.

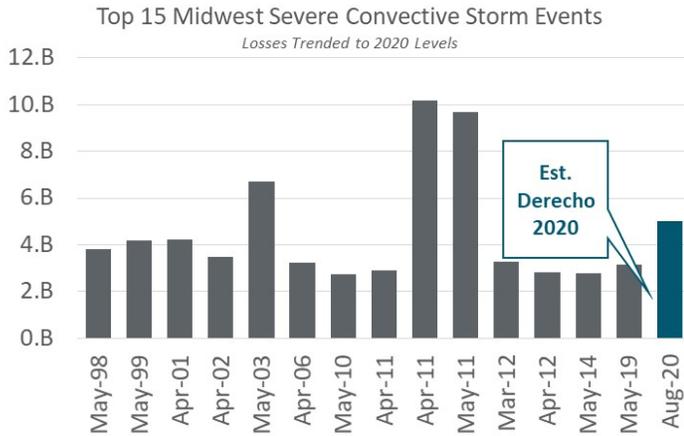
In Iowa alone, the derecho is estimated to be at well over 4.5 times higher than the largest event

Top 15 Severe Convective Storm Events in Iowa  
IA Only Losses Trended to 2020 Levels



Sources: PCS loss estimates for historical events. Derecho based on Holborn total estimate of \$5B. Includes adjustment for population changes and claims inflation

in recent history, even after adjusting for population changes and claims inflation.

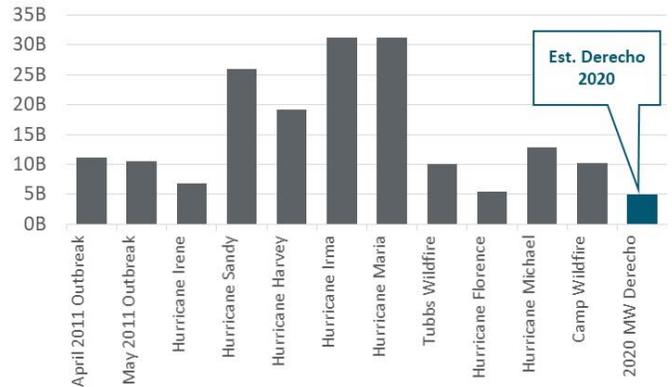


Sources: PCS loss estimates for historical events. Derecho based on Holborn total estimate of \$5B. Includes adjustment for population changes and claims inflation

Across all of the Midwest, the Derecho, which largely impacted Iowa, is looking to be the 4th largest event in recent history. If we exclude any adjustment for claims inflation or population change, it becomes the 3rd largest after the superstorms of 2011.

**The 2020 Derecho is the 4<sup>th</sup> largest event in the Midwest in recent history**

2010-2020 Countrywide Catastrophic Events Larger than \$5B  
Losses Trended to 2020 Levels



Sources: PCS loss estimates for historical events. Derecho based on Holborn total estimate of \$5B. Includes adjustment for population changes and claims inflation

And finally, on a nationwide basis, the Derecho joins the stage with many larger events, even Hurricanes and Wildfires.

### Conclusion

Holborn will continue to monitor the impact that this derecho and other events have on our clients and their reinsurance needs. Our large market share in the Midwest and ears to the ground monitoring, and collaboration, will help our clients succeed.



Holborn Corporation is an independent reinsurance brokerage firm, which was founded in 1920 and is headquartered in New York. Through the adoption of an Employee Stock Ownership Plan (ESOP) in 1998, it became exclusively owned by its employees. For additional information, please visit our website at [www.holborn.com](http://www.holborn.com).

