The 2022 Atlantic hurricane season is expected to be “well above average” in terms of the number of named storms, hurricanes, and “major” (Category 3, 4, or 5) hurricanes.

Insured losses from hurricanes have risen over the past 15 years as hurricane activity has intensified. When adjusted for inflation, nine of the 10 costliest hurricanes in U.S. history have struck since 2005. In addition to increased storm activity, coastal construction has continued, and property values risen, resulting in higher loss exposure.

Natural catastrophe losses are on the rise globally, and hurricanes account for a significant proportion of them. While it’s tempting to ascribe the increased losses to climate change, the available data doesn’t support that conclusion. In fact, recent research indicates that tropical cyclones (the umbrella term for hurricanes, typhoons, and cyclones) have actually decreased in both number and accumulated cyclone energy over the past 30 years.

We attribute this decreasing global trend to the shift toward a more La Niña-like basic state in the overall tropical climate

— Dr. Phil Klotzbach, Colorado State University, study’s co-lead author and Triple-I non-resident scholar

The La Niña climate pattern is marked by cooler-than-average water in the central Pacific Ocean. During La Niña, the Atlantic hurricane season tends to be more active and the Pacific season is usually much quieter.

Although there may be fewer tropical cyclones, the damage they cause is increasing – mainly because more people have been moving into harm’s way since the 1940s, and Census Bureau data show that homes being built are bigger and more expensive than before. With bigger homes filled with more valuables and replacement costs on the rise, the data suggests that demographic changes play a greater role in catastrophe-related claims and losses than weather and climate do.

But while hurricanes may not be more frequent or significantly more intense, they do appear to be getting wetter. While wind speeds and storm surge in coastal areas grab headlines, inland flooding is on the rise, as shown in the map below, which tracks changes in National Flood Insurance Program (NFIP) claims over the past two decades.

In August 2021, Hurricane Ida brought strong winds and heavy flooding to the Louisiana coast before delivering so much water to the northeast that Philadelphia and New York City saw flooded subway stations days after the storm passed. Ida also caused a surprising death toll thousands of miles from where the storm first made landfall: the storm claimed the lives of more than 40 people in four states.
Maintenance and preparation are key

When managing risks related to wind and water, it’s important to make sure property and buildings are well built and maintained and that any objects that might become projectiles in high wind are secured.

Because high winds can expose structures to further damage due to water seepage or animal intrusion, it’s also important to detect damage as early as possible. Historically, it has been difficult, time-consuming, and dangerous for insurance adjusters to get up onto every insured building in an area affected by hurricanes to look for damage. Advances in aerial imagery are helping to address this deficit.

Improved building codes would help

Modern building codes would go a long way toward mitigating natural-catastrophe losses. A FEMA study quantified the physical and economic losses that have been avoided due use of building codes and standards. It found that in California and Florida alone, adopting and enforcing modern codes over the past 20 years indicate a long-term average future savings of $1 billion per year.

In June 2022, the Biden Administration announced an initiative to help state and local governments adopt such codes and standards and help communities become more resilient. The initiative includes a comprehensive review of federal funding of construction and incentives for communities to adopt the latest codes and standards.