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"Building Smarter: The Benefits of Investing in Resilience and Mitigation"

U.S. House of Representatives Committee on Transportation and Infrastructure
Subcommittee on Economic Development, Public Buildings, and Emergency Management

March 18, 2021

Good afternoon. I would like to thank Chairwoman Titus, Ranking Member Webster and other members of the committee for the opportunity to testify today. My name is Ben Harper and I am the Head of Corporate Sustainability for Zurich North America.

I am here today to provide testimony as to the critical importance of investing in resiliency and mitigation as we transition to a new, low-carbon society and seek to reduce losses from disasters. Our role as an insurer not only provides us with a unique perspective on the required response, but also on the urgency in which we need to respond.

Before I start, though, let me introduce the company for which I work. Zurich North America is part of Zurich Insurance Group, a leading multi-line insurer that has been serving its customers in global and local market for 150-years. With approximately 55,000 employees, Zurich provides a wide range of property and casualty, and life insurance products and services in more than 215 countries and territories. Zurich's customers include individuals, small businesses, and mid-sized to large companies, as well as multinational corporations.

For over a century, Zurich North America has called the greater Chicago area home. In 2016, Zurich moved its U.S. corporate campus a few blocks north from its previous location in suburban Schaumburg, Illinois to an award-winning headquarters that has earned LEED Platinum® certification, the highest rating from the U.S. Green Building Council. The distinctive design underscores our commitment to resilience, collaboration and innovation. Our headquarters became the largest LEED Platinum®-certified structure of its kind in the United States and the only one of its kind in Illinois. On the one-year anniversary of Zurich's headquarters, we reported a 30% reduction in water and electricity consumption compared with our previous location. We have since improved on these metrics, and in North America operationally have reduced paper consumption by 80% and have eliminated single-use plastics. Globally, Zurich became carbon neutral in 2014 and we are committed to using 100 percent renewable energy across our global operations by 2022. In addition, we recently signed on to the EV100 pledge, committing to switch our entire global automobile fleet to electric

vehicles by 2030. These are a few examples of adhering to our commitment to a more sustainable world, which enhances our customers trust in us as we encourage them to pursue their own transitions to a more sustainable tomorrow.

As has become particularly evident in the last 12-months, no person or place is immune from disasters or disaster-related losses. As an insurer tasked with helping communities, individuals, and businesses recover from a catastrophe we are at the forefront of realizing and quantifying the large-scale consequences for the nation and its communities. We have direct insight into the difficulties in quickly returning to "normal" and are continually looking for solutions to reduce impacts and shorten recovery times. Infectious disease outbreaks, terrorism, social unrest, or financial disasters in addition to natural hazards can all create difficult fiscal, social, cultural, and environmental choices to ensure basic security and protection against hazards and disasters. My testimony today will be focused on the importance of physical resilience from natural hazards but, as risk managers, we fully recognize the interconnected nature of risk.

Using our core risk assessment skills to respond to some of the most significant long-term societal and environmental trends, we have identified climate change as perhaps the most complex risk facing society today. It is intergenerational; it is international; and it is interdependent. Representing the consensus of the international scientific community, the Intergovernmental Panel on Climate Change (IPCC) finds strong evidence that climate change is occurring, that it is influenced by human action, and that it is leading to changes in extreme weather and climate events.

For context, global losses from natural disasters in 2020 are estimated at $210 billion, of which some $82 billion was insured[1]. Both overall losses and insured losses were significantly higher than in the previous year (2019: $166bn and $57bn respectively)[2]. The US share of losses was exceptionally high: natural disasters in the US accounted for $95 billion (2019: $51bn) of overall losses and $67 billion of insured losses (2019: $26bn)[3]. Globally, of the ten costliest natural disasters in 2020, six occurred within the United States[4]. However, the most disturbing statistic is that this year's natural disasters claimed an estimated 8,200 lives[5].

It is Zurich's aim to leverage our sector's role as a primary risk signaler for society to help raise awareness of the increasing frequency and intensity of natural hazard events, and ultimately to incentivize the behaviors and best practices that will be required to both mitigate the worst impacts and adapt to changing weather patterns. We do this because Zurich's mission is to protect individuals,

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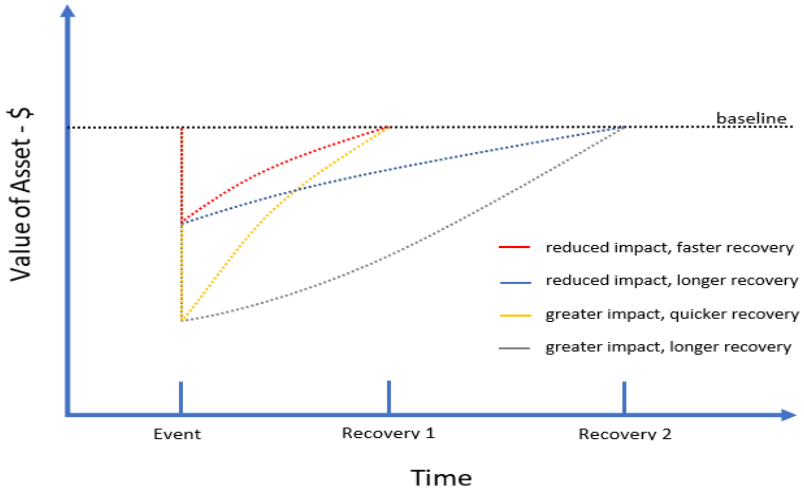
[1] https://www.munichre.com/en/company/media-relations/media-information-and-corporate-news/media-information/2021/2020-natural-disasters-balance.html
[2] Ibid.
[3] Ibid.
[4] Ibid
[5] Ibid.

businesses and communities, and because we believe it's the right thing to do. Furthermore, from an industry perspective, we do this because the impact of extreme weather events is escalating, and without enhancing resiliency and mitigation measures many assets will simply become uninsurable.

As an insurer of physical property and business continuity, we are tasked with providing economic resilience in the form of an insurance policy. Economic resilience is inclusive of three primary attributes: the ability to recover quickly from a shock, the ability to withstand a shock, and the ability to avoid the shock altogether. When an event does occur – such as a flood, fire or wind damage - it is best for both the owner and the insurer to minimize the time it takes to recover. And we know the recovery time will be less if the insured asset is able to better withstand the detrimental effects of the event or, simply put, is more resilient. This scenario is easier shown in the graph to the right:



As indicated in the graph, the value of a physical asset – perhaps a home, factory or office building – loses some value as an impact of the event. Bringing the value of that asset back to its base worth is the role of insurance. While the loss of the physical asset is clearly a significant cost, the time it takes for recovery can be just as costly, especially to the asset owner. Where we aim to be as an industry is in the smallest triangle above and bounded by the red lines, which means an insured can get back to their normal operations as quickly and efficiently as possible. This means the impact was minimalized and the speed to recovery maximized. And this will only occur when a structure or asset is built to a correct and current resiliency standard.

The property & casualty industry has a tradition of being at the forefront of disaster mitigation, which is why we are in a unique position to provide comment on resiliency and mitigation. A useful analogy is the development of fire codes in the late 1800's. During this period, several historic fires consumed vast areas of our largest cities, including New York, Chicago, and San Francisco. Recognizing that the "new normal" of tightly packed, dense construction greatly elevated fire hazard, the insurance industry sounded the alarm for adding sprinklers, fire breaks in construction, and other mitigation techniques as a necessity to maintaining community continuity. Further, the industry was forced to send risk-based price signals, which is a technical way of saying insurance will be prohibitively

expensive or simply unavailable in some cases if you do not adapt to these practices. Given the trends that are occurring in the frequency and severity of weather events, we are again sounding the alarm. Investing in mitigation measures, including resilient infrastructure, nature-based solutions, and low-carbon technologies, is required if society is to continue to operate with the continuity and resiliency that is expected.

What is encouraging is that these changes require minimal investment in comparison to the benefits received. Current data suggests that the extra cost of building resilience into infrastructure systems is only ". . . 3 percent of overall investment needs."[6] However, when taking into account both the capital costs and operating costs of the asset, in most cases the Total Lifecycle Cost will be lower in a hardened, resilient structure. And the savings are even more significant if the structure is impacted by weather. In our own post-event studies conducted after significant flood, drought and wildfire events, our analysis shows that for every $1 spent on resiliency up front resulted in $5 savings post-disaster. Like the integration of fire safety in modern construction – the necessity of which is unquestioned today – so should be inclusion of resiliency in building and infrastructure.

As I noted previously, insurers play a critical role in assisting communities, individuals, and businesses recover when catastrophe strikes. Importantly, the industry also plays a vital role in improving community preparedness and risk management **before** the disaster hits. In furtherance of this mission, Zurich has undertaken a series of initiatives to apply the analytics of insurance to a much broader set of stakeholders. Our goal with is to demonstrate the effectiveness of investing in pre-event resilience and shift funding from recovery to resilience.

In 2013 Zurich launched its Global Flood Resilience Alliance, a multi-sector partnership focusing on finding practical ways to help communities strengthen their resilience to floods. In 2018, we extended and expanded the program with the goal to increase third-party investments dedicated to pre-event resilience by $1 billion. We seek to do this by rolling out best-practice community programs that demonstrate the value of resilience-building and advocating for more investment in resilience with authorities and public and private funders.

[6] Hallegatte, Stéphane, Jun Rentschler, and Julie Rozenberg. 2019. Lifelines: The Resilient Infrastructure Opportunity. Sustainable Infrastructure Series. Washington, DC: World Bank pg.xiii.

Another approach we take is to share our knowledge about resilience through the publication of our Post-Event Review Capabilities, or PERCs. To date, we have completed 16 PERCS globally. In the United States, we have conducted four (4) such reports covering flooding events in North Carolina,[7]South Carolina,[8] and Houston,[9] and wildfires in California[10].

Zurich's PERC analyses of global disasters demonstrates that:

- Disaster risk management is playing catch-up to an increasingly larger exposure to natural hazards.
- Globally, spending on climate-related response is far greater than investment in pre-emptive risk reduction strategies.
- Where money is invested on weather-related prevention, it typically goes to protecting physical structures rather than more cost-effective risk management such as environmental planning.
- Infrastructure protection already in place – levees, for example – can produce a false sense of security.
- Few incentives exist to encourage "building back better" and including resilience into the rebuilding process.
- The neediest in society are often neglected before and after disasters, and sometimes are still recovering from one event when the next one strikes.

From our perspective, prevention and resilience-building are not just about humanitarianism, they are about more effective use of scarce funds. As noted previously, our research on the cost-benefit analysis from dozens of specific flood resilience programs shows that investing in resilience not only reduces suffering, it also is responsible budgeting.

I would like to further explain the statement I made earlier in this testimony regarding interconnected risk. This is a fundamental concept in risk management, which is directly applicable when managing physical risks as we have been discussing. We know there are direct pathways that influence outcomes, so when considering resiliency, we need to consider the entire built environment. For example, if we provide business interruption insurance for a casino operating on the Mississippi coast built with hardened, resilient components, we need to also consider the supporting infrastructure that can have a direct impact to that insured. It does no good to have a resilient building that is fully capable of operating after a major weather impact, but the roadways leading to the facility are damaged and impassable. This is just one example of why it is fundamental to consider the supporting

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[7] hurricane-florence-building-resilience-for-the-new-normal.pdf (zurichna.com)

[8] https://www.zurichna.com/-/media/project/zwp/zna/docs/kh/climate-resilience/perc-sc-report.pdf?la=en&rev=08690b6e85b2401ea050ceddfc21c658

[9] https://www.zurichna.com/-/media/project/zwp/zna/docs/kh/weather/perc_harvey_final.pdf?la=en&rev=e653cf8b7970497eac14abb7b32633fa

[10] california-wildfire-report.pdf (zurichna.com)

infrastructure when building a complete, resilient environment. Lastly, the urgency in addressing these issues should be considered immediate. Just two weeks ago, the American Society of Civil Engineers (ASCE) published their 2021 America's Infrastructure Scorecard that gave the U.S infrastructure an overall grade of C-, which sadly is an improvement from the previous score of D+. Simply put, we are at a crossroads with regards to aging structures and, combined with the significant increase in severe weather events, we can no longer afford to deploy temporary or band-aid fixes. And without proper resiliency standards as an integral part of all vertical and horizontal construction, we will simply be in the same situation we are today: facing increased perils without proper preparedness – and all at a significant cost.

In closing, let me reinforce that the insurance sector has a fundamental role to play in helping society prepare for and address the costs associated with severe weather events. We are proud of the leadership our sector is taking in driving awareness and action on this critical issue. Zurich is dedicated to continuing to play a leadership role in driving global sustainability, and we invite and encourage everyone to join us in this essential effort.

Thank you.