

New Public-Private Partnership Launched to Help Communities Bridge Gap Between Climate Data and Resiliency Planning

White House OSTP and partners launch Partnership for Resilience and Preparedness (PREP) to harness the data revolution for climate resilience by helping local governments access the best available information to manage climate risks

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SUMMARY

White House OSTP and partners launch Partnership for Resilience and Preparedness (PREP) to harness the data revolution for climate resilience by helping local governments access the best available information to manage climate risks

Key points:

- Communities, companies, and investors making long-term infrastructure decisions need to know how climate change could impact them; require relevant data and guidance to plan for climate risks.
- Risks from climate change impacts like more frequent and extreme storms, floods, and droughts set to increase 50 percent over the next 12 years.
- Nearly 1.9 million U.S. homes, valued at \$882 billion, at risk of flooding from sea level rise.
- Approximately 60,000 miles of U.S. coastal roads already exposed to flooding from coastal storms and high waves.
- New public-private PREP partnership will help planners identify priority data to improve climate resilience and will provide an open-source platform to enhance data accessibility, innovation, and knowledge sharing.

NEW YORK (September 22, 2016) — Climate change is accelerating the intensity and frequency of extreme weather across the globe, with increasing risks to communities and businesses. The White House Office of Science and Technology Policy (OSTP), World Resources Institute (WRI), U.S. Global Change Research Program (USGCRP) and a network of partners today launched the **Partnership for Resilience and Preparedness (PREP)** to help communities, companies and investors use data to improve climate resilience planning.

Harnessing the data revolution to improve climate resilience efforts will require a diverse set of partners including government, civil society, the private sector, and international organizations.

“Understanding the threats posed by climate change and extreme weather are critical to protecting people, homes, businesses and livelihoods. Data must be part of the solution,” said **Janet Ranganathan**, Vice President for Science and Research, WRI. “PREP will leverage open data and open-source computing to help planners build resilience in their communities by connecting those making decisions with the data they need, in a format they can use. Harnessing the data revolution as a force for good to strengthen climate resilience will only be possible with partnerships across government, civil society, the private sector and community organizations.”

PREP collaborating partners working on platform development include **WRI, NASA, NOAA, U.S. Department of the Interior, Amazon Web Services, CARTO, Descartes Labs, Earth Knowledge, Esri, Google Cloud Platform, Google Earth Engine, Sonoma County Climate Resilience Team and Vizzuality**. In its interagency capacity, **USGCRP** will act as the government-coordinating partner. Additional working group collaborators include Earth Science Information Partners, Forum One, Future Earth, Group on Earth Observations, IBM and Microsoft.

PREP, which emerged out of the Climate Data Initiative, seeks to empower a data-driven approach to building climate resilience by:

- **Engaging communities** to identify data needs.
- Identifying and **reducing the barriers to access, contribute, and use data** and information products for climate resilience.
- Developing an **open-source platform** to enhance access to and usability of climate-relevant data and information
- **Translating data into actionable information** to help inform planning decisions for people on the ground and providing access to the necessary tools and functionality communities need – data availability alone is not enough.
- Providing data translators with easy access to usable data they need in order to develop the decision-support tools needed to **inform and build climate resilience**.

“PREP is about reaching not just across the federal government, but across the public and private sectors, seeking out the best talent, the best capabilities to turn Earth science data into accessible information,” said **Dr. Ellen Stofan**, Chief Scientist, NASA. “And nothing could be more critical than making this country, and countries around the world, more resilient to the effects of climate change.”

While the world urgently needs to develop and harness data to better understand how climate change is affecting local communities, climate data is often inaccessible, trapped in silos, or too technical to use. Government and private sector planners typically have to rely on static reports or sort through hundreds of sources with conflicting or confusing data, often without guidance on what data exists, which data to use for projections, where data comes from, or if it is outdated.

Conversely, federal agencies have a vast supply of data, updated frequently from satellites and other sources, without a direct connection to the users who need it. And governments often don’t know the

specific data needs of planners – meaning information may be discarded without knowing its value.

PREP seeks to bridge this gap by launching a beta platform, www.prepdata.org, to provide local governments with dynamic data, climate reports, and projections directly sourced from NASA, NOAA, and others as they become available. The platform will be open-source and technology agnostic to suit the needs of all users. PREP seeks to empower users to pull information relevant to their community into data-driven dashboards that can better guide climate adaptation decisions.

Government partners like NASA, NOAA and DOI will provide global climate data and modeling, private technology partners will provide additional data and engineering support, and civil society groups will help engage users to understand their needs. WRI is the non-government partnership coordinator, focused on developing the beta PREP platform, which is powered by Resource Watch, an open architecture data system. In its interagency capacity, USGCRP will act as the government-coordinating partner.

The PREP beta platform is launching with domestic and international collaborators including Sonoma County, California; the Washington State Climate Impacts Group; Porto Alegre, Brazil; and the U.S. National Climate Assessment team. PREP plans to scale up after launch with testing in other communities around the globe over the next 12 months.

“Sonoma County is in the midst of experiencing climate change and that means higher temperatures, more extreme rainfall events and prolonged droughts. PREP has helped our community work together and integrate climate risk data into one central online tool that is available to our whole community,” said **Efren Carrillo**, Chairman of the Sonoma County Water Agency. “Before PREP, this data had no single home; instead it was fragmented amongst our government agencies and community organizations. Our urban planners, farmers and community now have the ability to plan for the future with this critical PREP climate resiliency tool.”

PREP will seek to expand data transparency so planners know if data comes from governments or commercial entities, clarifying data sources from the start to distinguish which data are most useful. Users will be able to share their plans, learn from others, and pull government data from multiple global datasets for specific locations. PREP will also promote data publication standards – especially from government entities – ensuring published data formats and data types produced by agencies are useful for long-term planning.

The ability to create customized climate risk dashboards is expected to be fully ready and publicly available for any user within one year. In the interim, the partnership will continually add datasets and case studies as available.

For more information visit www.prepdata.org.

ADDITIONAL QUOTES

Dr. Kathryn Sullivan, Administrator, National Oceanic and Atmospheric Administration and Under Secretary of Commerce for Oceans and Atmosphere:

"Communities across the country are becoming more vulnerable to natural disasters and adverse long-term environmental changes. NOAA has long provided information and services that help communities tackle such challenges head on and become more resilient. We look forward to working with this partnership to make it even easier for decision makers to find and use the tools and data they need most."

Javier de la Torre, Chief Executive Officer, CARTO:

"In the area of climate change, the universalization of data and digital tools will be key to enabling and empowering the millions of eyes we are going to need to overcome its challenges. CARTO is committed to providing cutting edge self-service location intelligence technology to make PREP a big success."

Thomas (Tod) Dabolt, Geospatial Information Officer, U.S. Department of the Interior:

"DOI will contribute relevant data and services from the Federal Geospatial Platform (GeoPlatform) and facilitate the delivery of Federal information on climate resilience. DOI will improve the reliability and performance of the most widely used PREP climate services in cooperation with other Federal agencies, developing those data by leveraging the GeoPlatform's cloud-hosting services. DOI will also enhance users' ability to search and use climate data through open-application-programing interfaces (APIs) delivered through the GeoPlatform and used by PREP."

Steven Brumby, cofounder & Chief Strategy Officer, Descartes Labs:

"As humans we're conditioned to naturally react and adapt to changes with the weather or surrounding environment, but we lack the necessary information to notice these warning signs in advance. We rely on maps to understand the world around us, but there are so many layers and caveats that maps do not see. What we need is a living, breathing atlas that can continuously provide data about our planet so we can react accordingly. The PREP platform is the answer to making real-time, scientific climate data, forecasts and insights easily digestible and available to the widest possible audience."

Julia Armstrong D'Agnese, Co-Founder and Chief Executive Officer, Earth Knowledge:

"As a technology company, we see PREP bringing order to some of the chaos of disparate environmental data and tools by providing integrated government agency data, and integrated dashboard tools that communities world-wide can select from and customize for their own needs. From the perspective of the Engaged Community with Sonoma County, PREP facilitates isolated global communities to learn from each other and provide a way to bring valuable information from

many different organizations together for decision-making potentially saving lives, resources, and costs.”

Andrew Turner, Director and Chief Technology Officer, Esri Research and Development Center in Washington, D.C.:

“Increasing access to scientific information offers a dramatic opportunity to improve climate-affected decision making by local governments and business. We’re dedicated to supporting government agencies making their data available to the public and citizen tools for telling their story.”

Chris Wolz, Chief Executive Officer, Forum One:

“We are pleased to work with PREP to define the data and digital needs of communities around the world working to address climate resilience. It’s critical to have a strong understanding of the users’ needs to guide PREP and its partners in developing improved data services to aid in resilience planning across infrastructure, health, agriculture and other sectors.”

Rob Bernard, Chief Environmental Strategist, Microsoft:

“Decision-makers today are facing increasingly complex challenges related to climate change. By making critical data both more accessible and rapidly available, we can accelerate the development of tools, such as PREP, that harness that data to empower communities to make smarter decisions. Microsoft is enthusiastic about joining with government and private industry partners to tap into the power of data and technology to improve urban resiliency, risk management challenges and help address climate change.”

David González, Founder and Chief Technology Officer, Vizzuality:

“Simply having access to data is not enough if we want to make our planet resilient to climate change. We need people to use that data and share their insights with the rest of the community. The PREP platform combines open-source technology and intuitive design to create a place that inspires people to take action and share their stories of how they did it. As the PREP community grows we’ll gather more data and insight which in turn will lead to better climate policies and a bigger impact.”

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About Partnership for Resilience and Preparedness

The Partnership for Resilience and Preparedness (PREP) is a public-private collaboration to empower a data-driven approach to building climate resilience. PREP aims to help planners, investors, and resource managers more easily incorporate climate risks into their decisions by enhancing access to relevant data and facilitating collective learning through insights on climate change. www.prepdata.org

About World Resources Institute

WRI is a global research organization that spans more than 50 countries, with offices in the United States, China, India, Brazil, and more. Our more than 550 experts and staff work closely with leaders to turn big ideas into action at the nexus of environment, economic opportunity and human well-being. www.wri.org

About CARTO

CARTO leads the world of location intelligence, empowering any organization and individual to discover and predict key insights through location data and then makes it available to their organization or the general public in the form of location intelligence apps. The apps, built by developers or data analyst using CARTO's self-service platform, help optimize processes, predict situations, and overall improve performance by leveraging location data. <https://carto.com>

About Earth Knowledge

Earth Knowledge, a global environmental information technology leader, provides software solutions for global change to business and governmental agencies to maximize operational efficiency, profits, and mitigate costs and risks in the areas of agriculture, water, land, climate, health and resilience. Earth Knowledge decision tools have been used in 80% of countries of the world. www.earthknowledge.net

About Esri

Since 1969, Esri has been giving customers around the world the power to think and plan geographically. The market leader in GIS, Esri software is used in more than 350,000 organizations worldwide including each of the 200 largest cities in the United States, most national governments, more than two-thirds of Fortune 500 companies, and more than 7,000 colleges and universities. Esri applications, running on more than one million desktops and thousands of Web and enterprise servers, provide the backbone for the world's mapping and spatial analysis. Esri is the only vendor that provides complete technical solutions for desktop, mobile, server, and Internet platforms. esri.com/news

About Forum One

Forum One is a full-service digital agency that works with mission-driven organizations to create the stunning designs, smart messaging, and custom-built technology tools they need to realize their goals and extend their influence in the areas they care most about. <https://forumone.com/>

About Vizzuality

Vizzuality is a world-leading data design agency that creates bespoke and compelling visualizations to help our clients tell the stories that matter to them and their communities. From developing digital tools that monitor deforestation to increasing government transparency through easy-to-use online

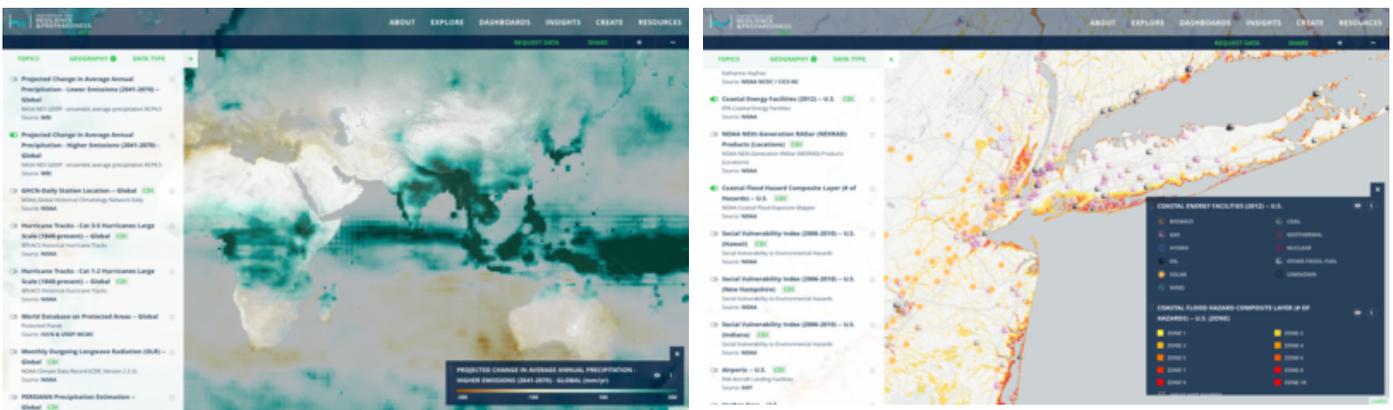
dashboards, our work often bridges the gap between policy, science and citizens – making complex information less complicated and equipping world-changing organizations with a new way to communicate their research to the world. www.vizzuality.com



RELEVANT LINKS

 To learn more, visit <https://carto.com>

IMAGES



ABOUT CARTO

CARTO leads the world of location intelligence, empowering any organization and individual to discover and predict key insights through location data. With CARTO's intuitive location intelligence platform, analysts and developers build self-service location based apps that help optimize operational performance, strategic investments, and everyday decisions.

Founded in 2012 by a team of experts in geospatial development, big data analytics, and visualization techniques, CARTO is based in New York and Madrid, with additional locations in Washington D.C., London, and Estonia. CARTO has a team of 100 employees, a portfolio of 1,200 customers including BBVA, BCG, NYC, Twitter, and Vodafone and more than 200,000 users over the globe. The company is backed by investors such as Accel and Salesforce Ventures.



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