



**VII Regional Platform for Disaster
Risk Reduction in the Americas
and the Caribbean (RP21)**

*Building Resilient Economies in the
Americas and the Caribbean*

1 to 4 November 2021, Virtual Event



CONCEPT NOTE

Title: Parallel Session 2, Enhancing the resilience of infrastructure

Date and time: Monday, November 1, 2021 (Day 1)

2:00 PM - 3:00 PM Jamaica time, Eastern Standard Time Zone (Jamaica, Panama, Mexico, Peru)

Venue: Virtual

Lead organizations: Pan American Health Organization (PAHO)

Co-lead organization: United Nations Office for Project Services (UNOPS), World Bank (WB)

Contributing Agency: United Nations Office for Disaster Risk Reduction (UNDRR)

GOALS

1. Provide ideas, recommendations, tools, practical examples and real references on how to enhance the resilience of infrastructure.
2. Promote the incorporation of disaster risk assessments in the development and implementation of territorial policies for the design, contracting, construction and operation of resilient infrastructure, as well as the use of guidelines and monitoring tools based on expected demographic and environmental changes.
3. Document the actions implemented in the countries of the region for the design, contracting, construction and operation of national resilient infrastructures with a priority focus on environmental sustainability.
4. Identify best practices for public and private investments in building resilient infrastructure including national health systems.

MEASURABLE OUTCOMES

1. Participants are made aware of actions that can be taken, considerations that must be given and best practices that can be applied to enhance the resilience of infrastructure.
2. Relevant interventions in strengthening resilient infrastructure considering environmental sustainability, socioeconomic aspects, decision-making and intersectoral collaboration as essential elements of reference.
3. Best practices implemented in cooperation with private and public organizations to promote the resilience of new and existing vital infrastructure, including water supply, transportation and telecommunications, educational facilities, hospitals and other health facilities.
4. Experiences where the strengthening of health infrastructure enabled more efficient emergency response and recovery, including COVID-19.

GENERAL DESCRIPTION

Beyond economic factors, infrastructure has important implications in terms of social development, since it directly determines the population's access to basic services, facilitates the supply of drinking water and energy, and ensures greater defense against shocks and stresses.

Investment in infrastructure is a fundamental part of the global economy. Only in Latin America USD 75 billion is allocated annually to infrastructure, according to Infralatam data. It should be much more – USD 150 billion – because if infrastructure development does not consider disaster risk, it could generate losses of a trillion dollars in the next 10 years. Hurricanes Eta and Iota, which have just struck Central America, precisely illustrate the vulnerability of today's infrastructure to disaster.

The net benefit of investing in more resilient infrastructure in low- and middle-income countries would amount to USD 4.2 trillion, representing a benefit of USD 4 for every dollar invested.

Disasters of natural, antropoc or biological origin can impose significant and lasting stress on social, financial, and ecological systems. The benefits of creating environments that are resilient to adverse weather or climate-related events are recognized to help promote and sustain community development. The real challenge is finding ways to balance the preservation of the social-ecological systems on which communities depend against the constant barrage of natural hazards.

The COVID-19 pandemic has shown the consequences of systematic underinvestment in resilience. With COVID-19 recovery investments allocated to new infrastructure and given that most of the funds allocated for recovery will be used to support public investment and key structural reforms, it is critical that risk reduction and resilience considerations shape how and where these resources are spent.

Resilient and sustainable infrastructure is defined as a system that has the capacity to endure over a long period of time, enables the human-built environment to thrive, and provides an opportunity for human society to improve its quality of life, without compromising the integrity and availability of natural, economic and social assets for future generations. Recent extreme events and the resulting disaster impacts around the world have highlighted the importance of sustainable and resilient infrastructure



systems, especially in historically disadvantaged communities and hazard-prone areas. Public and private agencies have begun to develop sustainability plans that focus on protecting physical systems along with community capital and public health in light of disasters and climate change. However, these emerging developments require long-term cooperative management, investment, and coordination across multiple agencies and sectors, at the same time that communities face limited budgets and reduced capacity to address looming environmental impacts.

Given the link between road networks and other essential facilities, such as hospitals or schools, and their role in induced community vulnerability, reducing vulnerabilities and structural imbalances in these networks should be one of the objectives for planning resilient infrastructure. However, these searches can be compromised when the negative cascading and cross-level effects that actions taken at the local level can have on global goals are disregarded, such as coordination problems in decentralized areas.

QUESTIONS THAT THE SESSION WILL SEEK TO ANSWER

1. What have we learned from the COVID-19 pandemic regarding the resilience gap in infrastructure (including services)?
2. What good practices/considerations can we apply in infrastructure planning, design, and implementation to improve resilience? Are there real success stories that can be used as a reference?
3. How can we encourage risk-informed infrastructure investments, planning and operational decisions?
4. How can we encourage more private sector investments in resilience and improve public-private partnerships for infrastructure resilience?
5. How can we develop a systemic approach for understanding and building infrastructure resilience?
6. How can we improve information sharing across the different stages of infrastructure development and operations?
7. How do we expand the risk perception of infrastructure owners? What tools are helpful for communicating risk metrics, data standardization, and interoperability?

