





## A Roadmap for Safer Schools

## Summary of presentations

Monday, January 30, 2017 Day 1

10:00 - 11:00 Session 1

## Establishing a School Infrastructure Baseline

# New Zealand's school property management information system

Howard Cattermole

Group Manager Asset Management & Finance, Education Infrastructure Service, Ministry of Education of New Zealand

Assessing the safety and quality of school infrastructure and planning investments in the sector require an efficient method to collect, analyze, communicate and update relevant information regarding the portfolio. This presentation will discuss how a national school property management information system was developed in New Zealand and how the system serves as a tool for the Ministry of Education to manage school infrastructure and plan investments in the short, medium and long terms.

## Contributing to a global school infrastructure baseline

## Dina D'Ayala

Professor of Structural Engineering, University College London

In a global world, there is great potential to open new channels for dissemination of knowledge and capacity building worldwide. This presentation will discuss the importance of conducting a systematic and comprehensive structural classification of school infrastructure, and present ongoing efforts to scale up analytics that is traditionally carried out at a national level to a global scale.



## 11:30 – 12:30 Session 2 Understanding the Construction Environment

# Regulatory environment for school infrastructure in the United States: past, present, and future

Veronica Cedillos Applied Technology Council

The regulatory environment incorporates local forms of construction, perception of risk, expectations of safety, legislation and enforcement. Effective and comprehensive regulatory environments deeply contribute to reduce the risk from natural hazards. This presentation will discuss how the regulatory environment for school infrastructure has evolved over time in the United States toward a more effective culture of safety, and what the remaining challenges and opportunities for improvement are.

# Understanding the local construction environment using a systematic approach

Joseph Stables ARUP

The identification of key stakeholders, procurement and construction management processes, and construction technology is a key task to determine the contributing factors of risk and the quality of school infrastructure. This presentation will discuss how this task can be carried out in a thorough and systematic manner.



## 14:00 – 15:00 Session 3 Understanding the Financial Environment

### Overview financing of school infrastructure in a region

Tigran Shmis Senior Education Specialist, World Bank

The financial environment within which school infrastructure is planned, designed, constructed, operated and maintained has a key influence on current risk level and the capability to scale up school infrastructure programs. This presentation will discuss the current school infrastructure related portfolio and financial environment of countries in the Europe and Central Asia region, and how this environment contributes to the planning and quality of school infrastructure and learning spaces.

## The financing investment system in Japan

Shoichiro Michibata

Subsection Chief, Local Facilities Aid Division, Department of Facilities Planning and Administration, Ministry of Education, Culture, Sports, Science and Technology

The financial environment evolves differently over time in regions and countries depending on the local needs, opportunities and challenges. This presentation will discuss how Japan, located in one of the most prone regions to natural hazards in the world, has financed a large-scale retrofitting program that successfully made school infrastructure more resilient to earthquakes.

## 15:30 – 17:00 Session 4 Disaster Risk Assessment

## Interactive Session: Decision-making process to reduce risk – the case of Peru

Luis Yamin Professor of Civil Engineering, Universidad de los Andes

Located in a seismic prone area, and with a national portfolio of over 300,000 school buildings, Peru faces complex challenges to improve the resilience of its school infrastructure. This interactive session will discuss how the first national probabilistic risk assessment allowed the quantification of the current risk and future benefit of risk reduction interventions over time, and how these results served as a fundamental input for the planning and prioritization of national risk reduction programs.



## Tuesday, January 31, 2017 Day 2

## 9:00 – 10:00 Session 5 Safer School Investment Opportunities

#### Improving the resilience of school infrastructure in Japan

#### Tetsuji Kimura

Deputy Director, Office for Disaster Prevention, Department of Facilities Planning and Administration, Ministry of Education, Culture, Sports, Science and Technology

The implementation of large scale risk reduction programs in the education sector faces multiple challenges associated to the technical and political spheres. This presentation will discuss how those challenges were addressed and the political and technical spheres interacted in Japan to successfully improve the resilience of school infrastructure at large scale.

### An innovative approach to retrofit vulnerable schools in Peru

Luis Yamin Professor of Civil Engineering, Universidad de los Andes

The synergy of technology and knowledge has spurred unprecedented levels of innovation and progress in improving the safety of schools. This presentation will discuss how an innovative engineering solution based on incremental retrofitting will enhance and accelerate the implementation of a national risk reduction program in Peru.



## 10:00 – 11:00 Special Session Seeking the road for safer and quality schools in post-disaster contexts

### Introduction to the recovery and reconstruction roadmap

Fernando Ramirez Senior Disaster Risk Management Specialist, World Bank

This presentation will discuss ongoing efforts to prepare a recovery and reconstruction roadmap for school infrastructure.

### Panel discussion and brain-storming session

This session aims to contribute to a consensus building effort around a systematic recovery and reconstruction strategy to ensure safety and quality of school infrastructure in disaster-affected countries.