

Mexico City's First Resilience Garage

CRO Arnoldo Matus Kramer Convenes Multidisciplinary Decision-Makers on Construction of New Airport and Existing Mobility Challenges

By Leah Flax, Juliana Villabona and Olivia Armenta (100RC)

Mexico City's Resilience office aims to be a catalyst for strengthening a regional agenda on issues of mobility, water, urban planning, metropolitan coordination, and adaptive transformation. With the goal of advancing conversations among stakeholders in mind, Arnoldo Matus Kramer, Chief Resilience Officer for Mexico City, chose to convene a Resilience Garage as one of Mexico City's Phase II strategy-development methods. The specific impetus for the garage is the opportunity to imbue ongoing development of the new international airport with resilience thinking. The airport is the largest and most expensive infrastructure project in the City in the last 50 years, and its design and construction will have lasting impacts on the city's watershed, mobility, housing, and economic systems. (The topic may be particularly familiar to those CROs who attended the November 2015 CRO Summit where the new airport was the focus of session held with City Cabinet leaders).

The Garage took place 21-22 April 2016 and brought together over 40 high-level participants from public, private, international and academic sectors to tackle two cases:

1. Given the impacts and tensions around the new airport, how can we enhance the resilience of the region?
2. How can development of the new airport catalyze improvements that reduce travel times in the region?

To delve into these topics participants were provided write-



Garage participants playing the *Nexus!* game in Mexico City.

ups of the cases developed in coordination with case owners from the Airport Group of Mexico City (CMAG) and The Policy Institute for Transportation and Development (ITDP). The Garage was led by Arnoldo and his team with the support of 100RC staff and Garage-inventor Roland Kupers, a resilience expert and editor of *Turbulence*¹. CROs Gabriela Elgueta, from Santiago, Chile and David Jacome Polit from Quito, Ecuador also attended, learning about the method first-hand and bringing additional resilience and subject matter expertise to the Garage.

The Garage took place at the "Laboratory of Mexico City," a city-owned maker-venue and hub of urban innovation. On the first day, Arnoldo and Olivia Armenta, 100RC Associate Director, presented a brief description of the development of the resilience strategy of Mexico City and the 100RC initiative. This was followed by a presentation on the new airport project by José Luis Romo,

Corporate Director of CMAG. Participants then began the process of warming up for the Garage through *Nexus!* - a resilience simulation board game.

Debriefing from the board game was followed by a presentation by Roland Kupers on the theoretical framework of the Resilience Garage suggesting nine elements that help understand the complexity of the systems and relationships that contribute to building resilience. The frameworks were then rolled out onto the floor on 3x3 meter mats and participants broke out into two groups to investigate relevant aspects of the cases using the framework. After in-depth discussion, the day concluded with each team presenting a summary of the identified resilience elements.

The second day began with participants switching cases and picking up where the other team left off. After adding any additional case elements to the frames, the teams then worked towards identifying a set of overarching themes and

¹ Kupers, R. (2014). *Turbulence - A Corporate Framing of Collaborating for Resilience*. Amsterdam: University Press.

underlying proposed actions to be taken forward in the projects. For the airport case these focused on social components, water management, regional coordination, and data sharing.

The mobility case actions were organized around developing an Integrated Transport System (ITS), regional coordination and financing, communication strategies, and experimentation. Based on the recommendations made during the workshop, various participants initiated a dialogue to collaborate on concrete actions that can be developed in the short and medium term including 100 Resilient Cities platform partners. These actions will be included within the Mexico City Resilience Strategy, to be published in August 2016.

Based on the recommendations made during the Resilience Garage, the Mexico Team and the Airport Group identified some specific actions in the water and social components of the project that will be explored in the short run.

Participants found the Garage to be both interesting and valuable. Arnaldo and his team are currently planning a second Garage on the topic of what to do with the current airport site following the completion of the new airport.



Flavia Tudela (Mexico City), Roland Kupers, Leah Flax (100RC), Olivia Armeneta (100RC), Gabriela Elgueta (CRO, Santiago de Chile), Arnaldo Matus Kramer (CRO, Mexico City), David Jacome Polit (CRO, Quito), Adriana Chavez (Mexico City), Juliana Villabona (100RC)

Structural Resilience	Integrative Resilience	Transformative Resilience
Redundancy	Multi-scalar interactions	Distributed governance
Modularity	Thresholds	Foresight capacity
Requisite diversity	Social cohesion	Innovation & experimentation

Framework used to evaluate aspects of the case studies during the garage.

