



# TRANSPORTATION SYSTEM-LEVEL RESILIENCE – CHALLENGES AND SOLUTIONS

**Symposium, 12<sup>th</sup> September 2025, 0900 to 1630 (UTC-5)**

FEDEX Institute of Technology. Rooms 203/205 (The Fishbowl). FEDEX Building,  
University of Memphis, USA

**Symposium organised by** international Task Force on Transport System Resilience members:



**Symposium hosted by**



**Supported by**



Transport modes are interconnected. The transportation network is only as resilient as its weakest link. Extreme weather events and other system shocks are impacting mobility and disrupting supply chains with increasing frequency. Strengthening preparedness is vital, not only at mode level, but at system level.

Join us as we bring together international and regional experts to embark on a journey to:

- Raise awareness of transport system interdependencies and the need for resilient, cross-modal solutions
- Highlight the potential consequences of inaction and a lack of preparedness
- Disseminate good practice case studies, both within modes and across modes
- Identify potential gaps in knowledge and research needs
- Facilitate collective action, continued discussion and knowledge exchange

The symposium will comprise a series of in person and online presentations by local and international experts, followed by a panel discussion. There will be plenty of opportunities for participants to engage, ask questions of the speakers, and share their own experiences.

# Programme

**0900            Registration and welcome**

**0930 – 1045    Session 1**

## **Examples of mode level resilience initiatives: recognising and accommodating interdependencies**

- A railways' perspective on resilient infrastructure: introducing ReRa Rain and ReRa Temp. Francisco Cabrera, International Union of Railways
- PIARC's approach to increasing the resilience of roads: French case study. Marie Colin, CEREMA, France/PIARC – World Road Association
- European aviation climate change adaptation and resilience: an overview. Rachel Burbidge, EUROCONTROL
- Urban flooding resilience. Dr. Ross Nazari, University of Memphis

**1115 – 1230    Session 2**

## **Consequences of extreme weather events: case studies**

- Drought-related impacts on transport and supply chains: Parana-Paraguay case study. Gerardo Bessone, Port of Bahia Blanca, Argentina
- Impacts on the road transport system in Valencia due to floods: interdependencies and lessons learnt. Monica Laura Alonso, Spanish National Public Works Research Centre/PIARC, Spain
- Impact of extreme weather events on the European rail system: case study from the European Union Agency for Railways. Eva Valeri, European Railways Agency
- Extreme weather impacts: valuing the consequences of inaction to make the business case for investment in resilient transport. Jan Brooke, PIANC – World Association for Waterborne Transport Infrastructure

**1330 – 1500    Session 3**

## **Good practice examples of cross-modal resilience planning**

- Informing post-disaster restoration through modelling interdependent agriculture and transportation networks. Professor Janey Smith Camp, University of Memphis
- Multimodal resilient transport research projects in The Netherlands. Thomas Bles, PIARC
- Weathering the storm: adapting Victoria's infrastructure to climate change. Caroline Evans, Infrastructure Victoria, Australia/PIARC
- Adapting London's integrated transport network to the changing climate. Kathryn Drayson, Transport for London, UK
- Critical connections: building a resilient intermodal supply chain. Chris Engelbrecht, Missouri Department of Transportation

**Why it matters!**

- Facilitators: Katherine Chambers, US Army Engineer Research and Development Center, and Rachel Burbidge, EUROCONTROL
- Introductory presentations:
- Daniel Pallme, Assistant Chief of Passenger Transportation, Rail and Freight, Tennessee Department of Transportation
- Dr. Sabyasachee Mishra, Professor and Director of Center for Transportation Innovation, Education & Research, University of Memphis

**Panel discussion**

- Dr. Sabyasachee Mishra, University of Memphis
- Daniel Pallme, Tennessee Department of Transportation
- Chris Engelbrecht, PIARC
- TBC, ACI World or Rachel Burbidge, EUROCONTROL



REGISTER HERE

**In-person attendance is encouraged, but online participation is also possible.  
Register here: [bit.ly/4o8WzX5](https://bit.ly/4o8WzX5)**

**Those attending in person may like to take advantage of the special hotel rates negotiated for the PIANC-Smart Rivers conference:  
<https://smartrivers2025.com/location/#hotel>**

