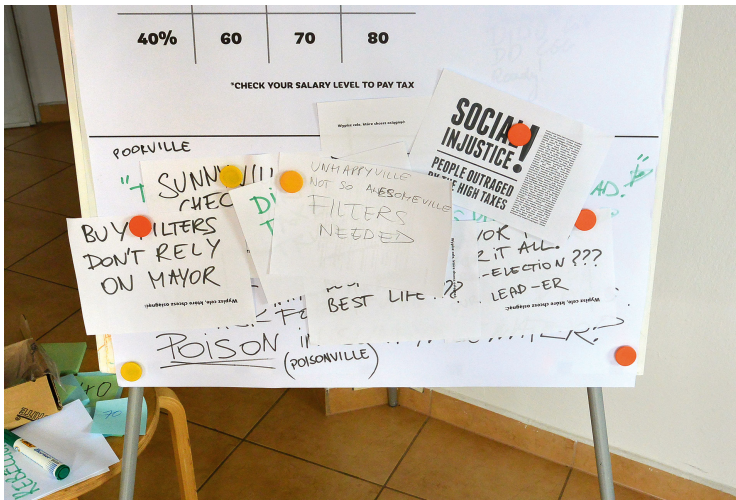


## WHAT IS PUBLIC INFRASTRUCTURE PARTICIPATORY ENGAGEMENT SIMULATION?

When highly interdependent water infrastructures break down,, they can rapidly evolve into complex and problematic issues due to the number of interdependent actors, fluctuating situations and interests, insufficient knowledge and expertise or the absence of mutual understandings and support. To integrate these contradicting and overlapping aspects, improved communication and information management processes are required that would support effective and efficient knowledge sharing and application.

The Public Infrastructure Participatory Engagement Simulation – P.I.P.E.S was designed to recreate the essential features of real-life situations, highlighting decision-making

challenges and their consequences. It compresses time and space so that a trajectory of a series of negotiations, decisions and impacts will emerge fully embedded within rational and value-based judgments and goals of participants. Players take the roles of local authorities, infrastructure managers and citizens, whose needs create a complex net of interrelations. The authorities, under the constant pressure from citizens, gather resources through taxes and then decide the budget spending on a variety of possible water systems.



The negotiation and conflict resolution that they all engage in, reflect the complexity and uncertainty of real-life decision processes. Often it happens that promising solutions targeted at root-causes of a problem and long-term risk reduction meet with opposition from participants whose priorities or risk perception differ. The conflict is further escalated by time pressure, mistrust or reluctance to cooperate. Whatever the final decision is, it will always resonate with many, often unexpected or indirect, consequences that affect the whole in-game reality...

## Benefits



**Experience problems and dangers connected to the aging water infrastructure**



**Practice collaboration among various organizations and groups of interest**

**Learn to interpret and relate facts**



**Master decision-making in an uncertain environment**

**Experience problems and opportunities in complex systems**



**Face the complexity of the real world**

## **Technical details**



**2 - 3 hours  
+ debriefing min. 1 hour**



**8 - 24**



**3 tables and chairs**

## What participants say



## Contact us

Your Name (required)

Your Email (required)





**MICHIGAN STATE**  
UNIVERSITY

GAMES 4 SUSTAINABILITY



---

[Privacy Policy](#) [Cookies Policy](#)

Copyright © 2018 by the [Centre for Systems Solutions - CRS](#) | All Rights Reserved