

Robust Decision Making is used to inform idealized port investment decisions considering changes in flood risk due to sea-level rise

Objective

Utilize probabilistic approaches to address two questions applied to investment decisions at the Port of Los Angeles:

1. Under what future conditions would hardening of coastal facilities against extreme flood scenarios at the next upgrade pass a cost-benefit test?
2. Do sea-level rise projections and other information suggest such conditions are sufficiently likely to justify such an investment?

Approach

Characterize deeply uncertain climate change projections of sea-level rise and impacts using Robust Decision Making analysis and full probabilistic approaches.

Impact

Results highlight the highly-localized and context dependent nature of applying Robust Decision Making methods to inform investment decisions.

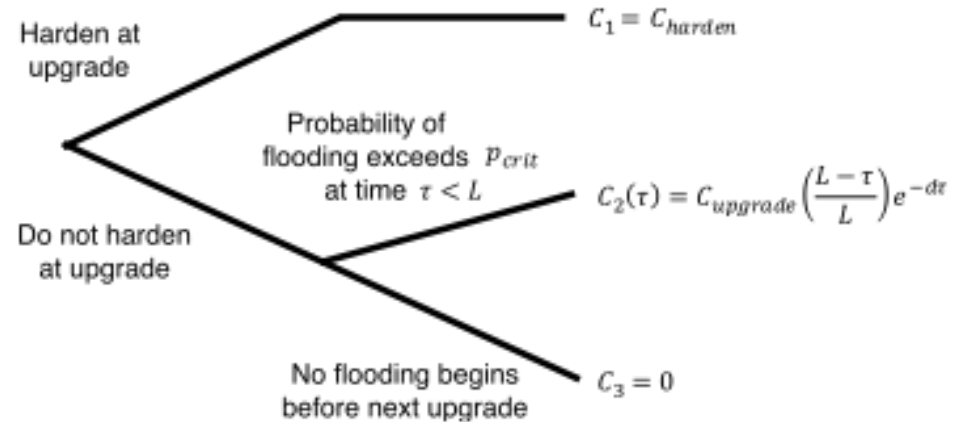


Figure: Simplified representation of Port of LA's decision regarding whether or not to harden its terminal at its next upgrade and the costs resulting from its choices.