

# ROBUST TRANSPORT PLANNING: CONCEPTUALISING THE CITP AND IPTN PLAN UNDER DEEP UNCERTAINTY

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## ABSTRACT

The transport planning profession is becoming increasingly aware of how uncertain the future is. The level of uncertainty in transport planning and decision-making has intensified – as it has in a number of spheres of policy – in the face of climate change, political and economic instability, technological innovation, and changing consumer preferences (Lyons, 2016). COVID-19 has accelerated many innovative and disruptive transitions, expanding the set of plausible futures and compounding the ‘deep’ uncertainty that we have about planning for a future that is decades, and many crises, away from the present (UN-Habitat, 2020). Conventional transport planning practices conceal uncertainty by relying heavily on historic cause-effect relationships, and result in misplaced confidence in our predictive abilities (Marsden & McDonald, 2019). This presentation outlines the development of the Comprehensive Integrated Transport Plan (CITP) and Integrated Public Transport Network (IPTN) plan in the City of Cape Town using new transport planning practices that try to grapple with the deep uncertainty we’re facing in long-term transport planning in South Africa. The new approach brings together new techniques from the climate adaptation, Decision-Making under Deep Uncertainty (DMDU), and sustainability transitions research fields into transport planning. This development process has resulted from a unique knowledge co-production arrangement between academia and local government that was started in 2017. The lessons from developing this new transport planning approach together, which still meets the established CITP and IPTN plan requirements, will be relevant to those cities across South Africa, and many others in the Global South, who are looking to embed more resilience in their transport planning system in the post-covid era.