Project 1.44

Scenario Planning Transport Futures:
Improved Road and Transport Planning using Digital Scenario Planning Tools

1 October 2015 - 31 March 2017

New data suggests Perth and Brisbane are likely to reach a population of 5 million, whilst Sydney and Melbourne will be 8 million by 2050. These are big cities; of the wealthy cities of the world only 11 cities are over 5 million currently. Given this, the project will investigate areas for consideration related to decision making and planning for the future of our large cities in the coming decades; in particular, the balance between urban development and the provision of transportation infrastructure.

Effective long term planning of urban infrastructure provides benefits across the infrastructure and building sectors. There is a need to better inform planning options to take advantage of new modelling software and access to a growing array of infrastructure related data to inform the application of 'long term big city' concepts. There is a dual need in industry for both selecting the most appropriate model to use and developing the skills needed to use such tools. Hence, this project will undertake a review of the value of available tools, provide insight as to how they can be further harnessed and enhanced, and provide capacity building tools and resources to support their use.

Objectives

The objective of the project is to go beyond politics and enhance the consideration of 'long term big city' concepts by major planning, roads and transport agencies. It will identify the current level of inclusion of such concepts and explore the notion that urban and transport planning digital scenario planning models can be used to provide value to planning processes. The project will provide valuable guidance as to the current strength of emerging digital scenario planning tools to be applied at the city level, along with guidance as to how these strengths can be further harnessed and enhanced.

Industry Outcomes

The project will investigate a suite of existing scenario planning tools to identify strengths and weaknesses to improve the existing planning processes and projections. This investigation will consider likely population, density and climate scenarios in order to inform land use planning and the provision of transport infrastructure and services in cities in a manner that harnesses the opportunities this growth will provide. Along with providing valuable guidance as to the value of current scenario planning tools, the project will scope out a set of recommendations for further research as to how to harness and enhance the capability of existing tools to be run in concert to significantly reduce the uncertainty of urban planning scenarios.

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