

## Governance Performance in Multi-Scalar Large Institutional Networks: Evaluating Transport Institutions in Australia's Metropolises

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The multiple networks of organizations that govern metropolitan infrastructure make investment decisions of great consequence, as infrastructure underlies all activities that occur in urban regions. However, ineffective decision-making by metropolitan governance institutions has contributed to (or failed to resolve) numerous problems with harmful consequences: traffic congestion, pollution, increased vulnerability to terrorism and hazards, and lower economic output. Researchers have located the source of many of these inadequacies in the infrastructure institutions themselves. However, there is a gap in knowledge about which factors are critical in managing *metropolitan governance institutions*. In particular, researchers have not measured the performance of metropolitan infrastructure institutions as an outcome of institutional design. There is, therefore, a crucial need to identify the underlying institutional factors that dictate effective decision-making and obtaining desired performance in the metropolitan policy arena.

This paper presents an Institutional Multi-factor Performance Assessment CriTeria (IMPACT) Model, which will be used to test the performance of metropolitan governance institutions that are composed of Multi-Scalar Large Institutional Networks (MSLIN). Specifically, five Australian capital cities' metropolitan transport institutions are analysed to assess the relative extent to which unitary and centralized or pluralist and networked variants of common institutional reform strategies (restructuring, coordination, privatization, and decentralization) have been more effective means for metro governance institutions to plan and deliver infrastructure services. Each variant (unitary / pluralist) has characteristic structures (hierarchy / networks), agency processes (sequential / directive and iterative / interactive), and doctrine (control / consent). The *general hypothesis* is that institutional design affects institutional performance. The *central hypothesis* is that a metropolitan governance institution of mixed design of unitary structure with pluralist agency and doctrine - will more efficiently, effectively, and equitably deliver public infrastructure.

This research framework is designed to allow deeper understanding of the effects of institutional design on institutional performance. Understanding this contributes to institutional theory, including the spatial dimensions of institutional design, as well as to the statutory design and ongoing management of metropolitan governance institutions. When applied to specific contexts, it will contribute to institutional theory by *establishing evidence-based causal links between institutional design and institutional performance for metropolitan governance institutions*.

This research approach has broad policy and governance implications. Lawmakers and other institutional policy makers/designers/reformers will be better able to develop strategies to improve infrastructure provision, making cities and their citizens' lives safer, more productive, and environmentally healthier, while saving billions of dollars. When applied to specific contexts, the results will inform controversies around privatisation and decentralisation, among other institutional governance topics.