

## A Sustainable Financing Mechanism for Urban Rail Projects: Case Study in Colombo, Sri Lanka

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### Abstract

The existing transportation infrastructure in Sri Lanka is heavily auto-centric. However, given the high rate of depletion of global fossil fuel resources, as well as the limited land area available for expansion of roads in Sri Lanka, continued auto dependency is no longer viable as a basis for the country's long-term transportation strategy. Therefore, the Western Region Megapolis Planning Project plans to introduce a Light Rail Transit (LRT) System in Colombo and its suburbs, in order to reduce dependency on fossil fuels and combat the issue of traffic congestion.

An effective financing mechanism is one of the key factors crucial to the success of a railway infrastructure project. Hence, this study sought to propose a viable financing mechanism for the proposed Light Rail System in Sri Lanka, by assessing methods of financing for railway infrastructure utilized in other countries, including the UK, the USA, France, HongKong, India, and Singapore. The methods studied include tax increment financing, the rail-property development model, hypothecated taxes-and congestion pricing, as well as various combinations of these methods.

Ten case studies were selected from various countries. These case studies were assessed on the following factors, in terms of their similarity to the existing situation in Sri Lanka; volatility of the project environment, strength of political support for the project, existing legal framework for taxation and land acquisition, and level of integration between government planning bodies. Next, the projects were assessed based on the funding mechanism utilized in the project, against the following aspects; allocation of risk, effectiveness of project planning-and organizing for operations.

The findings indicate that a combination of hypothecated taxes and the rail-property development model could be adapted in the Sri Lankan context to ensure the continued viability of the proposed LRT system.

Key words: Light Rail, Financing, Sustainable

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