Master-Thesis Nr. 24, Piriyananth Nadarajah, M.Sc.

Dilemma of Sustainable Integrated Transport Infrastructure – “A case of Western Region Megapolis Transport Masterplan: Sri Lanka”

This study explores the Transport Infrastructure of Western Regional Megapolis of Sri Lanka. Most of the developing countries still labor with traditional planning directions, where building roads as a solution to traffic congestion. This study assesses the sustainable integrated transport infrastructure of the Western Regional Megapolis Transport Masterplan. It offers a priority measure according to the current scenario of the region and also opinions the integration consideration.

Colombo, the core of Western Region of Sri Lanka, have a long history of Master plans from the beginning of British ruling period. It embraces some distinguish notions from the past such as the Garden City of the East, Colonial Architecture City and Ocean City of the East. But, in the eve of a high economic drive, rapid urbanization and negligence in commitment, have impacted the future of the City. Therefore, the Western Regional Megapolis Master Plan was created to face the future. The transport master plan has defined a vast area of coverage through short and long term projects.

Sustainable mobility paradigm has evolved through years and currently the major scope is with e-mobility, ITS based traffic management and promotion of public transport and non-motorized transport. But, to move and succeed on smart solutions, an attractive infrastructure which serves for the whole population is a must. Therefore, this study focuses sustainable measures such as public transport, walking and cycling and the urban forms/street design which support these modes.

Research concentrates on the basic, important and immediate measures to be considered in sustainability, where the future is smart solutions. The study identifies sustainability indicators in line with the current scenario of the region and accordingly ranks the level of sustainability of the transport infrastructure. This offers the base for the priority of development.

The study assesses in a holistic approach and offers the conceptual strategy for sustainable transport infrastructure and for its integration. Finally, the study outlines the projects of the Western regional Megapolis Transport Master Plan and briefs the missing ideas of sustainable integration.

The research can be used to understand the future for the sustainable integrated transport infrastructure of Western Region and the scope for a balanced development. And can be adapted for the growing cities in Sri Lanka.