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Analysis on Design Standards of Bus Terminals in Sri Lanka

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Improvement of public transportation along with its infrastructure is a timely need to address its demand. The infrastructure in bus terminals should be developed based on proper standards to ensure the quality of services provided. The existing terminals in Sri Lanka do not fulfil the basic amenities required by passengers and are not sufficiently designed to ensure comfortable movements inside the terminal. The main cause for this is the absence of a proper set of guidelines that can be referred to in designing bus terminal structures and infrastructure. The main objective of this study was to analyze existing bus terminal designs currently in use around the world and introduce a systematic bus terminal design guideline that ensures the provision of complete infrastructure facilities for bus passengers. In the first phase of the study, a terminal classification was introduced to categorize bus terminals in Sri Lanka, with a focus on those in the Western Province, using bus route data obtained from relevant authorities. A thorough analysis of existing bus terminal guidelines from various countries was then conducted, and guidelines that are suitable for the Sri Lankan system were identified. Based on the literature reviewed, a set of design guidelines was proposed for bus terminal designs in Sri Lanka. The basic amenities required in bus terminals were also outlined according to the classified bus terminal types. Additionally, specific functional requirements for bus terminals were highlighted based on a questionnaire survey conducted among passengers and terminal staff, aligning with the terminal classification developed. This study recommends the existing bus terminals follow the prepared guidelines and facilitate the minimum requirements mentioned under the guidelines. It also recommends providing at least the mandatory infrastructure at a terminal, based on the terminal category.

Keywords: bus terminal design, design guidelines, terminal operations