

Evaluation of Urban Transportation Systems: Comparing and Selecting the Most Efficient Transportation Solutions

Authors : E. Azizi Asiyabar

Abstract : The phenomenon of migration to larger cities has brought about a range of consequences, including increased travel demand and the necessity for smooth traffic flow to expedite transportation. Regrettably, insufficient urban transportation infrastructure has given rise to various issues, including air pollution, heightened fuel consumption, and wasted time. To address traffic-related problems and the economic, social, and environmental challenges that ensue, a well-equipped, efficient, fast, cost-effective, and high-capacity transportation system is imperative, with a focus on reliability. This study undertakes a comprehensive examination of rail transportation systems and subsequently compares their advantages and limitations. The findings of this investigation reveal that hybrid monorails exhibit lower maintenance requirements and associated costs when compared to other types of monorails, standard trains, and urban light rail systems. Given their favorable attributes in terms of pollution reduction, increased transportation speed, and enhanced quality of service, hybrid monorails emerge as a highly recommended and suitable option.

Keywords : comparing, most efficient, selecting, urban transportation

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