

## The Penetration of Urban Mobility Multi-Modality Enablers in a Vehicle-Dependent City

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**Abstract :** A Multi-modal system in urban mobility is an essential framework for an optimized urban transport network. Many cities are still heavily dependent on vehicle transportation, dominantly using conventional fuel-based cars for daily travel. With the reliance on motorized vehicles in large cities such as Riyadh, the capital city of Saudi Arabia, traffic congestion is eminent, which ultimately results in an increase in road emissions and loss of time. Saudi Arabia plans to undergo a massive transformation in mobility infrastructure and urban greening projects, including introducing public transport and other massive urban greening infrastructures that enable alternative mobility options. This paper uses a Geographic Information System (GIS) approach that analyzes the accessibility of current and planned public transport stations and how they intertwine with massive urban greening projects that may play a role as an enabler of micro-mobility and walk-ability options in the city.

**Keywords :** urban development, urban mobility, sustainable mobility, Middle East

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