



**Comprehensive Advanced Specific Summarised Studies
-For Architecture Studies (CASS Studies)
(An Official Publication of Bureau For Health & Education Status Upliftment)**

**Planning Implications of Metro Rail Project on Urban Areas
Atharva Milind Dixit**

VNIT, Nagpur, Maharashtra

Email Id: serviceheb@gmail.com

ABSTRACT:

In the evolving landscape of contemporary urbanization, transportation systems play a pivotal role in shaping the vitality and sustainability of cities. Among transformative infrastructural interventions, metro rail projects have emerged as catalysts reshaping urban fabrics. As burgeoning populations intensify challenges related to congestion, environmental sustainability, and efficient mobility, the integration of mass transit systems becomes imperative. This research explores the multifaceted impacts and planning implications of metro rail projects on urban areas, employing diverse methodologies to decipher their transformative potential on both physical and non-physical aspects of urban landscapes. The significance lies in their potential to provide a reliable, efficient mass transit alternative, fostering interconnected, accessible, and eco-friendly urban environments. The aim is to unravel how metro rail systems influence structural, economic, and environmental aspects, envisioning a more sustainable and liveable urban future globally.

The scope encompasses a comprehensive exploration of changes in urban environments following the introduction of metro rail systems. The analysis considers both tangible, physical alterations and intangible, non-physical characteristics of affected urban areas. Limitations include potential time constraints, availability of comprehensive and accurate data, and contextual variability. Mitigating these challenges through a systematic research methodology is crucial for a nuanced understanding of metro rail systems' impacts on urban environments.

The research delves into parameters such as land use and urban development, Transit-Oriented Development (TOD), ridership and usage patterns, traffic congestion and mobility, property values and affordability, and economic impact for a comprehensive analysis.

Keywords: Urbanization, transportation systems, environmental sustainability, Ridership, Mass Transit Systems, Congestion.

Access this Article Online

Website: <https://heb-nic.in/cassarc>

Received on 01/06/2024

Accepted on 13/06/2024

© HEB All rights reserved

Quick Response Code:

