



Infrastructure And Intra-Regional Migration: An Analysis Of The Mumbai Metropolitan Region (MMR)

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Abstract:

The paper examines how large-scale, state-driven infrastructure investments are reshaping intra-regional migration patterns within the Mumbai Metropolitan Region (MMR). Drawing on literature, primary survey data, and statistical analysis, it evaluates the influence of expanding metro networks, highways, and major transport corridors on residential mobility, housing distribution, and public satisfaction with local infrastructure. The findings show that awareness of new infrastructure projects significantly increases the likelihood of relocation, as residents strategically select areas expected to benefit from future connectivity improvements. Metro access emerges as the strongest driver of residential movement, often outweighing traditional housing preferences. Although ongoing construction contributes to short-term disruptions, residents generally view these inconveniences as temporary trade-offs for long-term regional gains. The study concludes that while infrastructure expansion is a powerful catalyst for spatial transformation, its success in fostering balanced and sustainable growth will depend on coordinated planning between transport development and housing strategies, ensuring that improved connectivity translates into equitable and inclusive regional development.

Keywords: Mumbai Metropolitan Region (MMR); Infrastructure; Intra-Regional Migration

Introduction:

The Mumbai Metropolitan Region (MMR), a \$140 billion economy, is undergoing an unprecedented, state-driven infrastructure program supported by more than \$47 billion in investment, aimed at repositioning the region as a global economic hub through major upgrades to its transport and connectivity systems. This paper examines how the rapid expansion of metro lines, highways, trans-harbour links, and large-scale development projects is reshaping residential locations and influencing the distribution of housing across the region. As new corridors and connectivity improvements reduce travel times and open access to previously distant areas, housing markets respond by expanding into emerging zones that become more viable for development. These infrastructure-driven shifts play a significant role in determining where new residential growth occurs and how different parts of the region become integrated into broader real estate and planning frameworks. The analysis suggests that while improved connectivity offers substantial opportunities for more efficient regional development, the long-term effectiveness of these investments depends on aligning transport expansion with

coordinated housing strategies. Without such alignment, infrastructure alone may not achieve the balanced and sustainable growth envisioned for the MMR.

Literature Review:

Infrastructure development is widely recognized as a key driver of spatial change in the Mumbai Metropolitan Region (MMR). The ISEG Foundation (2024) highlights a state-led strategy centered on transit-oriented development and major connectivity projects to restructure regional growth. Foundational planning documents, such as the *Concept Plan for MMR* (2011), similarly emphasize the role of integrated transport networks.

Empirical evidence underscores this relationship. The *Comprehensive Transport Study* (Infralife, 2022) shows that improved mobility infrastructure is reshaping travel patterns and enabling population shifts toward peripheral areas. Shaban and Sattar (2023) further note that expanding metro and road networks are altering regional mobility dynamics.

Industry and institutional reports confirm the scale of recent investments, with the MMRDA advancing major metro and road projects through substantial financial commitments (Economic Times, 2025; Times of India, 2025). These projects have had measurable market impacts, including significant real estate appreciation linked to the MTHL and Navi Mumbai Airport (Raheja Universal, 2025). Supporting this, Ghadge and Patil (2023) find that infrastructure growth in Navi Mumbai has directly encouraged migration and local development.

Collectively, the literature demonstrates that infrastructure investment is the primary catalyst driving connectivity improvements, land value changes, and intra-regional migration in the MMR.

Research Methodology:

This pilot study was conducted within the Mumbai Metropolitan Region (MMR) using a combination of purposive and random sampling to ensure broad representation across diverse demographic groups. Primary data was collected through a structured questionnaire administered via Google Forms, designed to capture insights on the relationship between infrastructure development and residents' inclination to migrate, along with other factors influencing mobility decisions. A total of 100 respondents from various parts of the MMR participated in the study, providing a comprehensive overview of perceptions and trends within the region.

Objectives of the study:

- To examine the correlation between infrastructure projects and internal migration trends in MMR.
- To identify key infrastructural factors influencing migration (e.g., transport, housing)
- To assess the impact of recent infrastructure projects on population distribution and real estate in MMR

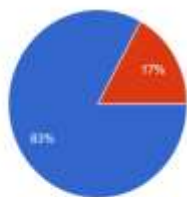
Data Interpretation:

Hypothesis 1: Awareness of Infrastructure Projects vs. Moving Within MMR

- **Null Hypothesis (H0):** There is no association between awareness of recent infrastructure projects and the decision to move to the current location.
- **Alternative Hypothesis (H1):** There is an association between awareness of recent infrastructure projects and the decision to move to the current location.

2. Have you moved from another part of MMR to your current location?

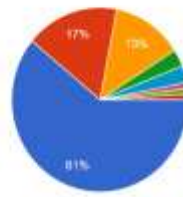
100 responses



● Yes, I moved within MMR
● No, I have lived here for over 5 years

6. Are you aware of any recent infrastructure projects near your area?

100 responses



● Metro or suburban rail extension
● New Highway/expressway
● New flyover or bridge
● New township/industrial zone
● New metro or rail station
● No, not aware of any projects
● Bullet Train project
● Bullet Train
● MTHL and the Ro-Ro ferry service

Observed Frequencies:

Moving Status	Bullet Train	Bullet Train project	MTHL	Metro/ Rail extension	New flyover	New highway	New township	Not aware
Lived > 5 years	1	1	0	8	0	5	0	2
Moved within MMR	0	0	1	53	13	12	3	1

Expected Frequencies:

Moving Status	Bullet Train	Bullet Train project	MTHL	Metro/ Rail extension	New flyover	New highway	New township	Not aware
Lived > 5 years	0.17	0.17	0.17	10.37	2.21	2.89	0.51	0.51
Moved within MMR	0.83	0.83	0.83	50.63	10.79	14.11	2.49	2.49

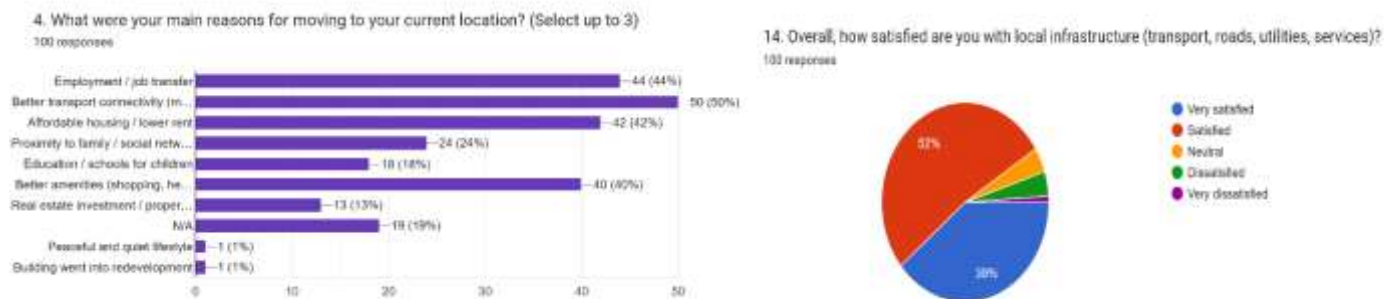
Chi-squared Test Results:

- **Chi-squared statistic:** 21.00
- **P-value:** 0.00377
- **Degrees of freedom:** 7

Since the p-value 0.00377 is less than the common significance level of 0.05, we reject the null hypothesis. This suggests that there is a statistically significant association between awareness of recent infrastructure projects and whether a person has moved from another part of MMR to their current location.

Hypothesis 2: Association between the importance of public transport in moving decisions and the overall satisfaction with local infrastructure.

- **Null Hypothesis (H0):** There is no significant association between the rated importance of public transport in a person's decision to move and their overall satisfaction with local infrastructure (transport, roads, utilities, services).
- **Alternative Hypothesis (H1):** There is a significant association between the rated importance of public transport in a person's decision to move and their overall satisfaction with local infrastructure (transport, roads, utilities, services).



Observed Frequencies:

Importance	Dissatisfied	Neutral	Satisfied	Very dissatisfied	Very satisfied
Extremely Important	2	1	32	1	20
Important	2	2	18	0	19
Less Important	0	0	1	0	0
Neutral	0	1	1	0	0

Expected Frequencies:

Importance	Dissatisfied	Neutral	Satisfied	Very dissatisfied	Very satisfied
Extremely Important	2.24	2.24	29.12	0.56	21.84
Important	1.64	1.64	21.32	0.41	15.99
Less Important	0.04	0.04	0.52	0.01	0.39

Neutral	0.08	0.08	1.04	0.02	0.78
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Chi-square Test Results:

- Chi-square statistic: 25.16
- P-value: 0.049
- Degrees of freedom: 16

With a p-value of 0.049, is less than the common significance level of 0.05, we reject the null hypothesis. This indicates a statistically significant association between the rated importance of public transport in a person's decision to move and their overall satisfaction with local infrastructure (transport, roads, utilities, services).

Key Findings:

Rise of "Sleeper" Suburbs and Satellite Cities

Enhanced connectivity is transforming distant suburbs into viable residential hubs. Areas such as Panvel and Mira Road are experiencing rapid growth driven by affordability and new transport links like the airport and metro. Additionally, redevelopment pressures and high costs in the city core are pushing families to locations like Virar, where they accept significantly longer commutes in exchange for affordable housing.

Short-Term Distress for Long-Term Gain

While the strategic goal is to transform the MMR into a global economic hub, the immediate reality for residents often involves significant distress due to construction activities. Citizens report navigating a "living nightmare" of dust, noise, and traffic diversions, yet many endure these temporary hardships with the expectation that the completed projects will eventually alleviate congestion and improve connectivity.

Awareness of infrastructure projects strongly influences relocation decisions.

Individuals who are informed about ongoing or upcoming developments tend to anticipate future improvements in connectivity and amenities. This foresight motivates them to choose locations expected to benefit from such projects. As a result, access to information becomes a significant driver of mobility within the region.

Metro connectivity is the strongest driver of residential mobility across the region.

Proximity to metro lines reduces commute times, increases convenience, and improves daily travel reliability. These advantages make metro-served areas highly desirable for working professionals and students. Consequently, metro access often outweighs other residential considerations such as neighborhood character or housing size.

Conclusion:

The study indicates that the Mumbai Metropolitan Region's infrastructure expansion is significantly reshaping intra-regional mobility by enhancing connectivity and altering residential patterns. The results show that individuals with greater awareness of major projects particularly metro extensions and new transport corridors demonstrate a stronger likelihood of relocating to areas expected to benefit from improved accessibility. Statistical evidence also confirms a clear association between the perceived importance of public transport and overall satisfaction with local infrastructure, underscoring mobility as a central factor in migration decisions. Although ongoing construction generates short-term disruptions, these are generally viewed as temporary conditions preceding long-term regional improvement. As the MMR continues its transition toward a global economic hub, the effectiveness of its infrastructure initiatives will depend on aligning transport development with coherent housing and land-use strategies to ensure that enhanced connectivity supports balanced, sustainable, and inclusive growth across the region.

References:

1. Ghadge, A. K., & Patil, B. S. (2023). An Impact of Migration on Urbanization Trends in Navi Mumbai: A Socio-Economic Perspective. *Journal of Advanced Zoology*, 44(S8), 87-91.
2. ISEG Foundation. (2024, September). *Developing Mumbai Metropolitan Region (MMR) as a Global Economic Hub*.
3. K. Raheja Corp. (2025). *The Rise of Navi Mumbai: Infrastructure Developments & Their Impact on Property Prices*.
4. MMRDA. (2025, April 14). MMRDA gears up for \$47 billion infrastructure makeover in Mumbai region. *The Economic Times*.
5. Raheja Universal Private Limited. (2025, June 9). *The Impact of Navi Mumbai's Infrastructure Development on Real Estate Values*.
6. Shaban, A., & Sattar, S. (2023). Mobility and transport infrastructure in Mumbai Metropolitan Region: growth, exclusion and modal choices. *Urban, Planning and Transport Research*, 11(1), 2212745.
7. Singh, D. P. (2023). Migration and Employment in Mumbai, India. *Migration*, 3(2), 337-356.

