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URBAN RAIL TRANSIT: IMPACT ON NATIONAL AND REGIONAL ECONOMIES: AN INDIAN PERSPECTIVE

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SCOPE

Urban Metro Railway Scene in India

Metro Development in India

Impact on National and Regional Economy

Observations and Suggestions

Conclusion

URBAN METRO RAIL SCENE IN INDIA

Name	Total Length (Km)
Kolkata Metro	14.67
Delhi Metro All Phases	282.44
Mumbai Metro 1	11.07
Mumbai Metro 2	75.07
Mumbai Metro 3	33.508
Bangalore Metro Both Phases	42.30
Delhi Airport Metro Link	22.70
Noida Metro	29.707
Chennai Metro	54.10
Pune Metro	60.52
Ahmedabad Metro	45.594
Kochi Metro	25.65
Hyderabad Metro	72.00
Jaipur Metro	35.099
Lucknow Metro	34.00

METRO DEVELOPMENT IN INDIA

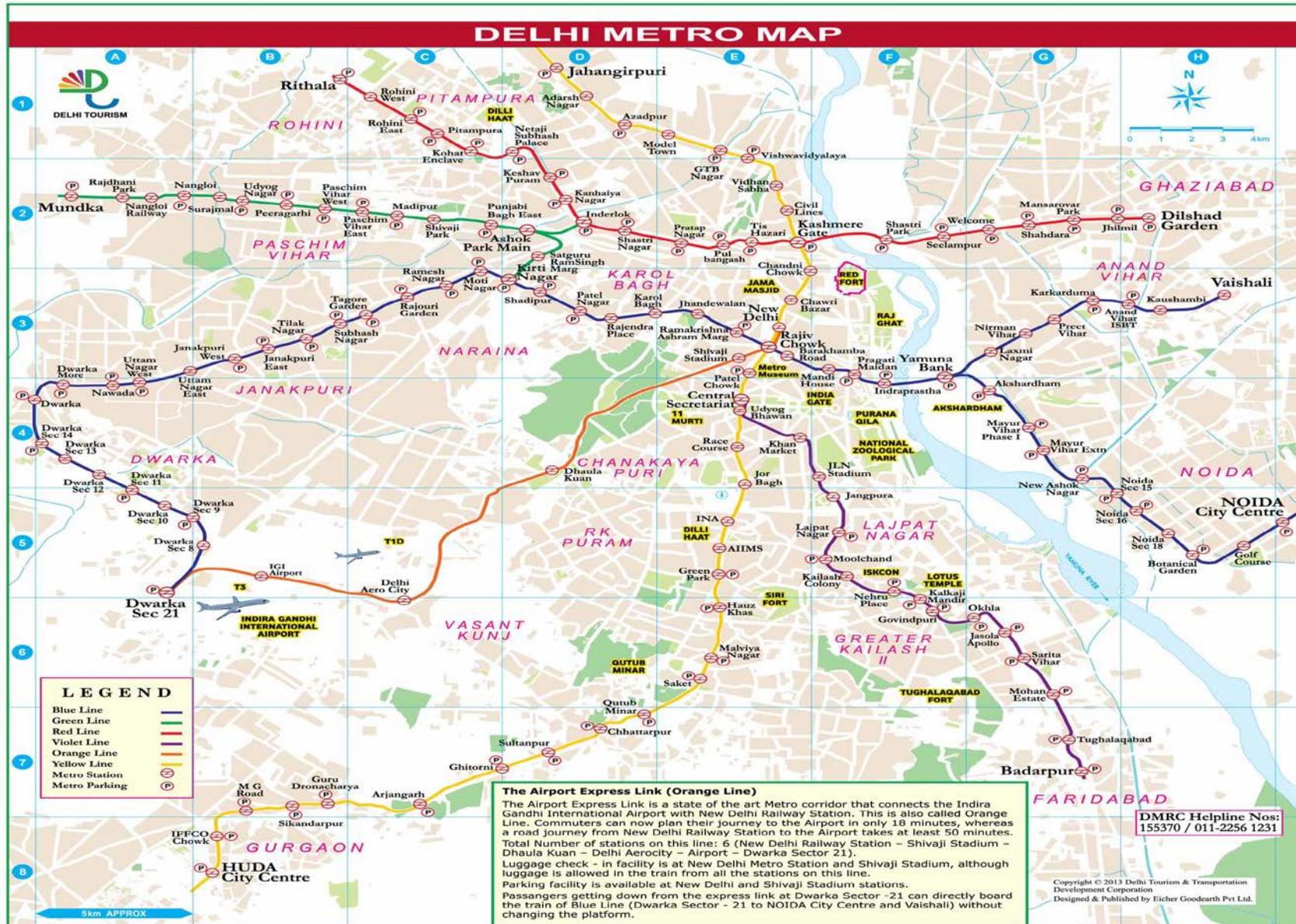
- The Metro in India are owned and operated by public owned companies except for the following three:-
 - Mumbai Metro One (PPP Mode)
 - Hyderabad Metro (PPP Mode)
 - Rapid Metro Gurgaon (Private Funding)
- Need for Decongestion and reduction of driving dependence.
- Impact on Skyline. Underground is the preferred option but due to high costs the elevated construction is adopted which spoils the skyline of the neighbourhood
- Improve quality of life and enhance accessibility for business, education, residence and recreation.
- TOD for new cities / expansions of existing towns

ORDINARY RAIL PROJECTS THAT MAY HAVE TRANSFORMATIONAL IMPACT ON NATIONAL AND REGIONAL ECONOMIES : INDIAN PERSPECTIVE

- Delhi Metro Rail Network including its expansion in Noida, Ghaziabad, Gurugram and Faridabad.
- Noida – Greater Noida Metro Rail Link.
- Rapid Metro System Gurugram.
- Bangalore Metro Rail Phase 1 and Phase 2.
- Mumbai Metro Rail Line 3.

First three are contiguous to each other and form a regional MRTS. Lets call it National Capital Region MRTS or NCR- MRTS. We shall discuss this as a case.

CASE STUDY OF NCR-MRTS



NCR-MRTS

Current Status

- Delhi Metro Rail Network alone recorded over a billion ridership in year 2016-17.
- Delhi Metro has impacted the commuting and have influenced the regional economy in a big way. There are many 'With Project' or 'Without Project' studies which prove the incremental increase in National GDP after the successful running of urban rail network in NCR.
- Positive effect on regional economy are most pronounced in the city of Old Delhi which had become a 'No Go' zone prior to arrival of Metro. Now it is one of the favored shopping and dining destination.
- Success of this network has larger National implications wherein 50 Indian cities are earmarked for a urban rail system in near future.

NCR - MRTS

Future Scenario

- **TOD Policy.** Urban Development Ministry approved Transit Oriented Development (TOD) for the National Capital Region – 14 July 2015. This TOD policy aims at developing the corridor with following attributes.
- **Live Work and Play.** 500 Meter on either side of MRTS corridor to be Influence Zone so that maximum number of people can live, work and find means of recreation within walking/ cycling distance of the MRTS corridors/ stations
- **Revitalisation of Urban Area.** Increased Floor Area Ratio (FAR) allows more construction per unit thereby allowing more **capital formation** in the TOD zone. Real estate prices and rental values have markedly improved in the TOD zone.
- **Access to Better Jobs.** Better jobs can be held by executives even if they need to commute from suburbs. Better accessibility allows businesses to operate from hitherto congested areas.

NCR-MRTS

Continued.. Future Scenario

Reduction of Carbon Foot Prints. Delhi Metro system has been regularly claiming carbon credits for the reduction of carbon foot prints. In addition it is aggressively developing the renewable energy projects. That is likely to lower the energy bill significantly thereby making it cheaper to travel and leaving passenger with more disposable income.

The Cities of Gurugram and Noida-Greater Noida. The adjacent cities of Gurugram and Noida-Greater Noida have seen **significant overall development** after being connected with Metro network. These cities are currently evolving as counter magnet for the working population who were conventionally looking for jobs and residence in Delhi.

Integration of railway, road transport and Metro is slowly revolutionizing the commuting scene. It has led to **reduction in 'Driving Dependency'**. The connecting of satellite cities i.e. Gurugram and Noida-Greater Noida have allowed people to shun cars and motor transport. It not only provides better and comfortable connectivity but also improves the safety and health parameters of travel.

CONCLUSION

- Metro Rail construction is progressing at rapid pace in India. 50 Indian cities are likely to have functional metro system by 2030. It is going to impact National and Regional economy in a significant manner.
- TOD is key to planning of new cities and retro-fitting the existing congested zones to make them more livable, sustainable and business friendly. The Mumbai Metro Line – 3 (33.5 Km) is an all underground network planned to decongest the prime locales of Mumbai.
- PPP format is most suitable for development of such capital intensive projects. Need of the hour is to evolve workable and sustainable guidelines so that procurement of such infrastructure is efficient and beneficial to public while providing suitable RoI to private investors.