

Hyderabad Outer Ring Road Catalysts of Infrastructure



Case Study by:

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Popular Ring Roads

- GRA Ring Road in Rome, Italy; 68 kms.
- Paris Ring Road in France; 35 kms
- Motorway 25 in London; 188 kms
- A10 Ring Road, Amsterdam, Netherlands; 32 kms
- E4 Ring Road, Stockholm, Sweden; 75 kms
- Capital Beltway, Washington DC; 193 kms
- Ring Roads (6 nos), Beijing, China; 940 kms
- Argentina Ring Road, 120 kms
- A100, Berlin, Germany, 23 kms
- Moscow Ring Road, 109 kms.

Benefits of Ring Roads

Beltline, Orbital, Beltway, Loop Road, Circular Road, etc

Benefits of Ring Roads are as follows:

- Connectivity
- Time savings
- Economic Activity
- Avoiding accidents
- Traffic decongestion
- Corridor development
- Support for public transport
- Support water conservation

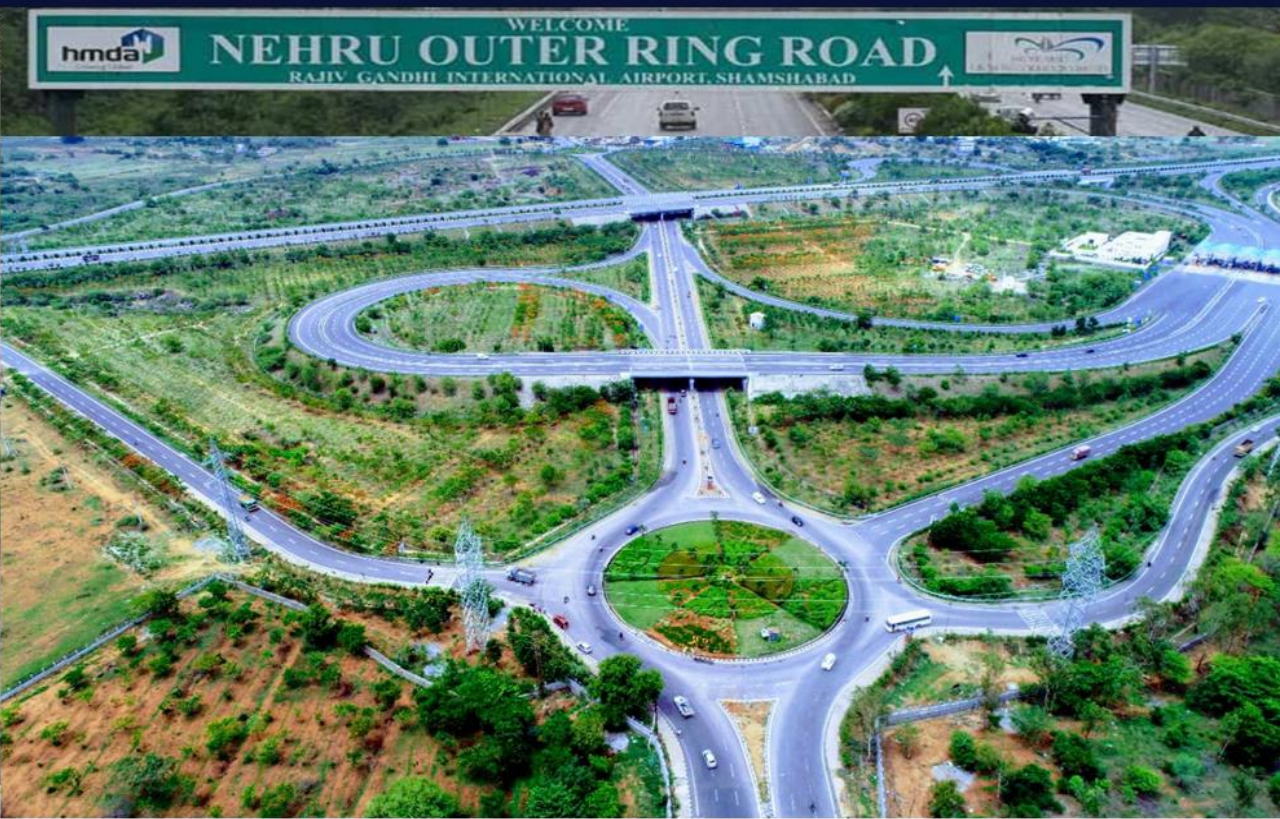
A101 in Afghanistan is the world's longest Ring Road with 2,200 kms length. Built with funds from US, Japan, Saudi Arabia, Iran, etc. Helps almost 80% of country's economic activity

Value Volumes of Ring Roads in India

- Already about Rs. 1.20 trillion worth of Ring Roads are constructed in India (today's value terms Rs. 5 trillion)
- 20 cities of India have Ring Roads.
- Another 30 cities have Ring Roads in planning stage with cumulative value of more than Rs. 60,000 crs to be implemented until 2030.
- Annually Rs. 10,000 crs worth of Ring Roads have to be constructed to implement the planned ring roads length in various cities.
- Since Ring Roads have connectivity to National Highways, Central Govt also gives grant between 20% to 50%.

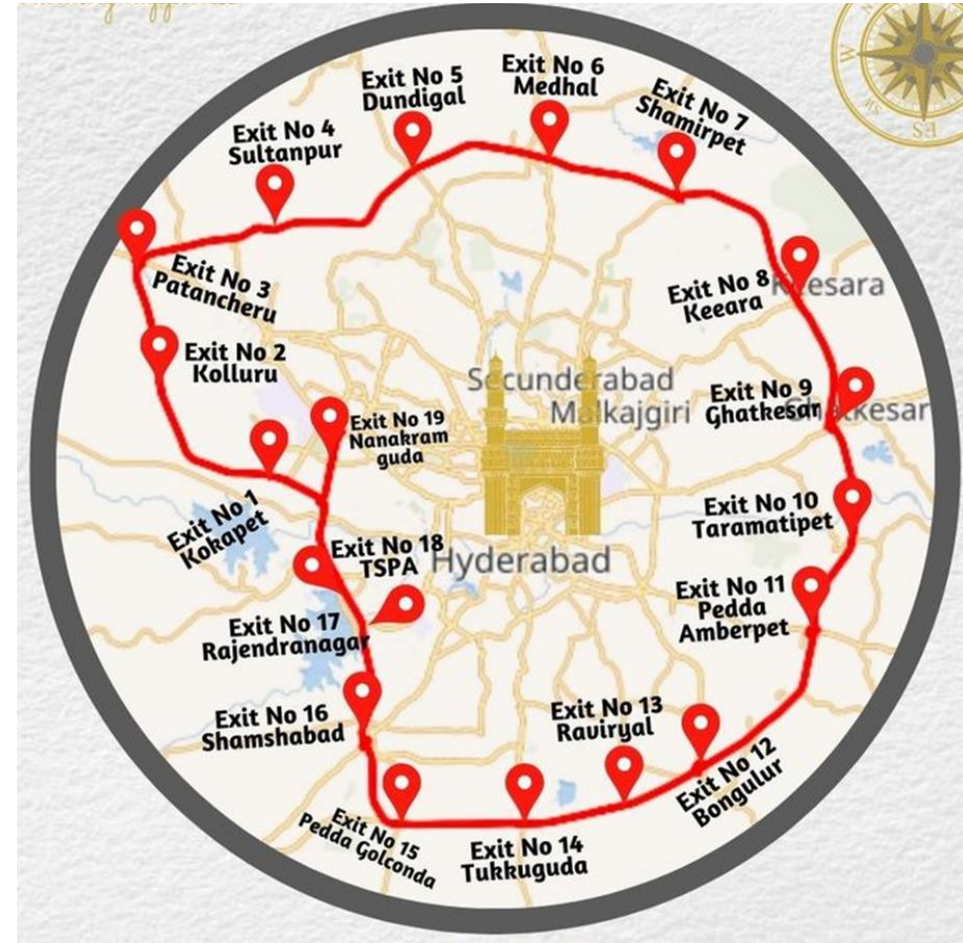
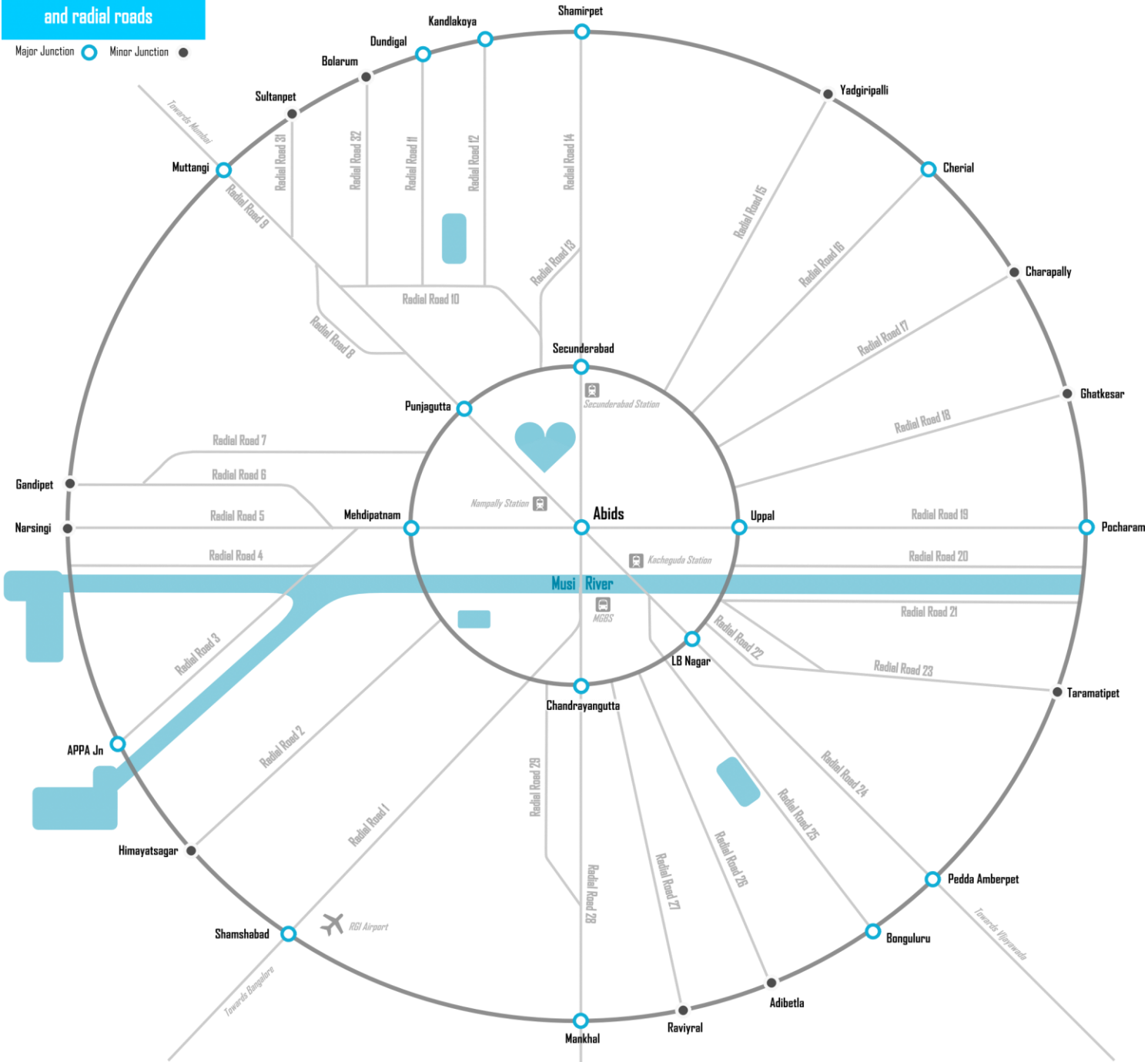
City	Project Title	Kms	Status	YoD	Cost Rs. Crs
Delhi	Delhi ORR	47.5	Operation	1970	50
Bangalore	NICE Ring Road	41	Operation	1999	700
Bangalore	Peripheral Ring Road	116	Development	2027	4,000
Hyderabad	Hyd ORR	158	Operation	2012	6,700
Chennai	Chennai ORR	62	Operation	2021	3,687
Kolkata	Kolkata ORR	110	Planning	2030	10,000
Pune	Pune Ring Road	161	Planning	2030	11,000
Nagpur	Nagpur ORR	119	Operation	2010	775
Jaipur	Jaipur Ring Road	48	Operation	2002	1,230
Ahmedabad	Ahmedabad ORR	76	Development	2027	4,500
Lucknow	Lucknow ORR	104	Operation	2018	5,000
Bhopal	Bhopal Ring Road	94	Planning	2030	5,000
Vijayawada	Vijayawada ORR	98	Planning	2030	5,000
Amaravati, Andhra P	Amaravati ORR	210	Planning	2030	20,000
Visakhapatnam	Vizag ORR	96	Planning	2030	7,000
Surat	Surat ORR	65	Planning	2030	3,500
Coimbatore	Coimbatore ORR	72	Planning	2028	1,100
Kochi	Kochi ORR	57	Planning	2030	4,000
Patna	Patna Ring Road	65	Planning	2030	2,300
Indore	Indore ORR	92	Planning	2030	7,000
Chandigarh	Chandigarh Ring Road	34	Planning	2030	1,500

Case Study of Hyderabad Outer Ring Road



Hyderabad ORR and radial roads

Major Junction  Minor Junction 



The saga of Hyderabad ORR

- Plan in 2001. Construction started in 2008 and completed in 2012.
- 6,250 acres of land. 158 kms, 8 lanes & can expand to 10.
- **Catalyst for Hyd & Telangana growth= IT Sector + Airport + ORR**
- ORR connects 5 districts. It is the Green Necklace of Hyderabad
- Safer, longer, low opex, ease of O&M, eco-friendly, & expandable.
- 22 toll plazas. Travel time across total ORR is 80 minutes
- Among the best growth propeller projects in the World
- PPP achieved in TOT with Rs. 7,000 crs upfront receipt to Govt.

Project cost & payback period

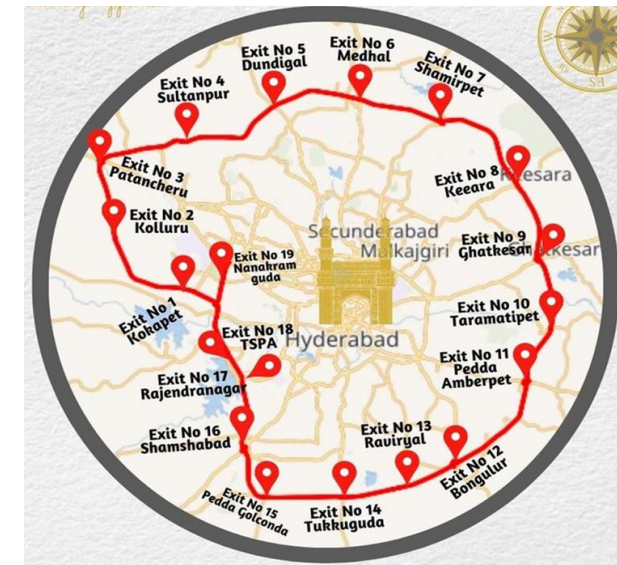
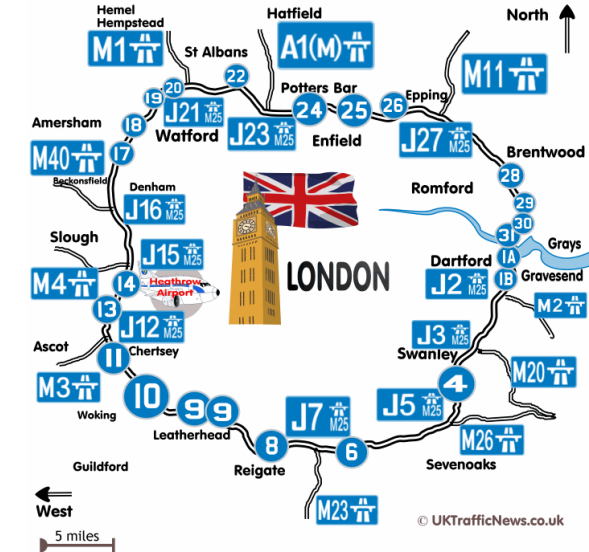
- The total project cost of ORR was Rs. 6,700 crs.
- Central Govt gave 20% as grant. State Govt gave 10% as investment.
- Debt from ADB and Japan International Cooperation Agency.
- JICA lent Rs. 2,500 crs @ 1.2% Int for 20 yrs after moratorium 10 yrs.
- ADB lent Rs. 1,200 crs @ 1.2% Int for 20 yrs after moratorium 5 yrs.
- Balance was funded with initial revenues and by the state government.
- The Project achieved payback in 11 yrs vs initially expected 23 years.

The Revenues & Returns of Hyderabad ORR

Revenues & Returns from Hyderabad ORR				
Annual Traffic rise	Annual Tariff rise	Other Income % of Revenue	O&M Cost % of Income	IRR to Bidder
3.00%	2.00%	3.00%	15.00%	9.44%
5.00%	3.00%	5.00%	14.00%	12.70%
7.00%	4.00%	6.00%	13.00%	15.90%
9.00%	5.00%	7.00%	12.00%	19.13%
10.00%	5.00%	8.00%	11.00%	20.34%
10.00%	5.00%	9.00%	10.00%	20.54%
10.00%	5.00%	10.00%	10.00%	20.64%

Development of Hyderabad ORR – 1/2

- **London Motorway Ring Road M25** was studied to design Hyd ORR. M25 is 188 km, orbital route, encircles Greater London, & passes thru countries around London including Kent, Surrey, Hertfordshire, & Essex. It is 6-lane road.
- Hyd ORR is designed with 8 + 2 lane service road & the comparable Bangalore has only 6 lane + 2 lane service road
- Pollution reduction in city, traffic jams & logging avoided for outstation transportation and also for city commuters
- ORR is planned to reduce within city accidents as heavy vehicles movement reduces within the city.
- Consultancy firm selected on QCBS with 80% technical score and 20 financial score
- Hyderabad Growth Corridor Ltd is SPV, Incap has 40% and HUDA 60% initially and later HUDA 74% and Incap 26%.



Development of Hyderabad ORR – 2/2

- Service roads as required and earthen shoulders to avoid noise disturbance and pollution transmission
- RRR with radial roads will connect ORR to improve connectivity.
- ORR improved the Civic Amenities for travelers
- Safety from robberies and attacks are completely avoided
- Greenery improved with huge landscapes and plantation
- All the adjoining areas of ORR improved in greenery
- Lakes around the ORR improved catchment and water table
- Facilitated planned development in areas around ORR



































**Thanks &
All the best to You**

