

GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS
RAJYA SABHA
UNSTARRED QUESTION NO. 229
TO BE ANSWERED ON FEBRUARY 05, 2024
METRO RAIL/RRTS IN BENGALURU

NO. 229. DR. DHARMASTHALA VEERENDRA HEGGADE:

Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

- (a) the details of Metro Rail/Regional Rapid Transit System (RRTS) network made operational across the country;
- (b) the financial assistance provided so far by the Union Government and the State Government for metro construction in Bengaluru, the Phase-wise details thereof;
- (c) the details of metro project operationalised in last five years;
- (d) the details of metro projects which has been approved by Union Government as 50:50 Joint Venture project with State Government in last five years; and
- (e) the details of noteworthy technological advancements taken place during the last five years in various Metro Rail projects operational in the country?

ANSWER
THE MINISTER OF STATE IN THE
MINISTRY OF HOUSING AND URBAN AFFAIRS
(SHRI KAUSHAL KISHORE)

(a) At present, Metro Rail/Regional Rapid Transit System (RRTS) network is operational in 20 cities across the country namely Delhi & 7 NCR cities (Gurugram, Noida, Greater Noida, Ghaziabad, Faridabad, Bahadurgarh, Ballabhgarh), Bangalore, Hyderabad, Kolkata, Chennai, Jaipur, Kochi, Lucknow, Mumbai, Ahmadabad, Nagpur, Kanpur and Pune.

(b) Financial assistance provided so far by the Union Government and the State Government for metro construction in Bengaluru till 30.01.2024 is as under:

<i>Particulars</i>	<i>Funds released (` in Cr)</i>		
	<i>Phase 1</i>	<i>Phase 2</i>	<i>Phase 2A & 2B</i>
<i>Government of India (GoI)</i>	<i>7,154.61</i>	<i>13,245.95</i>	<i>6,163.31</i>
<i>Government of Karnataka</i>	<i>5,923.26</i>	<i>12,663.63</i>	<i>5,577.89</i>

- (c) The details of metro project operationalised in last five years are as per Annexure-I.
- (d) The details of metro projects which have been approved by Central Government as 50:50 Joint Venture (JV) project with State Government in last five years are, as per Annexure II.

(e) A number of technological advancements have taken place during the last five years in various Metro Rail operational in the country. Some of the noteworthy technological advancements are :

- (i) Introduction of Namo Bharat Train- India's first State of Art Namo Bharat train with design speed of 180 kmph and operational speed of 160 kmph has been introduced on priority section between Sahibabad to Duhai Depot on Delhi- Meerut RRTS corridor;
- (ii) European Train Control System(ETCS) – World's first State of Art ETCS level II with Hybrid level-III radio based train signalling system on LTE backbone has been introduced on Namo Bharat trains running on priority corridor of Delhi- Meerut RRTS enhancing passenger safety to a new level.
- (iii) Platform Screen Door(PSD) - For improved safety and to reduce the risk of accidents, PSD has been jointly developed by Bharat Electronics Limited (BEL) with National Capital Region Transport Corporation (NCRTC);
- (iv) National Common Mobility Card(NCMC) – One Nation-One card i.e. NCMC work on all NCMC enabled transport systems in the country;
- (v) QR based Ticketing – QR based ticketing system has facilitated booking of tickets from Mobile based apps;
- (vi) Unmanned Train Operations (UTO) – For improved efficiency and quality of service including better utilisation of resources, Unmanned Train Operation is functional in Pink and Magenta Line of Delhi Metro Rail Corporation.
- (vii) Indigenous Automatic Train Supervision system (i-ATS) – India's first Indigenously built Automatic Train Supervision System developed by the combined efforts of DMRC and Bharat Electronics Limited (BEL) has been implemented on Red Line of Delhi Metro.

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF THE RAJYA SABHA UNSTARRED QUESTION NO. 229 FOR ANSWER ON 05.02.2024 REGARDING METRO RAIL/RTS IN BENGALURU ASKED BY DR DHARMASTHALA VEERENDRA HEGGADE:

DETAILS OF METRO RAIL PROJECTS OPERATIONALISED IN LAST 5 YEARS

SL	YEAR	METRO RAIL PROJECT	STRETCH	LENGTH (IN KM)
1.	2018-19	Delhi Metro Rail Project	Janakpuri West to Kalkaji Mandir	24.82
2.			Mundka to Brigadier Hoshiyar Singh	11.18
3.			Durgabhai Deshmukh South Campus to Lajpat Nagar	8.1
4.			Shiv Vihar to Trilokpuri Sanjay Lake	17.86
5.			Escort Mujesar to Raja Nahar Singh Ballabgarh	3.205
6.			Lajpat Nagar to Mayur Vihar Pkt 1	9.7
7.			Dilshad Garden to Ghaziabad Bus stand	9.6
8.			Noida City Centre to Noida Electronic City	6.7
9.		Chennai Metro Rail Project	Nehru Park to Central Metro	2.6
10.			Little Mount to AG-DMS	4.8
11.			AGDMS to Washermenpet	10
12.		Hyderabad Metro Rail Project	Ameerpet to LB Nagar	16
13.			Ameerpet to Hitech city	10.5
14.		Lucknow Metro Rail Project	CCS Airport to Transport Nagar	14.378
15.		Noida Metro Rail Project	Noida - Greater Noida	29.7
16.		Mumbai Monorail	Sant Gadge Maharaja Chowk to Wadala	11.2
17.		Ahmedabad Metro Rail Project	Vastral Gam to Apparel Park	6.5
18.		Nagpur Metro Rail Project	Khaprit to Sitabuldi	13.5
19.	2019-20	Kochi Metro Rail Project	Maharaja's college to Thykkodam	5.65
20.		Delhi Metro Rail Project	Dwarka to Najafgarh	4.3
21.		Nagpur Metro Rail Project	Lokmanya Nagar to Sitabuldi	11
22.		Hyderabad Metro Rail Project	Jubilee Bus Station to Mahatama Gandhi Bus Station	11
23.			Hitech City - Raidurg	1.5
24.		Kolkata Metro Rail Project	Salt Lake Sector V to Salt Lake Stadium	5.3
25.	2020-21	Kochi Metro Rail Project	Thykooodam to Petta	1.33
26.		Jaipur Metro Rail Project	Chandpole to Badi Choupar	2.4
27.		Kolkata Metro Rail Project	Small portion of corridor including Phoolbagan station	1.67
28.		Bangalore Metro Rail	Yelachenahalli to Silk Institute	6.12

		Project	
29.		Chennai Metro Rail Project	Washermenpet to WIMCO Nagar 9.05
30.		Metro Railway Kolkata	Noapara to Dakshineswar 4.1
31.			Mayur Vihar Pkt 1 to Trilokpuri 0.85
32.			Najafgarh Ext. to Dhansa Bus Stand 1.18
33.		Delhi Metro Rail Project	Mayur Vihar Pkt 1 to Trilokpuri 0.85
34.	2021-22	Nagpur Metro	Sitabuldi to Kasturchand Park Section 1.6
35.		Bangalore Metro	Mysore Road Station to Kengeri Station 7.5
36.		Kanpur Metro	IIT Kanpur to Moti Jheel 9
37.			PCMC to Phugewadi 7
38.		Pune Metro	Vanaz to Garware 5
39.			Dahisar (E) to Dahanukarwadi (Phase 1) 9.828
40.		Mumbai Metro Line 2A	Valnai to Andheri(W) 8.8
41.			Aarey to Gundavali(E) 5.8
42.		Mumbai Metro Line 7	Ovaripada/Dahisar (E) to Aarey Colony (Phase 1) 10.7
43.	2022-23	Kochi Metro	Petta to SN Junction (Phase 1A) 2
44.			Apparel Park to Thaltej 13.2
45.		Ahmedabad Metro	APMC to Motera Stadium 18.87
46.			Automotive Square to Sitabuldi 6.31
47.		Nagpur Metro	Prajapati Square to Sitabuldi 7.41
48.			Joka to Taratala 6.5
49.		Kolkata Metro	Phool Bagan to Sealdah 2.33
50.		Bangalore Metro	KR Pura to Whitefield 13.71
51.		Pune Metro	Phugewadi to Civil Court 6.91
52.			Garware to Ruby Hall 4.7
53.		Delhi Metro	Dwarka Sec 21 to Yashobhoomi Dwarka Sec 25 2.01
54.	2023-24	Bangalore Metro	Krishnarajapura to Baiyappanahalli, 2.1
55.			Kengeri to Challaghatta, 2.05
56.		Delhi-Meerut RRTS	Sahibabad to Duhai 17
57.		Navi Mumbai Metro (by CIDCO)	Belapur to Pendahar 11.1

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF THE RAJYA SABHA UNSTARRED QUESTION NO. 229 FOR ANSWER ON 05.02.2024 REGARDING METRO RAIL/RRTS IN BENGALURU ASKED BY DR DHARMASTHALA VEERENDRA HEGGADE:

CITY WISE DETAILS OF METRO RAIL PROJECTS APPROVED BY CENTRAL GOVERNMENT IN LAST FIVE YEARS AS 50:50 JOINT VENTURE PROJECTS

METRO PROJECTS SANCTIONED

SL No	City	Name of Metro Project	Length in Kms
1.	Delhi/NCR	Delhi Metro Extn from Noida City Centre to Noida Sector 62	6.675
2.		Delhi Metro Extn From Dilshad Garden to New Bus stand Ghaziabad	9.4
3.		Delhi Phase IV - 03 Priority Corridors	65.2
4.		Millenium City Centre to Cyber City Gurugram with spur to Dwarka Expressway	28.5
5.	Delhi, Ghaziabad, Meerut	Delhi Meerut RRTS	82.15
6.	Bhopal	Bhopal Metro Rail Project	27.87
7.	Indore	Indore Metro Rail Project	31.55
8.	Patna	Patna Metro Rail Project	32.507
9.	Agra	Agra Metro Rail Project	29.4
10.	Kanpur	Kanpur Metro Rail Project	32.385
11.	Surat	Surat Metro Rail Project	40.35
12.	Bangalore	Bangalore Metro Rail Project Phase 2A & 2B	58.19
13.	Kochi	Kochi Metro Phase II	11.2
14.	Ahmedabad	Ahmedabad Metro Rail Project Phase II	28.254
15.	Nagpur	Nagpur Metro Phase II	43.8