

14th Urban Mobility India Conference 2021

MOBILITY for All

29th
October | 14:30 to 20:50
2021 HRS



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MESSAGES



हरदीप एस पुरी
HARDEEP S PURI



75
आज़ादी का
अमृत महोत्सव

आवासन और शहरी कार्य मंत्री
पेट्रोलियम एवं प्राकृतिक गैस मंत्री
भारत सरकार
Minister of
Housing and Urban Affairs; and
Petroleum and Natural Gas
Government of India

Message

With greater recognition for the central role that India's cities will play in achieving its economic aspirations, it has become imperative to generate a sustainable pattern of mobility that enables cities to be productive, liveable and equitable spaces. Well-planned mobility options predominantly determine the efficiency of cities, and minimise the effects of climate change. Affordable and inclusive mobility options greatly improve the quality of life of our poorer urban residents. These considerations have been the driving force behind the reframing of India's mobility agenda under the leadership of Prime Minister Shri Narendra Modi ji.

The Ministry of Housing and Urban Affairs has prioritised "moving people over moving vehicles", with special attention provided to the needs of the specially-abled, elderly, women, and children. The Metro Rail Policy, 2017 promotes seamlessly integrated urban transport which emphasises reliable and accessible transit for all as well as mandates a more compact and walkable development pattern for commuters. Today, the 732 kms of metro rail that are operational across 14 Indian cities and the 1047 kms of metro rail / RRTS that are under construction signify the Government's commitment to scaling mobility and providing affordable access to urban transport that eliminates social exclusion.

The theme of "Mobility for All" for the Urban Mobility India 2021 conference is highly relevant, and aligns well with the Prime Minister's clarion call for "Sabka Saath, Sabka Vikas, Sabka Vishwas, Sabka Prayas". I convey my best wishes to the event, and look forward to the ensuing deliberations.


(Hardeep S Puri)

New Delhi
22 October 2021

कौशल किशोर
KAUSHAL KISHORE



आवासन और शहरी कार्य राज्य मंत्री
भारत सरकार
Minister of State, Housing & Urban Affairs
Government of India

Message

With the increase in economic activities in urban agglomerations there is a rising trend in urban population. This has necessitated the demand for mobility in cities and metropolitan areas which has resulted in problems ranging from road congestion, air pollution to other environmental and health related issues. Such a precarious scenario clearly point to the necessity for an effective and superior transport systems in cities to make them liveable, compact, accessible and smart, so that they continue to function as engines of economic growth.

Ministry of Housing and Urban Affairs (MoHUA) in recent years has already taken several initiatives under various schemes and projects which impacted the entire gamut of urban hierarchy ranging from million plus cities to small cities. This includes modernisation of urban transportation in Indian cities with impetus towards intelligent transport management systems, strengthening Non Motorized Transport etc., besides thrust to reinforce mass transit modes with investments in metros, MetroNeo, MetroLite and Rapid Rail Transit System. The ministry has also strengthened regulatory mechanisms through various policy initiatives and reforms such as urban transport fund, parking policy, advertisement policy and constitution of Unified Metropolitan Transport Authority etc. Further strides has been made in introducing innovative financing mechanisms by involving private participation and promoting indigenization through "Make in India".

As we celebrate "Azadi ka Amrit Mahotsav" in India's 75th year of Independence, our efforts are directed towards expedient and equitable urban mobility which helps to pave way for inclusive growth and ensure prosperity to all. The 14th UMI 2021 Conference will dwell upon a very apt theme of "Mobility for all" in order to pursue the discussion on accessible and inclusive urban mobility for all sections of the society.

I wish the conference a great success and look forward to the fruitful outcomes.

(Kaushal Kishore)

New Delhi
21st October, 2021

दुर्गा शंकर मिश्र
सचिव

Durga Shanker Mishra
Secretary



भारत सरकार
आवासन और शहरी कार्य मंत्रालय
निर्माण भवन, नई दिल्ली-110011
Government of India
Ministry of Housing and Urban Affairs
Nirman Bhawan, New Delhi-110011



MESSAGE

With the vision of "sabka saath, sabka vikaas, sabka vishwaas", Ministry of Housing and Urban Affairs (MoHUA) considers "urban transportation" a synonyms of "urban transformation" by bringing a unified approach to strengthen transport systems for all stratum of the society. The transportation system is being boosted with the help of reforms and policies such as National Urban Transport Policy (2006), Metro Rail policy (2017), and National Transit Oriented Development policy. Intelligent systems are efficiently managing travel demand through modern Communication Systems, National Common Mobility Card, Global Positioning System etc. New public transport mobility paradigms such as MetroNeo, MetroLite, and Rapid Rail Transport Systems is being inducted along with multimodal hubs for seamless travel experience. Following the call for 'Atma-Nirbharta' (self-reliance), India has shown its ability by introducing driver less metro trains, export indigenous rolling stock to other countries and standardized the specifications of various metro rail components. Moreover, to make cities more accessible and compact, ministry asserts that NMTs should occupy the prime, non-negotiable, position in every form of urban mobility discourse and intervention. All these initiatives have been able to foster goodwill and improve the convenience of citizens.

India at 75 is pursuing an all-round, all-pervasive and all-inclusive development which will pave the way for inclusive growth and ensure prosperity to all. In this context, the theme for the 14th edition of "Urban Mobility India" 2021 is "Mobility for all" is pertinent and opportune. I hope, this annual event will provide delegates – decision makers, practitioners, businesses and individuals - with the opportunity to exchange views & experiences and learn.

I convey my best wishes for the success of this event.

Durga Shanker Mishra

New Delhi
21st October, 2021

JAIDEEP

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ex-officio Joint Secretary

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भारत सरकार
आवासन और शहरी कार्य मंत्रालय
निर्माण भवन, नई दिल्ली-110011

GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS
NIRMAN BHAWAN, NEW DELHI-110011



MESSAGE

Undoubtedly, the urban transportation plays critical role for the growth of urban economy. This sector permeates the lives of every person living in urban centre. This is also critical for successful operation of other economic sectors available in urban agglomerations.

Citizens should be provided with affordable, multimodal and accessible mobility options. For this purpose a plethora of urban travel options should be available so that users can choose among public and private transport modes and adopt the fastest/cheapest way of reaching their destination at any time, with focus on making public transportation more attractive. NMTs must be encouraged through transformation of car-centric locations into public spaces for physical activities. Accessible and compact destinations is the need of hour through "15-minute city" concept to reduce dependency on private vehicles.

In order to comprehend and deliberate over decisive necessities of the urban commuters, Ministry of Housing and Urban Affairs (MoHUA) organises Urban Mobility India (UMI) conference, annually. UMI aims to create and provide a forum for sharing ideas and experiences among transportation professionals, policy-makers, administrators, practitioners, researchers, and representatives of Government, industry, and academic institutions to solve India's mobility challenges. Similar to the 13th edition of UMI that was organised last year, the 14th UMI conference is also being arranged online, due to COVID pandemic.

As Officer on Special Duty (Urban Transport) in the Ministry and Director General of Institute of Urban Transport (India), I convey my best wishes to the organizing team for the successful conduct and conclusion of the event.

(Jaideep)



TUMI PROGRAM

INAUGURAL SESSION

14:30 – 15:30

WELCOME ADDRESS

Shri Durga Shanker Mishra, Secretary,
Ministry of Housing and Urban Affairs, Government of India

KEY NOTE ADDRESS

Mr Daniel Ernesto Moser
Transformative Urban Mobility Initiative (TUMI), Germany

SPECIAL ADDRESS

Prof. Dr. Claudia Warning, Director General
German Ministry of Economic Cooperation and Development (BMZ)

RELEASE

Shri Hardeep Singh Puri, Hon'ble Union Minister
Ministry of Housing and Urban Affairs and Petroleum & Natural Gas,
Government of India

1. Film on "India at 75-Mobility for All"
2. Toolkit on Mobility as a Service (MaaS)
3. Source Book on PPP Arrangements for Urban Bus Operations in India
4. A compendium of 'SMART-Sustainable Urban Transport'
5. Compendium of 'SMART-MOVE – Innovative Urban Mobility Challenge 2021'
6. Service and Business Plan for City Bus Operations for two ESCBS Cities Chandigarh and Mira-Bhayandar under the World Bank—GEF assisted Efficient and Sustainable City Bus Services (ESCBS) Project
7. Campaign Logo – Kochi: India's Cycling and Active Streets Capital

INAUGURAL ADDRESS

Shri Hardeep Singh Puri, Hon'ble Union Minister,
Ministry of Housing and Urban Affairs and Petroleum & Natural Gas,
Government of India

VOTE OF THANKS

Shri Jaideep, OSD (UT) & Ex. Officio Joint Secretary,
Ministry of Housing and Urban Affairs, Government of India

SHORT BREAK

15:30 – 15:40

PANEL DISCUSSION – ECONOMIC DEVELOPMENT AND URBAN MOBILITY 15:40 – 17:10

Chair and Moderator **Shri Durga Shanker Mishra** *Secretary,
Ministry of Housing and Urban Affairs, Government of India*

Background Presentation **Dr. O.P. Agarwal** *CEO,
WRI India*

Panellists

1. **Mr. Ashish Kundra**, *Principal Secretary cum Commissioner, Transport, Govt. of Delhi*
2. **Mr. Takeo Konishi**, *Country Director, Asian development Bank*
3. **Shri V.K. Singh**, *Managing Director, NCRTC*
4. **Prof Sewa Ram**, *HOD, School of Planning and Architecture, Delhi*
5. **Mr Yves Crozet**, *Leading French Economist
Institute of Political Science, Lyon University*

Rapporteur **Ms. Pooja Paghadar**

SHORT BREAK 17:10 – 17:20

BREAKOUT SESSION 1: STATUTORY INTERVENTIONS – REFORMS IN ACTS AND POLICIES 17:20 – 18:50

Moderator **Shri Elias George**, *Partner and Head
Infrastructure, Government & Healthcare KPMG in India and
Ex-MD, KMRL*

Panellists

1. **Ms. K. Vijaya Lakshmi**, *Managing Director, HUMTA*
2. **Shri. Shanavas S**, *IAS, Chief Executive Officer of KMTA*
3. **Mr. Mohinder Singh**, *Ex-Dean, LTA Academy, Singapore*
4. **Mr. Shashi Verma**, *Member of transport for London's
Executive Committee*
5. **Mr. Guy Le Bras**, *Managing Director,
GART-French association for transport authorities, Paris*

Rapporteur **Ms. Nausheen Chhipa**

BREAKOUT SESSION 2: BEST PRACTICES IN INTEGRATED PUBLIC TRANSPORT 17:20 – 18:50

Chair and Moderator **Mr. Sudesh Kumar**, *Team Leader,
Mott MacDonald*

Panellists

1. **Mr. K.R. Jyothilal**, *Principal Secretary (Transport),
Government of Kerala*
2. **Dr. Rajesh J. Pandya**, *Advisor and Managing Director (SSL),
Surat Municipal Corporation*
3. **Dr Brijesh Dixit**, *Managing Director,
Maharashtra Metro Rail Corporation*
4. **Prof. H.M. Shivanand Swamy**, *Director Emeritus,
Centre of Excellence in Urban Transport, CRDF, CEPT University,
Ahmedabad*
5. **Mr Fabrice Morenon**, *Managing Director,
SNCF Hubs & Connexions, Paris*

Rapporteur **Ms. Appurva Chauhan**

BREAKOUT SESSION 3: SUSTAINABLE AND GREEN MOBILITY**17:20 – 18:50**

Opening Remarks

Shri Durga Shanker Mishra, *Secretary,
Ministry of Housing and Urban Affairs, Government of India*

Session Chair

Mr. Phillipp Knill *Head of Division
"Policy issues of cooperation with Asia, South Asia", BMZ*

Moderator

Mr. Amegh Gopinath, *GIZ*

Panellists

1. **Dr. Shalini Sinha**, *Center Executive Director,
CEPT University*
2. **Mr. Shirish Mahendru**, *Technical Expert,
SMART-SUT, GIZ*
3. **Mr. Karl Peet**, *Director,
Knowledge Management and Impact, SLOCAT Partnership on
Sustainable, Low Carbon Transport*
4. **Ms. Anja Fourie**, *KFW*

Rapporteur

Ms Kalyani Menon, *Consultant, GFA
(SPONSORED BY GIZ)***BREAKOUT SESSION 4: INNOVATIONS IN URBAN MOBILITY****17:20 – 18:50**

Moderator

Dr. O.P. Agarwal, *CEO, WRI India*

Panellists

1. **Ms. Mahua Acharya**, *CEO, CESL*
2. **Mr. Pawan Mulukutla**, *Director,
Electric Mobility – Sustainable Cities, WRI India*
3. **Mr. Jaideep**, *OSD (UT) & E.O. JS, MoHUA and Director General, IUT*
4. **Ms. Shreya Gadepalli**, *Founder & Managing Trustee
Urban Works Institute*
5. **Mr. Thibault Balland**, *Project Manager, SETEC-ITS, France*
6. **Mr. Sharat Chander**, *Head of Public Policy, Uber India South Asia*

Rapporteur

Ms. Aishwarya Nair**BREAKOUT SESSION 5: RESILIENT TRANSPORT SYSTEMS (POST COVID)****17:20 – 18:50**

Moderator

Mr. Ajai Mathur, *Managing Director & CEO, Urban Mass Transit Company*

Panellists

1. **Dr Mangu Singh**, *Managing Director,
Delhi Metro Rail Corporation (DMRC)*
2. **Mr. Laghu Parashar**, *Deputy Project Head,
SMART-SUT, GIZ India*
3. **Mr. Prasanna Patwardhan**, *Chairperson & Managing Director,
Prasanna Purple Mobility Solutions Ltd*
4. **Mr. Gerald Olivier**, *Lead Transport Specialist for India,
The World Bank*
5. **Mr. Martial Chevreuil**, *President, ATEC ITS, Paris*

Rapporteur

Ms. Pooja Paghadar

SHORT BREAK**18:50 – 19:00****CONCLAVE: INDIA AT 75– MOBILITY FOR ALL****19:00 – 19:45**

Opening Remarks

Shri Durga Shanker Mishra, *Secretary,
Ministry of Housing and Urban Affairs, Government of India*

Moderator

Dr. Surendra Kumar Bagde, *Additional Secretary,
Ministry of Housing and Urban Affairs, Government of India*

Presentations

1. **Ms. Garima Gupta**, *Managing Director
Shahjahanabad Redevelopment Corporation*
2. **Mr Shyam Khandekar**, *Director and Co-Founder,
MY LIVEABLE CITY*
3. **Mr. Amit Bhatt**, *Executive Director – Integrated Transport,
WRI India*
4. **Ms. Anumita Roy Chowdhury**, *Executive Director,
(Research and Advocacy), Centre for Science and Environment*

Rapporteur

Ms. Kalyani Menon**SHORT BREAK****19:45 – 20:00****VALEDICTORY SESSION****20:00 – 20:50**

Opening Remarks

Shri Durga Shanker Mishra, *Secretary,
Ministry of Housing and Urban Affairs, Government of India***Shri Hardeep Singh Puri**, *Hon'ble Union Minister,
Ministry of Housing and Urban Affairs and Petroleum & Natural Gas,
Government of India*

- **Distribution of Awards** for “Excellence in Urban Transport”,
- **Certificate Distribution** under Executive Programme in Sustainable Transport
- **Trophy Distribution** for SMART-MOVE (Innovative Urban Mobility Challenge 2021)
- **Certificate Distribution** for Best Paper in “Urban Transport”, Research Symposium, UMI 2021
- **Valedictory Address & Launch of UMI 2022**

VOTE OF THANKS

Shri Jaideep, *OSD (UT) & Ex. Officio Joint Secretary,
Ministry of Housing and Urban Affairs, Government of India*

Minute to Minute

| INAUGURAL SESSION | | 14:30 – 15:30 |
|---|---|---------------|
| WELCOME ADDRESS 14:30 – 14:35 | Shri Durga Shanker Mishra , Secretary <i>Ministry of Housing and Urban Affairs, Government of India</i> | |
| KEY NOTE ADDRESS 14:35 – 15:00 | Mr Daniel Ernesto Moser , Head, <i>Transformative Urban Mobility Initiative (TUMI), Germany</i> | |
| SPECIAL ADDRESS 15:00 – 15:05 | Prof. Dr. Claudia Warning , Director General <i>German Ministry of Economic Cooperation and Development (BMZ)</i> | |
| RELEASE 15:05 – 15:15 | Shri Hardeep Singh Puri , Hon'ble Union Minister, <i>Ministry of Housing and Urban Affairs and Petroleum & Natural Gas, Government of India</i> <ol style="list-style-type: none"> 1. Film on "India at 75-Mobility for All" 2. Toolkit on Mobility as a Service (MaaS) 3. Source Book on PPP Arrangements for Urban Bus Operations in India 4. A compendium of 'SMART-Sustainable Urban Transport' 5. Compendium of 'SMART-MOVE - Innovative Urban Mobility Challenge 2021' 6. Service and Business Plan for City Bus Operations for two ESCBS Cities Chandigarh and Mira-Bhayandar under the World Bank-GEF assisted Efficient and Sustainable City Bus Services (ESCBS) Project 7. Campaign Logo- Kochi: India's Cycling and Active Streets Capital | |
| INAUGURAL ADDRESS 15:15 – 15:25 | Shri Hardeep Singh Puri , Hon'ble Union Minister, <i>Ministry of Housing and Urban Affairs and Petroleum & Natural Gas, Government of India</i> | |
| VOTE OF THANKS 15:25 – 15:30 | Shri Jaideep , OSD (UT) & Ex. Officio Joint Secretary <i>Ministry of Housing and Urban Affairs, Government of India</i> | |
| VALEDICTORY SESSION | | 20:00 – 20:50 |
| Opening Remarks 20:00 – 20:05 | Shri Durga Shanker Mishra , Secretary, <i>Ministry of Housing and Urban Affairs, Government of India</i> | |
| 20:05 – 20:40 | Shri Hardeep Singh Puri , Hon'ble Union Minister, <i>Ministry of Housing and Urban Affairs and Petroleum & Natural Gas, Government of India</i> <ul style="list-style-type: none"> • Distribution of Awards for "Excellence in Urban Transport", • Certificate Distribution under Executive Programme in Sustainable Transport • Trophy Distribution for SMART-MOVE (Innovative Urban Mobility Challenge 2021) • Certificate Distribution for Best Paper in "Urban Transport", Research Symposium, UMI 2021 | |
| Valedictory Address & Launch of UMI 2022 20:40 – 20:45 | Shri Hardeep Singh Puri , Hon'ble Union Minister, <i>Ministry of Housing and Urban Affairs and Petroleum & Natural Gas, Government of India</i> | |
| VOTE OF THANKS 20:45 – 20:50 | Shri Jaideep , OSD (UT) & Ex. Officio Joint Secretary, <i>Ministry of Housing and Urban Affairs, Government of India</i> | |



SPEAKERS PROFILE



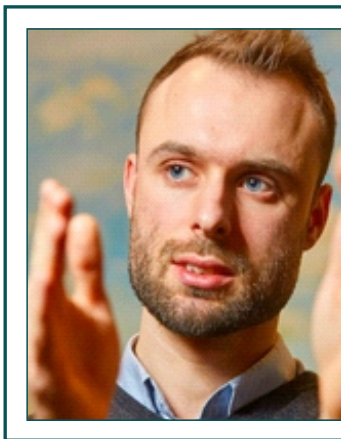
Shri Hardeep Singh Puri

Hon'ble Union Minister of Housing and Urban Affairs, and Minister of Petroleum and Natural Gas

Hardeep S Puri is Union Minister of Housing and Urban Affairs, and Minister of Petroleum and Natural Gas.

He has had a distinguished four-decade career in diplomacy spanning the bilateral and multilateral arena, having held Ambassadorial posts in London, Brazil and as India's Permanent Representative to the United Nations in both Geneva (2002-2005) and New York (2009-2013). He is one of the few Indians to preside over the United Nations Security Council and the only one to have chaired its Counter-terrorism Committee. He served as Chairman, RIS; as Vice President at the International Peace Institute; and as Secretary-General of the Independent Commission on Multilateralism in New York.

He is the author of three books, Separating the Wheat from the Chaff: Decoding Dominant Narratives (Konark Publications, 2019); Delusional Politics: Back to the Future (Penguin Viking, 2019); and Perilous Interventions: The Security Council & The Politics of Chaos (Harper Collins, 2016).

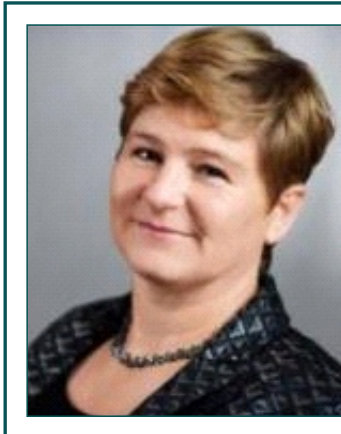


Mr. Daniel Ernesto Moser

Head Transformative Urban Mobility Initiative (TUMI), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Daniel Moser is Management Head of the Transformative Urban Mobility Initiative (TUMI) at GIZ. In his position he provides management and strategic development of the initiative and its activities. TUMI is shaping the future of sustainable urban mobility through diverse opportunities around the world. The initiative is the joint endeavor of ADB, BMZ, CAF, C40, GIZ, ICLEI, ITDP, KfW, SLOCAT, UN-HABITAT and WRI to enable substantial finance, scale pilot projects and provide knowledge & policy.

He is also closely associated with various activities in sustainable urban mobility at GIZ. As an advisor, he is directing sustainable urban mobility programs and interdisciplinary projects comprising transport, governance, city planning and urban technology. In his current position he is also advising the Government of Germany and the Federal Ministry of Economic Cooperation and Development on sustainable urban mobility.



Dr. Claudia Warning

Director-General for the Asia; South-Eastern and Eastern Europe; Middle East; Latin America; Civil Society; Churches, German Federal Ministry for Economic Cooperation and Development (BMZ)

Since May 2018, Professor Claudia Warning the Director-General for the Asia; South-Eastern and Eastern Europe; Middle East; Latin America; Civil Society; Churches, German Federal Ministry for Economic Cooperation and Development (BMZ). Her Directorate-General is responsible for technical and financial cooperation with the BMZ's partner countries in the said continents.

For thirteen years, from 2005 to 2018, she was a member of the Board of the German Protestant development agency Bread for the World within the Evangelisches Werk für Diakonie und Entwicklung and of its predecessor organisation, the Church Development Service.

From 2005 to 2009, she chaired the Association of German Development and Humanitarian Aid Non-Governmental Organisations (VENRO).

Professor Warning studied geography in Bonn, Germany, and in Pune, India. In July 2012 she became a part-time professor at the International Centre for Sustainable Development (IZNE) of Rhein-Sieg University of Applied Sciences.

She has vast experience in development from work in various governmental and nongovernmental organisations, including the Karl Kübel Foundation for Child and Family, where she served on the Board from 1999 to 2005; the German Foundation for International Development (DSE, now a part of GIZ); the German Commission Justitia et Pax; and the Federal Ministry of Regional Planning, Building and Urban Development.

Professor Warning has published many papers on development issues, participatory urban development, environmental and resource protection, and savings and loans systems.



Shri Durga Shanker Mishra

Secretary, Ministry of Housing and Urban Affairs, Govt. of India

Currently working as Secretary in the Ministry of Housing and Urban Affairs, Government of India, Shri D.S. Mishra belongs to 1984 batch of Indian Administrative Service (IAS) from Uttar Pradesh cadre. He has held various assignments in Union and State Governments covering Revenue Administration, Internal Security, Vigilance, Civil Aviation, Tourism, Sports, Agriculture, Taxation, Medical & Health, Mining and Urban Development. He had been Principal Secretary to the Chief Minister for over two years.

B. Tech. in Electrical Engineering from IIT, Kanpur, Shri Mishra is MBA (International Business) From University of Western Sydney, Australia and Post Graduate Diploma in Public Policy from Institute of Social Studies, The Hague. He has keen interest in promoting good governance and has published various papers on the subjects related to governance, public administration and development administration in national/ international journals and books. He has represented Union/ State Governments at various national/ international fora and participated in such workshops/ conferences. He had been visiting faculty in the University of Guelph, Canada. He is fond of trekking, sports and tourism.



Shri Jaideep

Officer on Special Duty (UT) & Ex-officio Joint Secretary, Ministry of Housing and Urban Affairs, Government of India

Shri Jaideep is currently Officer on Special Duty (Urban Transport) & Ex-officio Joint Secretary, M/o Housing and Urban Affairs, Government of India. He is an officer from Indian Railway Service of Electrical Engineers (IRSEE).

Shri Jaideep is a Post Graduate in Electrical Engineering from Indian Institute of Technology Delhi. He has also done his graduation in Law from Delhi University. Shri Jaideep has rich experience in intercity and intracity rail based transportation system. He has extensively dealt with railway rolling stock and traction equipment during his various assignments in Railways. He had also been closely associated with implementation of Mumbai Urban Transport Project & Linke Hoffmann Bosche project of Indian Railways.

As OSD (Urban Transport), he is currently handling various metro and other urban transport projects in the country.



Dr. Surendra Kumar Bagde

*Additional Secretary, Ministry of
Housing and Urban Affairs*

Dr. Surendra kumar Bagde has spent more than 27 years in the Indian Administrative Service. In his career he has promoted domestic & foreign direct investment in various sectors in the State of Maharashtra and was involved in the formulation of State's policies for Information Technology and Biotechnology sectors during his stint at Maharashtra Industrial Development Corporation.

While working in the Government of India, Dr. Bagde has dealt with the formulation of national strategy on bilateral economic cooperation with countries like USA, Japan and Canada. He also negotiated financing of development projects with Government of Japan for projects in the infrastructure, water supply and power sectors which included Western Dedicated Freight Corridor project.

Dr. Bagde has been working as the General Manager, Brihan Mumbai Electric Supply & Transport, Undertaking (BEST) Mumbai since May 2017. During his tenure several reforms were introduced in the bus operations of BEST. The concept of "Hiring of Buses" has been introduced for the first time in the Undertaking and more than 1000 such buses are in operation today. The conductor-less bus operations have been another major reform initiative. Technology was also introduced (ITMS) so that service reaches closer to the user and its monitoring of bus operations becomes effective.

Dr. Bagde holds a Graduate Degree in Electrical Engineering from VJTI and a PhD in Applied Economics and Management from Carnegie Mellon University, USA. Dr Bagde's research has appeared in the American Economic Review and the American Sociological Review.



Shri K. R. Jyothilal

*Principal Secretary (Transport),
Transport Department
Government of Kerala*

Shri Jyothilal IAS, a 1993 batch IAS officer is currently the Principal Secretary, Transport Department, Government of Kerala and Vice-Chairman, Kerala Metropolitan Transport Authority. Armed with a B Tech from IIT Madras and MBA from ICFAI, Mr. Lal has earlier been the Collector of Trivandrum and Kannur, and held portfolios in IT, Transport, Agriculture, Animal Husbandry, Fisheries, Food and Civil Supplies, GAD, Tourism, Devaswom, Parliamentary Affairs, Ports, Aviation, Excise among others. He has been instrumental in projects related to hitech agriculture, Smart City Kochi, KMRL, KMTA, Kannur airport, e-mobility and hydrogen economy etc.



Mr. Mohinder Singh

Ex-Dean, LTA Academy, Singapore

Mr. Mohinder Singh is the former Dean of the LTA Academy in the Land Transport Authority of Singapore. The LTA Academy serves as the knowledge hub for governments, organizations and professionals around the world to exchange best practices in land transport. The Academy conducts capacity building programmes, conducts research and provides advice on land transport.

Mr Mohinder Singh was the Director of Planning of the Land Transport Authority from 1996 to 2007 before assuming his appointment as Dean of the LTA Academy.

Before joining the Land Transport Authority in 1996, he served in various positions in the Ministry of National Development overseeing urban and transport planning in Singapore.



Ms. K. Vijaya Lakshmi

*Managing Director, Hyderabad
Unified Metropolitan Transport
Authority (HUMTA)*

As MD of HUMTA, HMDA, she is working on projects such as Light Rail Transit Systems (LRTS), New Generation Trams, Ropeway Projects, Exclusive Bus Lanes, Electric Mobility including EV Charging Stations, Non-Motorized Transport (Bicycle Lanes), Common Mobility Card (One Telangana Card), Environment Friendly Transport, Transit Oriented Development Projects, Comprehensive Transportation Study in Hyderabad Metropolitan Area, and Metro - Neo Project in Warangal.

She has more than 35 years of professional experience in Traffic and Transportation planning.

She worked in the Transport and Communication Division (T & C Division) of Mumbai Metropolitan Region Development Authority (MMRDA) in different capacities. She was heading the T & C Division as Chief before taking over the responsibility as the Managing Director of Hyderabad Unified Metropolitan Transport Authority (HUMTA) in Hyderabad Metropolitan Development Authority (HMDA), Hyderabad, Telangana.

At MMRDA, her major achievements included planning and implementation of Mumbai's most vital infrastructure projects such as the first Mumbai Metro project, implemented on PPP format, and the India's first Monorail Project. Her expertise includes planning and implementation of mass transit systems, multi-modal integration, integrated ticketing system, preparation of comprehensive transportation plans, green mobility solutions, etc.

She has done her graduation in Civil Engineering from Osmania University (1983) and Masters in Transportation Engineering (1985) from REC, Warangal.



Dr. O. P. Agarwal

CEO, World Resources Institute

Dr O.P. Agarwal has been the CEO of the World Resources Institute India since June 2017.

He was an IAS officer from 1979 to 2007, and was assigned to the Assam – Meghalaya cadre. He held several positions with the central and state government of Assam, including Joint Secretary (Urban Transport) in the Ministry of Urban Development. He was Secretary for Transport in the State of Assam. He was the principal author of the National Urban Transport Policy for the country, which was adopted in 2006 and has remained the key document guiding urban transport investments since then. He took voluntary retirement from the IAS in 2007 and joined the World Bank at its headquarters in Washington DC as its global Urban Transport Adviser.

He chaired the US Transport Research Board's committee on Transportation in Developing countries for 6 years and was a member of this committee for a total of 12 years.

He has written several papers on urban transport policy and governance issues. His recent book entitled "Emerging Paradigms in Urban Mobility Planning, Financing and Implementation" was published by Elsevier. He has taught courses at ISB, LBSNAA, the World Bank and NRTI.

He has a PhD in Transport Economics from the Indian Institute of Technology, Delhi, a Master's degree in Transportation from the Massachusetts Institute of Technology, USA and a Bachelor's degree in Electrical Engineering from the Indian Institute of Technology Madras.



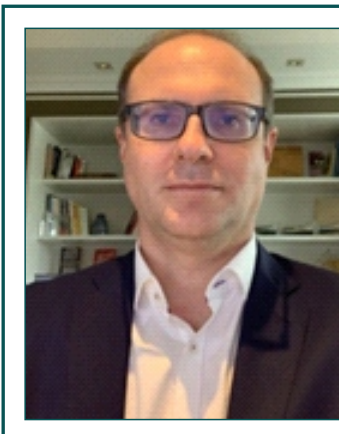
Shri Elias George

**Partner & National Head –
Government & Public Services,
KPMG in India**

Over a career spanning 32 years in public service as a member of the Indian Administrative Service (IAS), Mr. Elias George served with distinction in senior leadership positions in sectors such as investment promotion & economic development, industry, urban development & transit, energy, water resources, and labour. He has held policy formulation and project management leadership roles with the Union and State Governments, and has extensive experience of overseeing the translation of policy objectives into schemes and projects, many of which have been seen through to conclusion. He has made significant contributions to drafting the legislation and policy papers for infrastructure projects such as the Unified Metropolitan Transport Authority Bill, and providing inputs for the new National Metro Rail Policy. He has also served on the Boards of India's large state-owned enterprises.

Prior to joining KPMG in India in 2018, he concurrently managed three significant urban development & urban transit projects – Kochi Metro Rail Limited, Kochi Metropolitan Transport Authority and the Cochin Smart Mission Limited – of a combined size of INR110 billion.

Elias earned a Post Graduate Diploma in International Economic Relations from the International Institute of Public Administration (IIAP), Paris and a B.Tech in Naval Architecture from University of Kochi, Kerala.



Mr. Gerald Ollivier

**Lead Transport Specialist, World
Bank**

Mr. Gerald Ollivier is Lead Transport Specialist for the World Bank in India. He focuses on developing solutions to enhance urban mobility, unlock markets for electric mobility, achieve sustainable economic integration through multimodal transport, and achieve safer transport to better serve the needs of India. Prior to India, he was Cluster Leader in the Singapore World Bank Hub and led the World Bank Community of Practice on Transit Oriented Development. From 2010 to June 2018, he supported the development of metro lines and high-speed rail lines in China, as team leader for several World Bank projects. From 1995 to 2010, he focused on World Bank trade and transport projects in Europe and Central Asia. He is a civil engineer and a chartered financial analyst.



Dr. Rajesh J. Pandya

*Advisor and Managing Director
(SSL), Surat Municipal
Corporation*

Dr. Rajesh J. Pandya has been working with Surat Municipal Corporation since last 33+ years in different capacities, with special mention to tenure of 13 years as Town Planner and Town Development Officer. As the Deputy Municipal Commissioner he headed the departments of Traffic, BRTS, and Public Parks & Gardens of the urban local body of the vibrant and dynamic city of Surat.

He has been a part of the team which has strategically planned, implemented and is now successfully operating the longest BRT system in the country and a well integrated public transport system. He also held the posts of General Manager of Surat Smart City Development Company and DREAM City Company as well. At present he is the Managing Director of the Sitilink Company and after retirement he is associated with SMC as Advisor for special projects.

As Adjunct Professor in Practice of SVNIT he is actively associated with academics and research work in urban planning and urban mass transport area and has published a number of research papers in national and international journals and has participated in a number of workshops and conferences in India and abroad.



Ms. Garima Gupta

*Managing Director,
Shahjahanabad Redevelopment
Corporation*

Ms. Garima Gupta, Managing Director of Shahjahanabad Redevelopment Corporation (SRDC) is a civil servant with varied administrative experience having interest on diverse areas from social development to urban revitalisation. Presently, she is also holding charge of Secretary (Information & Publicity) & Chief Executive Officer (Delhi Urban Shelter Improvement Board). Till recently, as Secretary (Social Welfare), she was instrumental for policy for financial relief to families of COVID19 victims & efficient delivery of public schemes during COVID19 pandemic. Prior to this, as Managing Director of Delhi Transport Corporation (DTC), she contributed in policy for switch of CNG buses to electric buses while focusing on capacity augmentation of public transportation. Besides Delhi, she also served in states / UTs like Arunachal Pradesh, Goa, Andaman & Nicobar Islands since joining IAS in year 2004. Despite additional charges of other department, she remained committed for redevelopment of Chandni Chowk since year 2017.



Shri Sudesh Kumar

Team Leader, Mott MacDonald's

An eminent engineer from IIT Kharagpur, Sudesh Kumar served the Indian Railways, in different parts of the country in various capacities, including Divisional Railway Manager, General Manager and superannuated at the apex level of Member Electrical Railway Board and secretary to the Government.

He has continued to contribute from his vast experience and specialization, as advisor on several urban transport projects in India, including metros, and on externally aided urban transport projects.

Presently he leads Mott MacDonald's teams on climate resilience projects in Indian cities.



Prof. Shivanand Swamy

*Director Emeritus, Centre of
Excellence in Urban Transport,
CRDF, CEPT University,
Ahmedabad*

Prof. Shivanand Swamy, an economist & urban and regional planner, has been an educator, researcher, policy advisor and consultant on urban development planning and management.

As an academic, he has been involved in teaching at CEPT University since 1986, and his teaching and research interests are in land use-transport planning, public transport planning, transportation economics and finance. He is instrumental in the conceptualisation and introduction of master degree programmes in Infrastructure Planning, and Urban Transport Planning. Prof. Swamy has been instrumental in upgrading CEPT from an autonomous institute to that of a University.

He is currently leading capacity building programs; 'Executive Program in Sustainable Transport', and 'Leaders Programme in Urban Transport Planning and Management and supported by the Ministry of Housing and Urban Affairs (MoHUA) and GIZ/ the World Bank. These are aimed at building leadership in urban transport development in India.

Prof. Swamy has over thirty-five years of extensive professional experience in related fields of urban development management: urban transport policy and planning, public transport planning and management, BRTS planning, design and development.



Shri Ajai Mathur

*Managing Director & CEO,
Urban Mass Transit Company
Limited (UMTC)*

Mr. Ajai Mathur is the Managing Director and CEO of Urban Mass Transit Company Limited (UMTC) – an advisory company in the field of urban transport.

Mr. Mathur has a Masters Degree in Business Administration from University of Lucknow and has worked extensively in areas of policy formulation and development of schemes to promote urban mobility in India.

Mr. Mathur has also been associated with Noida Toll Bridge Company Limited (NTBCL) in various capacities and has been in the forefront of promoting Public Private Partnership in the infrastructure sector in India. Mr. Mathur was part of the team which has implemented the Delhi Noida Toll Bridge project on a BOOT basis which has created industry benchmarks for toll roads in India.



Ms. Anumita Roy Chowdhury

*Executive Director, (Research and
Advocacy), Centre for Science and
Environment, Delhi*

Anumita Roychowdhury is the Executive Director, Research and Advocacy, Centre for Science and Environment, New Delhi, India. She is in charge of research and advocacy on Sustainable Urbanisation that encompasses clean air, sustainable mobility and sustainable habitat. Over the last two decades she has worked extensively to shape policy advocacy on these issues and has catalysed the Right to Clean Air campaign at the Centre. She has helped to guide and build some of the key policy campaigns on air pollution especially vehicular pollution and multi-sector clean air action planning in cities. She has participated and played active role in several national international policy forums as well global environmental platforms. She has widely written and published articles, policy research papers and books. She has been awarded the prestigious Haagen-Smit Clean Air Award by the California Air Resources Board, California, USA.



Shri Laghu Parashar

Deputy Project Head, GIZ, India

Mr Laghu Parashar is currently Deputy Project Head of Sustainable Urban Transport and e-mobility projects in GIZ India and leading a team supporting partner Cities/States/Ministries in implementing measures on sustainable mobility and building their capacity. He is a Transportation Planner and having more than 17 years of experience in planning, design and implementation of sustainable transportation projects. He has lead teams delivering various sustainable transport projects including Bus Rapid Transit System (BRTS) and city bus operation from concept till implementation stage. He has been instrumental in drafting "Urban Bus Specifications" (UBS-II) and various model documents, policies, schemes and implementation of urban transport reforms at various levels of Governments. He has authored/co-authored various publication/papers in National and International level. He has been Honorary Secretary of Institute of Urban Transport (IUT), India and active as a visiting faculty in leading planning institutes.



Shri Prasanna Patwardhan

*Chairman & Managing Director,
Prasanna Purple Mobility Solutions
Pvt. Ltd.*

Shri Prasanna Patwardhan is currently the Chairperson & Managing Director at the Prasanna Group. The Prasanna Group, has a long history of more than three decades in the Transportation & Leisure business with qualified, experienced and highly trained team of professionals managing the operations 24/7 efficiently with professionally designed Standard Operational Systems and Processes. The Group has an array of mobility solutions including City and Intercity scheduled bus services, Hop-on-Hop-off City Sightseeing services, Bus and Car rentals, Corporate and School bus services and Domestic & International tours and travel services for Corporate and individuals.

The Prasanna Group with a fleet of over 1000+ vehicles ranging from Indica cars to Volvo buses and small tempos to multi-axle trucks providing employment to around 4000+ people.

The vision of the Group is "To be peoples' chosen brand, universally in mobility solutions, by serving beyond their expectation for every journey, whilst adding value to all stakeholders and society at large"



Shri Amit Bhatt

*Director, Integrated Urban
Transport at World Resources
Institute*

Shri Amit is the Executive Director of (Urban Transport) at WRI India. He is based in Delhi and provides vision and leadership to all transport initiatives across WRI in India and neighbouring countries.

Amit has around 20 years' experience in the field of urban transport, electric mobility, road safety, non-motorised transportation planning, street design and urban development.

Amit has a Bachelor's degree in Architecture and a Master's degree in Transport. Amit also has a Master's degree in Economics and a diploma in Transport Economics and Management.



Shri Pawan Mulukutla

*Director, Electric Mobility -
Sustainable Cities, WRI India*

Pawan Mulukutla is the Director of Electric Mobility Program under Sustainable Cities at WRI India. Here, he is responsible for overall strategy, creating and maintaining delivery of research projects, stakeholder engagement and partnerships, work plan development and fundraising.

Pawan has over 18 years of experience in the urban mobility ecosystem. Prior to joining WRI India he worked at Bosch for close to two years setting up the "e-micromobility connected solution" program including development of business model, deployment of the solution with cloud-based backend for performance measurement and analytics. He also worked in the US for a decade with more than 20 cities on multiple topics ranging from Multi-modal Integration, Transit Planning, Long Range Transportation Planning, among others.

He holds a degree in Advanced Management Program from Indian Institute of Management, Bengaluru, a master's in Transportation Engineering and Planning from Clemson University, South Carolina, USA and a bachelor's in Civil Engineering from National Institute of Technology, Bhopal, India.



Ms. Shreya Gadepalli

*Founder & Managing Trustee,
Urban Works Institute*

Shreya Gadepalli is the Managing Trustee of the UrbanWorks Institute, an Indian think-n-do tank that enriches the lives of people by helping cities develop green and inclusive mobility solutions and create safe and engaging public spaces. She is regarded as one of the foremost urban mobility experts in India and worldwide.

Ms Gadepalli founded and led the immensely successful India Programme of the Institute for Transportation & Development Policy (ITDP) for over two decades. In this role, she guided dozens of cities to design and implement high-quality public transport systems and inclusive streets, as well as regulate motor vehicle use.

More recently, she helped the Smart Cities Mission of the Government of India conceptualise and launch three transformative national programmes: Cycles4Change, Streets4People, and Transport All. Shreya Gadepalli's work is a shining example of India's National Urban Transport Policy in action—Moving People, Not Cars.



Dr. Mangu Singh

*Managing Director, Delhi Metro
Rail Corporation (DMRC)*

Mr. Singh Graduated in Civil Engineering from University of Roorkee (1979).

He joined DMRC at the inception stage in November 1997 and has been playing key role in developing the Metro system in Delhi. He is also instrumental in assisting other State Governments in developing Metro systems in various cities.

He is recipient of National Award (Railway Week Award 1996), Sat Paul Mittal Award.

He has been awarded D.Sc. (Honoris Causa) by Amity University and D. Lit (Honoris Causa) by Modi University.

He has been awarded prestigious "Distinguished Alumina Award" by IIT Roorkee.

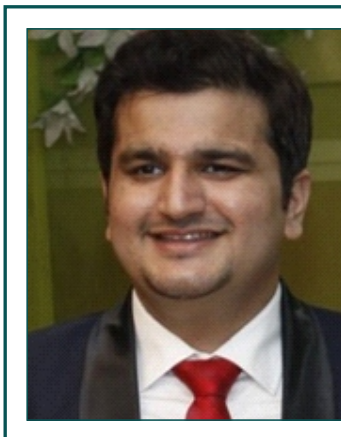
He has Published/Presented many technical papers in National and International Journals/Conferences etc. He is Fellow Indian National Academy of Engineering, Fellow Institution of Engineers (India) and President, Tunnelling Association of India. He is a Member of Policy Board of UITP and also Member of many Institutions.



Mr. Yves Crozet

*Leading French Economist,
Institute of Political Science,
Lyon University*

Mr. Yves Crozet, an academic economist, specialising in the transport economy, emeritus professor at the Institute of Political Studies (University of Lyon) and member of the Laboratory of Urban Planning, Transport, Economics (LAET) at Lyon University, where he was director from 1997 to 2007. He is also researcher associated with CERRE (Centre on regulation, Brussels). From 2010 to 2015, he was Secretary General of the World Conference on Transport Research (WCTR). His last publications focus on urban mobility, mobility as a service and the issues of accessibility to promote a new regulation of daily mobility.



Mr. Shirish Mahendru

Technical Expert, SMART-SUT, GIZ

Shirish Mahendru is a Transportation Expert. His work has focused on addressing both, overarching transport subjects like-transport vision preparation, policy preparation & assistance in strategy formulation for shift towards alternative clean fuels like green hydrogen & electric mobility; and core transport subjects like-performance enhancement of city-based bus services, transport-based capacity building, gender sensitization in transport, and road safety auditing and advocacy. Shirish is an alumnus of School of Planning and Architecture, New Delhi and has a Master's degree in Transportation Planning. He is also pursuing his PhD on Sustainable Transport Policy interventions.



Dr. Brijesh Dixit

*Managing Director, Maharashtra
Metro Rail Corporation Ltd*

An acclaimed Railway Administrator and an efficient infrastructure builder. An eminent institution builder and urban transport professional. Presently heading Maharashtra Metro Rail Corporation Ltd. (Maha Metro) as Managing Director.

Associated with Indian Railway for over 30 years including association with Mumbai suburban and urban rail transport for over 15 years, at various levels covering planning, designing, constructing, and maintaining large scale rail infrastructures & operation of services and administration of institutions on both Western and Central Railways.

Known for Total Transformation of Rail infrastructure and quality of services to both passenger and freight customers and public in general as DRM Nagpur, Central Railway.

Currently, as Managing Director, Maharashtra Metro Rail Corporation Ltd. (Maha Metro), built the organization from scratch, being employee no. 1 on 18th Feb' 2015, the day of its incorporation. Has ensured, a very expeditious start and fast progress of this major project overcoming numerous administrative and organizational challenges. Organized quick and smooth land acquisition; achieved fast tie up with international funding agencies viz. KfW Germany, AFD France and EIB. Ensured expeditious appointments of consultants and contractors. Achieved building up and functioning of organizational structure at board level and at the level of the corporation.

His latest accomplishment is Inauguration of 11 km section of Picturesque Aqua Line of Nagpur Metro, at the hands of Hon'ble Chief Minister of Maharashtra through video link on 28th Jan 2020 and inauguration of 13.5 km of Orange Line of Nagpur Metro, at the hands of Honorable Prime Minister Shri. Narendra Modi Ji through Video link on 7th March 2019.



Ms. Anja Fourie

Principal Portfolio Manager, KfW Development Bank

Ms. Anja Fourie is a Principal Portfolio Manager within the German development finance institution KfW Development Bank, currently working in the team Climate Finance and Mobility South Asia.

She has over 15 years of international cooperation work experience in different positions within KfW Development Bank and several countries – beside India, South Africa, Ghana and Kenya as well as Serbia, Montenegro and Bosnia Herzegovina.

Her expertise lies in sustainable urban development and climate-friendly urban transport as well as in financial sector development. She serves as a member of the Advisory Board of several Indian investment funds, like Aavishkaar, Omnivore and Encourage Solar Finance.

Anja is a trained banker and holds a master's degree in business management from the University of Regensburg, Germany.



Mr. Shashi Verma

Member of Transport for London's Executive Committee

Shashi Verma is a member of Transport for London's Executive Committee. As Director of Strategy he is responsible for TfL's overall corporate direction. Shashi established the Technology and Data team in 2017 and has been Chief Technology Officer since then. Upon joining TfL in 2002 Shashi established the Corporate Finance team with responsibility for major projects and for the development of corporate strategy.

Since 2006 Shashi has been responsible for the operation of TfL's revenue collection system including the Oyster card, the largest smartcard based ticketing system in the world; and, advising the Mayor of London on fares and ticketing policy. Shashi has led the development of contactless payments since 2007 and implemented this successfully on TfL's systems starting in 2012.

Shashi came to TfL from consultants McKinsey and Company, where he worked with clients in the heavy industrials, mining and petroleum sectors. Shashi has a Bachelor of Technology degree from the Indian Institute of Technology, Kharagpur, and a Master in Public Policy and an unfinished Ph.D. in Public Policy from the Kennedy School of Government at Harvard University. He taught at the Kennedy School for a year and received an award for excellence in teaching.



Shri Vinay Kumar Singh

*Managing Director,
National Capital Region Transport
Corporation (NCRTC), Delhi*

Shri Vinay Kumar Singh is the Managing Director of National Capital Regional Transport Corporation (NCRTC), a company under the Ministry of Housing and Urban Affairs. This company has mandate to design, develop, finance, operate and maintain the Regional Rapid Transit System (RRTS) with an aim to provide fast, safe and comfortable rapid transit between Delhi and nearby NCR towns.

Shri Singh is an officer of the Indian Railway Service of Engineers (IRSE) 1988 batch and is a Post Graduate from the Indian Institute of Technology (IIT) Delhi. He is a civil engineer who has worked on a wide variety of challenging professional assignments including maintenance of the highly demanding Ahmedabad - Kandla Port rail line as Divisional Engineer, Deputy Chief Engineer in charge during the first phase of Delhi Metro Rail Project, Secretary to General Manager, Northern Railway and Executive Director in the Railway Board.

Shri Singh was the Chief Executive Officer of the High Speed Rail Corporation a subsidiary of Rail Vikas Nigam Ltd. Shri Singh was the first officer who started construction of Delhi Metro on ground, the first CEO of the High Speed Rail Corporation and is now the first MD of NCRTC.



Mr. Fabrice Morenon

*Managing Director,
SNCF Hubs & Connexions, Paris*

Fabrice MORENON, Managing Director of SNCF Hubs & Connexions, subsidiary of SNCF Group (state-owned company), is in charge of the international development of stations. SNCF Hubs & Connexions develops all the expertise linked to transports hubs, from financing, conception, exploitation to the optimization of the retail and real estate development revenues. He holds a PhD in Economics (2003), a Master's Degree in Business Law from La Sorbonne University (1996) and graduated from Sciences Po Paris (1996).

He joined SNCF in 2009 as Director of Institutional Relations, especially for Ile-de-France and Greater Paris. In 2012, Fabrice MORENON initiated twinning between Railway Stations: Paris Austerlitz Station/ Shanghai South Station (2015) / Seoul Station / Paris Lyon Station (2016) London Saint Pancras / Bordeaux Saint Jean (2019). As the Managing Director of SNCF Hubs & Connexions, Fabrice MORENON aims at managing and operating railways station internationally.

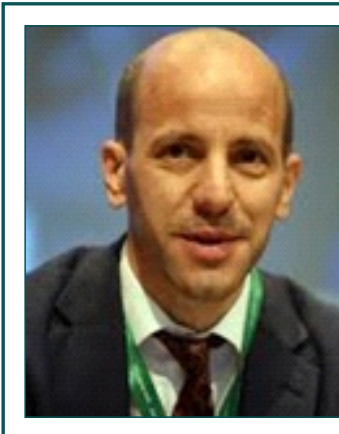
Fabrice MORENON is Chevalier (Knight) of the French National Order of Merit (2016). He has been appointed French foreign trade advisor by decree from French Prime Minister since July 2021 and named Chairman of the sector "Station Managers Global group" (SMGG) at International Union of Railways (UIC) since February 2021.



Mr. Martial Chevreuil

President, ATEC ITS

Over 30 years of experience in the field of ITS (Intelligent Transport Systems), past Business Innovation Director at Egis. In charge of Egis Innovation policy and exploitation of R&D projects. Fostering innovation culture among employees, coordinating cross entities innovative projects. Developing partnership in R&D and innovation. Since 1989, involved in Transport Telematics projects with a leading role in several projects for the European Commission. Involved in various projects concerning national deployment of ITS in France and other countries. Co-founder of ATEC-ITS France in 2000 and member of the scientific committee. Involved in the PIARC- World Road Association committee on Road Network operation since 2002, chairman of the technical committee B2 (2008 – 2011) with contribution to the Road Network Operation Handbook, the 2nd edition of the ITS handbook and the related website. Before joining Egis, ten years at the French Department of Transport, responsible for the national traffic information policy, the co-ordination of operations for summer holiday traffic (Bison Fûté), and the development of new technologies.



Mr. Philipp Knill

Head of Division "Policy issues of cooperation with Asia, South Asia, German Federal Ministry for Economic Cooperation and Development (BMZ)

Philipp is an economist by training and has been working with BMZ since 2000 in different functions, including cooperation with West Africa, policy and development effectiveness, environment and as head of cooperation at the German Embassy in La Paz/Bolivia. In 2015, he became head of division for Climate Policy. He took over his current position in July 2019.



Mr. Amegh Gopinath

Technical Expert, Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT), Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Mr. Amegh Gopinath is currently working as a Technical Expert for GIZ supported SMART-SUT project, he is working on National level projects related to electric mobility, training needs for electric buses, SOPs for bus transport post COVID19 lockdown, impacts of COVID19 on mobility and cities, street design guidelines, and capacity building activities. He has more than 8 years of experience in the field of urban transport. Prior to joining GIZ, he worked at World Resources Institute (WRI) and L&T, where he was actively involved in activities to improve urban mobility and road safety in Indian cities, Bangkok, and Addis Ababa. He started his professional career as a researcher working on urban transport-related emissions in Indian cities.



Mr. Narendra Verma

Technical Expert, Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT), Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Narendra is a transport planner with experience in working on projects related to sustainable mobility. He is currently working with GIZ on its bilateral technical cooperation project "Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT)" in India. The project works with smart cities of Kochi, Coimbatore, and Bhubaneswar with an objective to improve the planning and implementation of sustainable urban transport activities in these cities.

Prior Joining GIZ, Narendra was working with TERI where he was consistently engaged in research projects which focussed on issues related to urban and regional transport planning such as developing city sustainability guidelines and indicators, improving road safety on urban and rural roads, increasing share of railways in freight movement and so on.



Dr. Shalini Sinha

*Executive Director, CoE-UT,
CRDF-CEPT*

Dr. Shalini is an Associate Professor with Faculty of Planning at CEPT University and teaches postgraduate courses in transport planning and transport modelling. She is a transport and urban planner with nearly 20 years of work experience in India and the United Kingdom in the areas of public transport planning, demand forecasting, economic appraisals, and transport scheme appraisals. She has a PhD from CEPT University and a master's degree in Transport Planning and Engineering from the University of Leeds, U.K.



Mr. Karl Peet

*Director, Knowledge Management
and Impact, SLOCAT Partnership
on Sustainable, Low Carbon
Transport*

Karl leads knowledge and policy analysis for the NDC-TIA project and other researches on a range of topics, including financing strategies for sustainable transport, with the goal of supporting the global climate change and sustainable development agendas, in both urban and rural areas.



Prof. (Dr.) Sewa Ram

*Head of Department, School of
Planning and Architecture (SPA),
New Delhi*

Dr. Sewa Ram is an alumnus of IIT Delhi, SPA Delhi. He completed B. Tech from IIT Delhi, M. Planning (Transport) and Ph.D. from SPA, New Delhi. His area of interest includes transport engineering, transport design, transport infrastructure, transport environment, planning and design of sustainable transport system, road Safety and universal accessibility. He has been actively involved in formulation of several IRC codes. Dr. Ram was a key member of Indo- Highway Capacity Manual. To his credit, he has several international and national research publications and presentation. He was one of the member of Technical Core Group of TCPO on formulation of Urban and Regional Development Plan Formulation Guidelines (URDPFI) Guidelines. Dr. Ram is coordinator of module of Traffic Engineering for course of Accredited Road Safety Auditor course conducted by IAHE, ARRB and MoRTH, GOI.



Mr. Thibault Balland

*Bus Electrification Engineer,
Engineer, SETEC ITS*

Engineer at setec its, Thibault BALLAND is specialized in the field of public transport and energy transition.

He has been involved in several electrification missions of bus fleets with adaptation of maintenance for the Association du Transport Urbain du Québec (Canada), Toronto Transit Commission (Canada), Nagpur (India), Dakar (Senegal), etc.

He is setec's referent for Volt@bus, an internal simulation software used to estimate electric buses energy consumption and to dimension and optimize electrical infrastructures in depots.

He is also involved in the development of digital tools. In particular, he has helped develop an environmental cost-benefits analysis tool, which he uses in setec studies.



Mr. Takeo Konishi,

*Country Director, Asian
Development Bank India*

Mr. Takeo Konishi is the Country Director of Asian development Bank in India.

Mr. Konishi has more than 22 years of professional experience, including almost 20 years with ADB. He steadily progressed through senior roles since joining ADB as a Young Professional in August 1999. He has worked in SEOD as Programs Officer/Programs Coordination Specialist for 2 years and was assigned in PHCO as Programs Coordination Specialist in November 2003. He transferred to BPMSD as Human Resource Specialist in BPHR in September 2004 and was promoted to Senior Human Resource Specialist in February 2005. He then progressed to Principal Board Operations Specialist, OSEC in June 2008 and moved back to BPMSD in September 2011 as Advisor, BPMSD and Head, Unit for Institutional Coordination in BPOD-UIC. While in UIC, he supported ADB's Work Program and Budget Framework and implemented corresponding institutional changes to address evolving business needs and institutional priorities. In April 2014, he took over as Country Director, URM, where he established the ground-work for the significant increase in operations in a very complex and challenging environment. He moved to Central West Asia Department (CWRD) as Advisor in July 2018 and in this role, he supported the restructuring of CWRD's front office to help optimize the division of responsibilities and improve CWRD's overall operational effectiveness. He also effectively liaises with the Management and Board on a range of operational matters. Prior to ADB, he was Consultant at Inter-American Development Bank and PADCO (now AECOM International Development) in the USA.

Mr. Konishi holds a Master's degree in Public and International Affairs from University of Pittsburgh, USA and a Bachelor's degree in Political Science from Lynchburg College, USA.



Mr. Guy Le Bras

*Managing Director, GART-French
Association for Transport
Authorities, Paris*

Guy Le Bras is an engineer from the prestigious Mines engineering school in France and the Managing Director of the Groupement des Autorités Responsables de Transport (GART), an association of elected officials responsible for transport at the national and European level. He began his career as head of relations between Renault Véhicules Industriels and the World Bank, then as head of bus sales for south-eastern France. In 1995, he was appointed Chief of Staff for the Mayor of Laval and then, from 1997, Director of Laval Mayenne Technopole. In 2006, he joined the Veolia Transport group as Director of External Relations.



Mr. SHARAT CHANDER

*Head of Public Policy, Uber India
SA*

Sharat Chander is Head of Public Policy, Uber - India South Asia. He handles regulatory affairs and policy related mandates.

He has been a Civil Servant for 21 years. As part of the Indian Information Service from 1999 to 2020, he was posted in various departments of the Government of India including the Prime Minister's Office and the Election Commission of India.

He is an alumnus of IIT Roorkee, IIM Lucknow and the School of Planning and Architecture, New Delhi.



Shri. Shanavas S.

*Chief Executive Officer,
Kerala Metropolitan Transport
Authority*

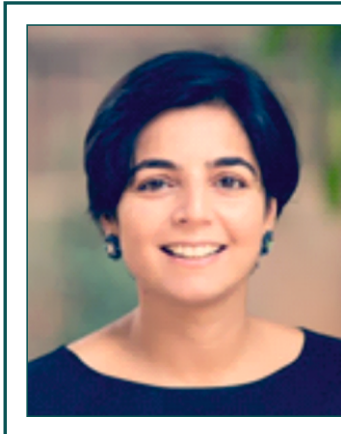
Mr. Shanavas S IAS (KI -2012) entered state civil service in the year 2006. He is a post graduate in Sociology and has an MBA in Marketing and Diploma in Supply Chain Management. He bagged the best State Civil Service officer award in 2011. He held various position such as Director Lotteries, Chief Executive Officer Norka Route and the Chief Executive officer of Education Mission. In 2018 Mr. Shanavas served as the Registrar of Cooperative Services. Mr. Shanavas had been instrumental in several innovations and initiatives during his stint as District Collector from 2019 to 2021. In the year 2021 he was posted as the Mission Director of MNREGA. Presently Mr. Shanavas is holding the position of Chief Executive Officer of Cochin Smart Mission Limited, Managing Director of Kerala Metropolitan Transport Authority & Vyttila Mobility Hub.



Mr Shyam Khandekar

*Co-Founder and Director,
MYLIVEABLE CITY*

Shyam is Co-founder, Director and Editorial Director of the Knowledge platform, My Liveable City. He is an urban designer, city planner and architect with four decades of design experience in Europe and India. He was the founder and director of the award winning Dutch design practice, Khandekar Urban Design and Landscape, that continued under the name of BDP. Khandekar. He has lectured and published extensively on different aspects of Liveable Cities at universities and conferences across the world. My Liveable City has published two books under his guidance, Affordable Housing, Inclusive Cities published in 2019 was edited by him, while Designing For Sustainability Through Upcycling, published in 2020 was authored by him.



Ms. Mahua Acharya

*Managing Director & Chief
Executive Officer, Convergence
Energy Services Limited*

Ms. Mahua Acharya is Managing Director & Chief Executive Officer of Convergence Energy Services Limited (CESL), a wholly owned subsidiary of Energy Efficiency Services Limited (EESL). She was the Asia Director of Climate Policy Initiative and was responsible for leading the organisation in Delhi and Jakarta, while also supporting high-level strategic planning and further build-up of the organisation. Ms Acharya has two decades of international experience in green finance, renewables, and carbon markets. Ms. Acharya served at the Global Green Growth Institute (GGGI) as Assistant Director-General and Head of GGGI's Investment and Policy Solutions Division, where she introduced green finance into the organization's corporate agenda and established a team that worked across 16 countries. Prior to joining GGGI, Ms. Acharya was Managing Director at C-Quest Capital LLC. She has also held positions at the World Bank as well as in the private sector with ArcelorMittal, London. She has a Masters' degree from Yale University.



Sh. Ashish Kundra, IAS

*Pr. Secretary cum Commissioner
(Transport), GNCTD*

Sh. Ashish Kundra belongs to the 1996 batch of the Indian Administrative Service. He currently leads the office of Pr. Secretary cum Commissioner (Transport), GNCT of Delhi.

With a keen interest in Technology, he did his graduation in BTech (Electronics) from the prestigious IIT (Banaras Hindu University), Varanasi. He has vast administrative experience spanning across 25 years of serving the nation. Mr. Kundra has held several important posts like – Chief Electoral Officer of Mizoram, Private Secretary to the Union Minister for Commerce and Industry, and as an Administrator of Daman & Diu and Dadra & Nagar Haveli.

In his current capacity, Mr. Kundra is leading the charge to electrify Delhi's mobility, getting RTO services to citizens doorsteps by way of Faceless Services, implementing Road Safety measures and ensuring women safety in Public Transport by implementing projects like installing CCTV cameras and panic buttons in every bus of the State.



SESSION BRIEF



Plenary Panel Discussion – Economic development and Urban Mobility

Cities are the Engines of Economic Growth and if India is to become a \$5 Trillion economy by 2025 and a \$10 Trillion economy by 2030, urban areas will have to both accommodate and enable such growth. Transport systems will be fundamental to such growth as they allow people to access jobs, children to access education, patients to access healthcare and goods to access markets. However, economic growth also brings challenges to existing mobility systems as travel demand goes up and existing systems need change to accommodate the growth.

Hence, this plenary session will seek to look at how mobility systems support economic growth and how economic growth requires changes in mobility systems. It will suggest changes needed to ensure that India's growth ambitions are not constrained by mobility systems. In this context, this plenary session will comprise one background presentation followed by a panel discussion that will seek to address the following:

Effecting a shift from personal to public modes

Personal vehicles continue to be attractive as they are very convenient and comfortable. How can public transport be made attractive to persuade a shift – integrated systems, safe systems, affordable systems, and innovative financing sources seem to be needed?

Focus on access rather than mobility

People look for transport systems to allow access to jobs, education, etc. However, the focus of planning transport systems is in improving mobility. How do we change the focus? Paying attention to integrated land use and transport planning will help improve access.

Empower local governments

Local governments are best placed to integrate transport and land use planning and so need to be trained and empowered to do this at the local level. This includes transit oriented development and creation of jobs near public transit stations.

Make in India

How can “make in India” be implemented and how is it being done? What benefits accrue from this in terms of reduced costs and improved reliability?

Urban freight planning and improved logistics

Urban freight movement and improved logistics is critical to economic growth, but has not been given due attention. What needs to be done to improve this?



Breakout Session 1:

Statutory Interventions – Reforms in Acts and Policies

Major changes have taken place in the urban transport sector. Advancements in IT and the proliferation of shared mobility options are changing the way people travel. COVID19 is likely to create lasting changes in how people work or shop. All of these need changes in how transport systems are provided. They will need far greater integration of different modes of transport as also transport and land use. These, in turn, will need changes in the legal frameworks and the existing policies, all of which were designed for earlier times. This session will seek to understand the modifications needed in the legal frameworks and existing policies. Among them will include:

- Integrated institutional and Governance Frameworks
- Regulatory challenges and frameworks for regulation
- Frameworks for data sharing and security



Breakout Session 2:

Best Practices in Integrated Public Transport

Multimodal integration (MMI) helps in creating a transport system combining multiple modes of transport to offer seamless mobility for all users. Enabling integration involves putting in coordinated set of measures in five core areas – network and service integration, physical integration, fare integration, information integration and institutional integration. There are several examples, across the world, of integrated transport systems which have made commuter travel on public transport more convenient and comfortable leading to increase in ridership and revenue. MMI has been one of the key focus areas of in many Indian cities over the past decade. This session focuses on the MMI experiences in Indian cities and an evaluation framework to assess the level of integration achieved and identify the action areas.



Breakout Session 3:

Sustainable and Green Mobility

Around the world, mobility is changing. More than 50 percent of today's global population live in cities. By 2050, this will be just under 70 percent, which means that around 6.5 billion people will need mobility solutions. The urban population growth rate in India has consistently overpowered the total population growth rate over the last seventy years. This trend is set to continue for the next 30 years.

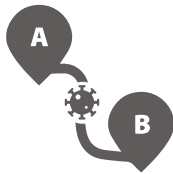
Fundamental changes are necessary to overcome these hurdles in transport sector and to achieve the goals of the 2030 Agenda. Sustainable transport systems can make a positive contribution towards this goal considering the environmental, social, and economic sustainability of communities. The panel discussion session will explore Government of India's effort to support green urban mobility infrastructure and services at national, state, and city level along with recent initiatives towards implementing sustainable, inclusive, and smart mobility solutions in Indian cities.



Breakout Session 4: Innovations in Urban Mobility

New technologies are transforming urban mobility like never before. Whether it is shared mobility, or clean fuels like electric vehicles, big changes are taking place. This session will involve presentations on some of these innovations, including the following:

- Opportunities for multimodal integration with emerging technologies
- Issues and opportunities in electric mobility
- Issues and opportunities in shared mobility
- Innovations in informal mobility systems
- Innovations in low cost metro systems



Breakout Session 5: Resilient Transport Systems (Post COVID)

Resilience planning is an important feature of sustainable transport development, ensuring that passenger and freight transport infrastructure, services and operations are able to adapt well to climate change-related events, unexpected disasters and chronic outbreaks. This is even more so, given the experience of the pandemic. The session will cover the following:

Assessment of changes in travel demand patterns during the pandemic, and likely scenario in the future

The assessment of Travel demand in the urban areas during and after lockdown to understand the change in modal split, environmental impact, and travel pattern.

Re-inventing public transport post pandemic

Initiatives and measures to reinvigorate public transport ridership in the post pandemic era.

Resilient last mile logistics

The impact of heavy growth in e-commerce demand on urban freight during the pandemic.

Re-allocating street space

Given the reduced travel demand, examples of how street space was re-allocated to encourage more cycling and walking

Plenary Conclave: INDIA AT 75- MOBILITY FOR ALL

There is an increasing recognition that transport infrastructure, especially urban roads, have tended to be used largely by personal motor vehicle users. Their design has not allowed safe walking and cycling, or even allocated equitable space for public transport. While this may have worked at a time when congestion was not too bad, competition of space, as travel demand grew enabled personal motor vehicle users to use up a lion's share of this space, often crowding out other users. It is important to ensure that urban transport systems are equitable and enable safe and affordable mobility for all.

The major initiatives which propel this understanding are as follows:

1. The National Urban Transport Policy adopted in 2006 emphasizes "Moving people not vehicles".
2. The Metro Rail policy of 2017 stresses reliable and accessible transit medium for the vulnerable sections of the society, in line with the policy of "sab ka saath, sab ka vikas" (i.e., "development with all, and for all").

Further, the country, under the visionary leadership of Hon'ble Prime Minister Shri Narendra Modi, is focusing on several initiatives towards energy-efficient and low-carbon transport like providing mass transit systems in more than 50 cities, hybrid & electric mobility, improved emission standards, etc. In order to promote indigenization and reduction in cost, the specifications of various metro rail components like rolling stock, signalling & telecom systems, electrical & electromechanical systems and civil engineering structures have been standardized. New public transport mobility paradigms such as MetroNeo, MetroLite, RRTS, and augmented city bus services are being implemented. Also, smart transportation systems have been created like modern Communication Systems, NCMC, Global Positioning System (GPS), Intelligent Transport System (ITS) etc to improve the performance of transit modes which increases the acceptance of commuters.

This session will, accordingly, focus on:

- Policies and practices for reframing urban mobility so that "no one is left behind".
- Gender Inclusive Urban transportation
- Economic Inclusion for all.
- Measures to actively protect and promote NMT
- Safe and Affordable urban transport.
- Minimizing transport-related fatalities and air pollution emissions

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HIGHLIGHTS OF THE DELHI METRO SYSTEM

- India's largest Metro network* - Over 390 KM with 286 Metro stations
- Completing 19 years of successful Metro Operations in 2021
- Around 6 million passenger journeys performed daily (Pre-Covid)
- Metro stations are fully equipped with Divyang-friendly facilities - Wheelchairs, Ramps, Lifts, Escalators, Tactile Path etc.
- Last Mile Connectivity provided through Feeder Buses, E-Rickshaws, E-Bikes, Cab Aggregator Services, etc.
- Energy Conservation with extensive use of Renewable Energy produced through Rooftop Solar Plants at Metro premises, Off Site Solar Plants and Waste-to-Energy Plants.
- Around 35% of Delhi Metro's daily energy requirement is met from Renewable Energy i.e., Solar and Waste recycling.
- First Metro Rail & Rail based system in the world to get Carbon Credits from the United Nations

* Including the Noida - Greater Noida Metro Corridor and Rapid Metro, Gurugram



As on September 2021

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PIONEERING A NEW COURSE OF PUBLIC TRANSPORTATION IN SURAT



SURAT METRO RAIL PROJECT

Surat Metro Corridor Details_Phase 1:

| Sr. No | Corridor | Underground | Elevated | Total |
|--------|-------------------------------------|---|---|-----------------|
| 1. | Sarthana – Dream City (20 Stations) | Chowk Bazar – Kapodara (6 stations) 6.47 KM | Dream City - Kadarsha ni Nal (10 Stations) + Swaminarayan Mandir - Sarthana (4 stations) 15.14 KM | 21.61 KM |
| 2. | Bhesan – Saroli (18 stations) | | Bhesan - Saroli (18 stations) 18.74 KM | 18.74 KM |
| | Total (KM) | 6.47 KM | 33.88 KM | 40.35 KM |

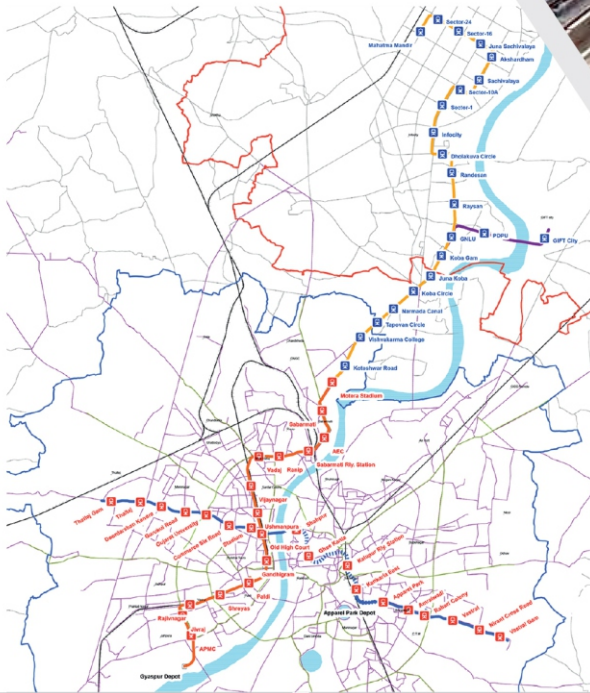


Surat Metro Depot Details_Phase 1:

| Sr. No. | Corridor | Depot Location |
|---------|-----------------------|----------------|
| 1. | Sarthana - Dream City | Dream City |
| 2. | Bhesan - Saroli | Bhesan |



PIONEERING A NEW COURSE OF PUBLIC TRANSPORTATION IN AHMEDABAD & GANDHINAGAR



AHMEDABAD METRO MAKES ITS PRESENCE FELT

PHASE-I METRO PROJECT

| Corridor Name | Length (km) | No. of Stations |
|----------------------|--------------|-----------------|
| North-South | 18.87 | 15 |
| East-West Elevated | 14.63 | 13 |
| East-West UG Section | 6.53 | 4 |
| Total | 40.03 | 32 |

PHASE-I

| | |
|--|---------------|
| | Metro Station |
| | AMC Boundary |
| | Depot |
| | Railway |

PHASE-II

| | |
|--|---------------|
| | Metro Station |
| | GUDA Boundary |
| | AMTS |
| | BRTS |

PHASE-II METRO PROJECT

| Corridor Name (Elevates) | Length (km) | No. of Stations |
|--------------------------|--------------|-----------------|
| Motera-Mahatma Mandir | 22.84 | 20 |
| GNLU Gift City | 5.42 | 2 |
| Total | 28.26 | 22 |





Phase-1 of Namma Metro:

The Phase-1 of Bangalore Metro Rail Project with 42 km and 40 stations which has two corridors viz. East -West Corridor called the Purple line of length 18.1 Kms with 17 Stations and North-South called Green Line of length 24.1 Kms with 24 Stations and both these lines cross at Underground "Nadaprabhu Kempegowda Station – Majestic" at two levels and is also the Interchange Station.

The Phase-1 of the project was opened for passenger services in stages from October 2011 and the last section of Phase-1 was commissioned in June 2017 and completed at a cost of Rs. 13,845 Cr.

Phase-2 of Namma Metro:

Bangalore Metro Rail Project Phase-2 is for a route length of 72.1 kms with 61 stations. It consists of Extensions to both Purple and Green lines in all the four directions totaling to 32.03 route kms and two new lines viz. Gottigere-Nagawara for a route length of 22 Kms out of which 14 kms is underground line and R V Road- Bommasandra for a route length of 19 Kms. The southern extension of 6 kms and 5 stations and the western extension of 7.5 kms and 6 stations were opened for passenger services on 15.01.2021 and 30.08.2021. With this 56 kms and 51 stations are operational remaining works are in various stages are in progress.

The project is being implemented at the approved revised cost of Rs. 30,695 Crore and the Works are in progress in all the lines.

Phase- 2A & 2B ORR-Airport Metro:

Phase-2A from Central Silk Board to K.R. Puram along the

Outer Ring Road for a route length of 19.75 kms with 13 Elevated Stations and Phase-2B from K.R. Puram to Kempegowda International Airport for a route length of 38.44 kms with 17 stations at a total estimated cost of Rs.14,788 Crores. The IT companies on this ORR Corridor account for more than 12 % of India's IT export.

- ◆ Phase-2A Civil Contracts has been awarded and 100% Land Acquisition is completed for this section.
- ◆ Phase-2B Civil Tenders are at advance stage and are awarded by October, 2021. Land Acquisition and Utility Shifting completed are 87% and 50% respectively.
- ◆ For Phase-2A & 2B, Japan International Cooperation Agency and Asian Development Bank have provided loans of Rs.2364 Crore and Rs. 3781.63 Crore respectively.

Phase-3 Network at Planning stage:

- ◆ Bangalore Metro Rail Project Phase-3 is proposed to be taken up metro project in the following line;
 - ❖ ORR West Line from Kempapura to J.P. Nagar 4th Phase covering 32.16 km.
 - ❖ Magadi Road Line from Hosahalli Metro Station to Kadabagere covering 12.82 km.
- ◆ Presently DPR Preparation is under progress.

With completion of Phase-2 of the Metro Rail Project and the Phase-2A & 2B by the year 2024, Bangalore will have a Metro Rail Network of 176 kms, Namma Metro is inching toward connecting every nook and corner of Bangalore city. Presently, In addition the Comprehensive Mobility Plan for the year 2031 envisages a total length of 317 km of Metro Rail Network for the city of Bangalore.

Bangalore Metro Rail Corporation Ltd.

3rd Floor, BMTC Complex, K.H. Road, Shanthi Nagar, Bengaluru - 560 027

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Delhi - Gurugram - SNB - Alwar : 198 km

Delhi - Panipat : 103 km



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Kanpur Metro



Agra Metro

Kanpur & Agra Metro Project:

- First prototype train for Kanpur Metro has reached in Kanpur Metro Depot on 28th September where it will go through several tests that include Oscillation Trial Run, Train Load Testing, Signalling and Electrical, speed trial etc.
- UPMRC is slated to commence the trial run in November, 2021.
- Civil construction of Agra Metro projects' priority corridor is continuing at a fast pace.

Salient features of Lucknow Metro Project:

- The fastest constructed Metro Rail Project in the country.
- Lucknow Metro has a network of 21 Metro stations comprising 17 Elevated and 4 Underground stations covering a stretch of 22.878 km.
- Distinction for starting commercial operations for public on the 8.5 km Priority Corridor' from Transport Nagar to Charbagh on 5th September, 2017 in less than three years.
- The 23 km. long North-South corridor of Lucknow Metro was completed 36 days before the deadline of 4.5 years .
- Provides state-of-the art, modern, world class facilities and infrastructure.
- Lucknow Metro Rail Corporation is now Uttar Pradesh Metro Rail Corporation (UPMRC) and implementing Metro projects in important cities of Uttar Pradesh like Kanpur and Agra.

Awards :



- Lucknow Metro registered its name in the 'Limca Book of Records' for completing the construction of underground metro station of CCS Airport in just 19 months 10 days.
- 'National Energy Conservation Award, 2019' by Bureau of Energy Efficiency (BEE), Ministry of Power, GOI.
- International 'Royal Society for the Prevention of Accidents (RoSPA)' Gold Award, 2019.
- ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 certified organization.

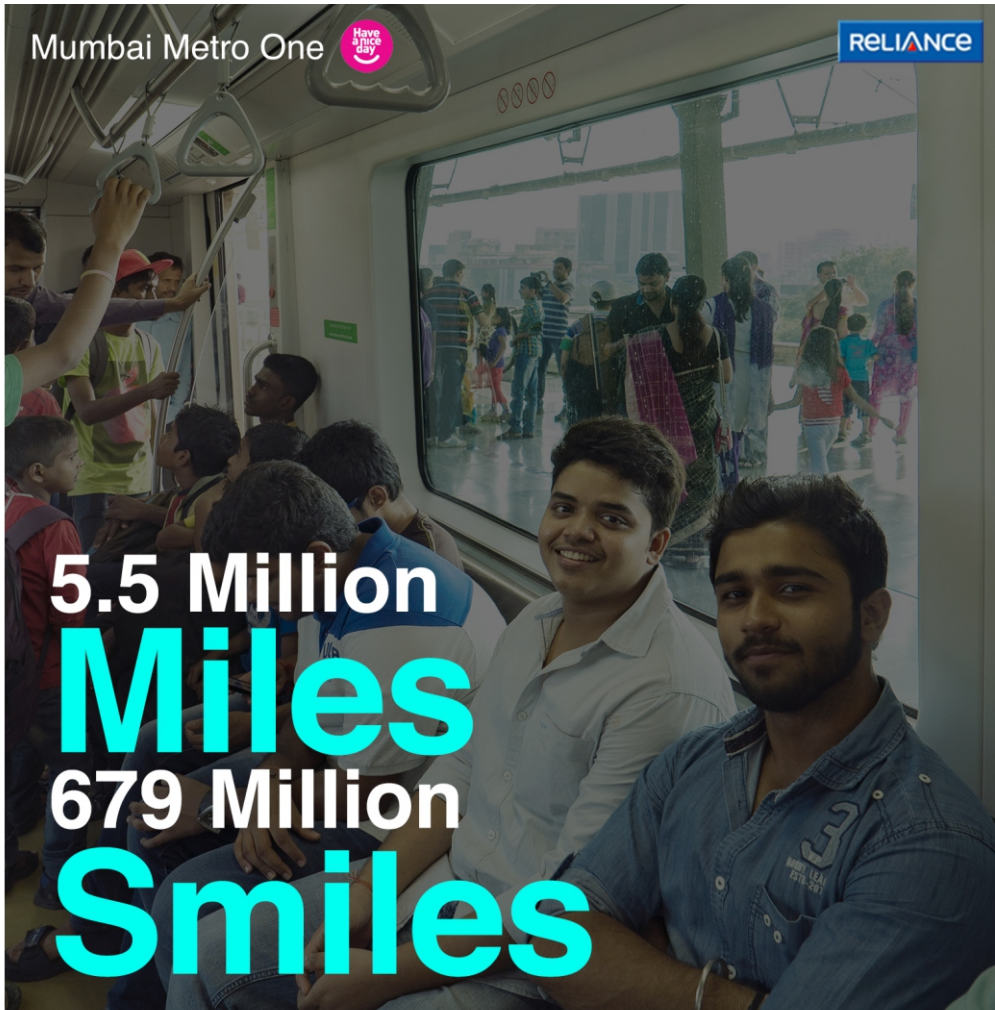


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- Expert O&M consultancy services for planning and delivery of metro rail projects
- Transit Oriented Development opportunities with vibrant urban spaces for businesses. Integrated with a high-quality transit system, TOD offers around 18.5 million sqft of space for work, shopping, leisure, entertainment, healthcare along with a parking and circulation area, comprising of over 6.0 million sqft adjoining Metro Rail stations and 12.5 million sqft at terminal and depot locations.
- Availability of a state-of-the-art Rail Grinding Machine on hire for maintenance and enhancement of rail tracks' lifespan



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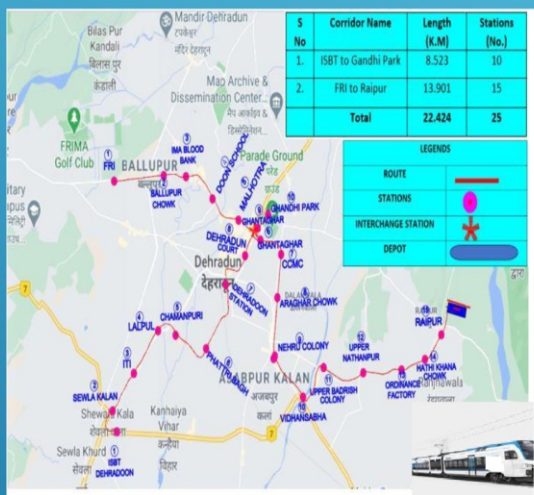


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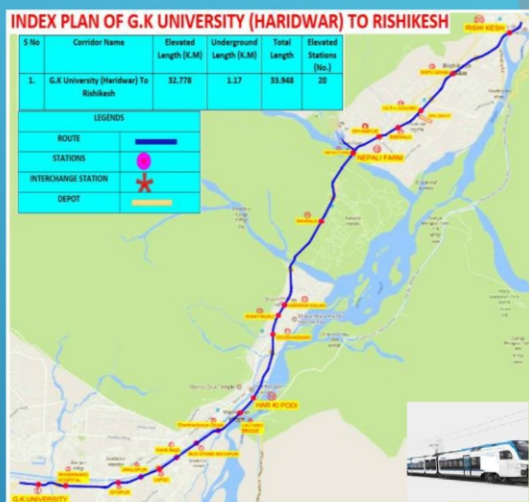
**UKMRC Incorporated In March 2017 With The Responsibility Of Implementation Of
Uttarakhand Metro Rail Project.**

Projects Under Consideration

Metro Neo Dehradun



Metro Neo Haridwar to Rishikesh



Ropeway Projects

- Har Ki Pauri to Chandi Devi Mandir with Length of 2.3 kms and 2 station
- ISBT Rishikesh to Neelkanth Mahadev Temple of Length 5.4 kms and 3 stations.



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Sh. Ashok Gehlot
Hon'ble Chief Minister, Rajasthan



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