Training Course Report

Capacity Building for Urban Development (CBUD) under AMRUT

Capsule II

22 – 24 August, 2016 | Indore, Madhya Pradesh

Organized jointly by:

WRI INDIA

अमृत
Atal Mission for Rejuvenation and Urban Transformation

सत्यमेव जयते
Ministry of Urban Development
Government of India

CONTENTS

SUMMARY

This document is a report on the second capsule of the Capacity Building for Urban Development (CBUD) program under AMRUT. The capsule was organized by WRI India with support from the Ministry of Urban Development, and the Madhya Pradesh Directorate of Urban Administration and Development (UADD). The capsule was conducted at Hotel Sayaji in Indore, Madhya Pradesh, between the 22nd and 24th of August, 2016.

The capsule was designed in consultation with the UADD, considering the feedback provided by participants at the Orientation Capsule held in June, 2016. The capsule was aimed at helping participants explore subjects related to urban mobility – city bus operations and BRT systems, safety in design and use of public transport, and transit oriented development – in the context of the cities of Madhya Pradesh. The training methodology consisted of a series of interactive sessions underpinned by expert led lectures, facilitated discussions, specially designed group activities, interactive board games and role plays and a guided exposure visit.

The capsule was led by a faculty of five experts and two supporting members from WRI India, with extensive practical experience. They led a cohort of 31 participants representing 22 cities from the state through public offices like Municipal Corporations, Urban Development Departments, and Town and Country Planning Departments.

The capsule also consisted of mechanisms for assessing feedback through both quantitative and qualitative questionnaires. The feedback assessment highlighted a largely positive reception to the capsule, with especially favourable ratings for the course's content and its faculty, and the extensive use of interactive training methodologies.

From an organizational standpoint, WRI India was responsible for the design and articulation of the capsule, including its content, structure, faculty, and delivery. The UADD recommended the participants for the training, sourcing them from relevant departments and offices from across the state.

PARTICIPANTS' PROFILE

The orientation capsule was attended by 31 participants, all of whom were recommended by the Directorate of Urban Administration and Development, Government of Madhya Pradesh. Details of these participants can be found in the database of participants (please see appendix B) accompanying this report, while a generic overview follows:

- The participant cohort represented a total of 20 of the 30 most populous cities from across the state, the largest being Indore (population of 2,167,447 people as per the 2011 census) and the smallest being Sarni (population of 100,503 as per the 2011 census).

largest *city represented*

smallest *city represented*

bhind bhopal burhanpur chhindwara dewas guna gwalior indore jabalpur
katni khandwa morena ratlam rewa sarni satna singrauli ujjain vidisha

- The training was attended by a large number of officials from engineering departments of various ULBs, and also by a significant number of town and country planning department officers.
  - ●●● two thirds *were from engineering departments*
  - ●●●●●● one sixth *were from town and country planning offices*

- A majority of participants were grade B officers, with most holding the designation of 'COO – Transport'. They were accompanied by a significant number of Engineers.
  - ●●●●● three fifths *were grade B officers*
  - ●● half *held the designation COO-Transport*
  - ●●● one third *held the engineering designations*

- A significant proportion of participants were from various urban development authorities and different circle offices of the UADD. Other department types represented included municipal corporations, town and country planning departments, transport planning departments, and finance departments.
  - ●●●● one fourth *from urban development authorities*
  - ●●●● one fourth *from UADD*

- All participants were male, with a third being above the age of 50. Over half held academic qualifications in engineering, with many others holding a degree in Management.
  - ●●●●●●●●● ~60% *above the age of 40 with* half of them *being above the age of 50*
  - ●● half *were engineers*

TRAINING AGENDA

The capsule was spread over three full days, each divided into a number of sessions, each 30 to 60 minutes in length. Sessions were subject specific, and were led by faculty in an interactive, discussion based manner. Many sessions were followed by group exercises focusing on advancing planning skills of the participants, while a guided site visit was conducted to allow participants to contextualize their learnings and engage in implementation and practical aspects of urban mobility. The capsule's content broadly focused on public transport in the cities of Madhya Pradesh, with intensive sessions on planning and design of bus-based urban transport systems, safety in their design and usage, and transit oriented development.

The formal agenda of the capsule was as follows.

Training Day 1 – 22nd August, 2016

09:00 AM – 09:30 AM	Participant Registration
09:30 AM – 10:00 AM	Inaugural Session and Group Photograph *Jointly by State and WRI India*
10:00 AM – 01:00 PM *Session 01*	Principles of Transit Oriented Development (TOD) *Prerna Mehta, Manager –Sustainable Cities, WRI India*
01:00 PM – 02:00 PM	Lunch
02:00 PM – 05:30 PM *Session 02*	Understanding Safe Access to Public Transit through an interactive Board Game & Role Plays *Prerna Mehta, WRI India* *Rajeev Malagi, Senior Project Associate – Urban Transport, WRI India*

Training Day 2 – 23rd August, 2016

09:00 AM – 09:30 AM	Review of Day 1
09:30 AM – 10:30 AM *Session 03*	Status of Public Transport in Indian Cities and Introduction to Sustainable Urban Transport *Umang Jain, Managing Associate – Urban Transport, WRI India*
10:30 AM – 12:00 PM *Session 04*	Optimising City Bus Services through Fare Structuring and Route Rationalisation *Umang Jain, WRI India*

12:00 PM – 01:00 PM *Session 05*	Understanding Bus Rapid Transit (BRT) Systems *Priyanka Vasudevan, Managing Associate – Urban Transport and Road Safety, WRI India*
01:00 PM – 02:00 PM	Lunch
02:00 PM – 03:00 PM *Session 05 (Contd)*	Understanding Bus Rapid Transit (BRT) Systems (Continued) *Priyanka Vasudevan, WRI India*
03:00 PM onwards	Site Visit to the Indore BRT System *All participants facilitated by WRI India Team*

Training Day 3 – 24th August, 2016

08:00 AM – 09:00 AM	Breakfast and Check-out by all participants
09:00 AM – 09:30 AM	Review of Day 2
09.30 AM – 11:00 AM	Group Presentations and Reflections from Site Visit *Presentations by participants (facilitated by WRI India Team)*
11:00 AM – 12:00 PM *Session 06*	Public Transport and Safety *Priyanka Vasudevan, WRI India*
12:00 PM – 01:00 PM *Session 07*	Mechanisms for Financing Public Transport in Indian Cities *Umang Jain, WRI India*
01:00 PM – 02:00 PM	Lunch
02:00 PM – 03:00 PM *Session 08*	Planning for Women's Safety in Public Transport *Azra Khan, Consultant, WRI India*
03:00 PM – 04:00 PM *Session 09*	Intermediate Public Transport and Public Transport Integration *Umang Jain, WRI India*
04:00 PM – 04:30 PM	Wrap-up and Closing Remarks *WRI India Team*

COURSE SUMMARY

Summary of Day 1 – 22nd August, 2016

The first day of the capsule focused largely on transit oriented development, and its integration into mainstream urban planning practices in Indian cities. The day's sessions included:

- A session on TOD led by Ms. Prerna Mehta. The session introduced participants to various approaches and tools with which to effectively implement TOD in the cities of Madhya Pradesh. The session consisted of a lecture, an overview of TOD in the context of principles of TOD, scales of TOD, case studies for retrofitting, redevelopment, Infill and Greenfield examples and a guided group discussion followed by participants' presentation. Key takeaways included that :
    - TOD requires a long term vision and has a long incubation period, and can be implemented at various scales. Benefits of TOD will be apparent in long-term post implementation. Timely inclusion of TOD in urban planning practice can help prepare cities that are currently small or medium sized for future expansion.
    - That TOD needs to consider and appropriately plan for first and last mile connectivity through non-motorized and paratransit channels, and that its principles can be applied for enhancing safety, accessibility, and people-friendliness in transit rich areas and in neighbourhood planning as well.
    - There is no standardized approach to TOD, i.e., one size does *not* fit all and hence, it needs to be contextualized to be effective and popular.
    - The existing institutional setup will require restructuring to empower stakeholders, like transit agencies, for taking up TOD.

Figure 1 – The TOD session in progress. Participants can be seen brainstorming on the legal and policymaking frameworks surrounding implementation of TOD policies in India.

- A session on Safe Access to Public Transit led by Ms. Prerna Mehta and Mr. Rajeev Malagi. The aim of the session was to highlight the importance of ensuring safe and universal access to public transport systems, given that public transport nodes in Indian cities were significantly accident prone, and that public transport ridership is compromised if potential riders were affected by the difficulty of accessing stations and transport nodes. The session was largely devoted to an innovative board game developed by WRI India, where participants were divided into groups and allotted roles such as a cyclist, a car owner, a wheelchair user, a government representative, a shop owner etc,. Assuming these roles, participants had to collectively brainstorm on several public transport issues such as its safety and design, and arrive at mutually agreed upon interventions, which they were required to present and defend in front of other groups and faculty. In the second part of the game, participants were introduced to Palasiya, an important station of Indore's BRT corridor, and one where congestion and accidents are major issues. Participant groups were then asked to discuss the applicability of their interventions in the area, and present their views in front of the rest of the groups. Most important take away of this session was the understanding of "station area" as a term and its spatial application. This interaction helped the participants to understand the station area definition in context of the surrounding development which was not the case before. The participants realized that there are other elements that can bring quality to the "Station area" and resolve issues.

Figure 2 – The session on Safe Access to Mass Transit and its board game. Participants can be seen discussing strategies through which to safe access principles can be implemented and promoted in congested precincts of Indore, like Palasiya.

Summary of Day 2 – 29th June, 2016

Day 2 focused on public transport systems, and included the following sessions:

- A session introducing participants to the current state of public transport in Indian cities, highlighting the continued importance of buses and paratransit systems. The session was led by Mr. Umang Jain, and was aimed at familiarizing participants with existing practices and paradigms in the realm of mass urban transport.
- A session on the optimization of city bus services led by Mr. Jain. The session focused on operational issues of city bus services, and helped participants understand basic tools and methodologies behind route rationalization and fare structuring. Given that most AMRUT cities in Madhya Pradesh lacked any formal public transport system, the session devoted significant time to discussions on various ways in which new bus systems could be planned and introduced in these cities. The session also included simple exercises, like formula based calculation of public transport requirements, and a discussion on peer-to-peer learning between city bus operators, drawing from the success of WRI India's Bus Karo programme.


Figure 3 – The session on optimization of city bus services. Participants can be seen working together to calculate typical bus fleet requirements using simple formulae.

- A session on BRT systems led by Ms. Priyanka Vasudevan. The session was aimed at introducing participants to Bus Rapid Transit systems, and helped them understand its essential components. This was followed by a showcase of different BRT systems around the world, stressing the many ways in which it could be contextualized. The session also included a discussion on the perception of BRT systems and the reasons for its success and failure in different Indian cities. It was generally agreed that a BRT system was a much more viable and flexible mass transit offering for resource-limited Indian cities, and that it needs to be supported by sensitive design and marketing to ensure high ridership.
- A session on Indore's BRT system, the iBus, led by Mr. Rahoul Shrouti, a senior technical executive at Atal Indore City Transport Service Limited (AICTSL). The presentation focused on the achievements of the iBus system, and the various outreach methodologies adopted to increase

patronage. The presentation also discussed how litigations against the system led by car lobbies were countered with conclusive evidence of the system's many benefits.

The day culminated with a guided site visit to the iBus system. Participants were made to access and use the system like regular passengers, taking a feeder bus to the closest BRT station, and then riding its entire length. At the BRT station, participants were shown the various design and operational elements employed, such as ticket counters, food dispensers, wi-fi accessibility, and automated signaling. Participants also got a chance to discuss technical aspects of the system with the operators, AICTSL.

Figure 4 – The site visit to Indore's iBus system, guided by representatives from AICTSL, the system's operators.

Summary of Day 3 – 30th June, 2016

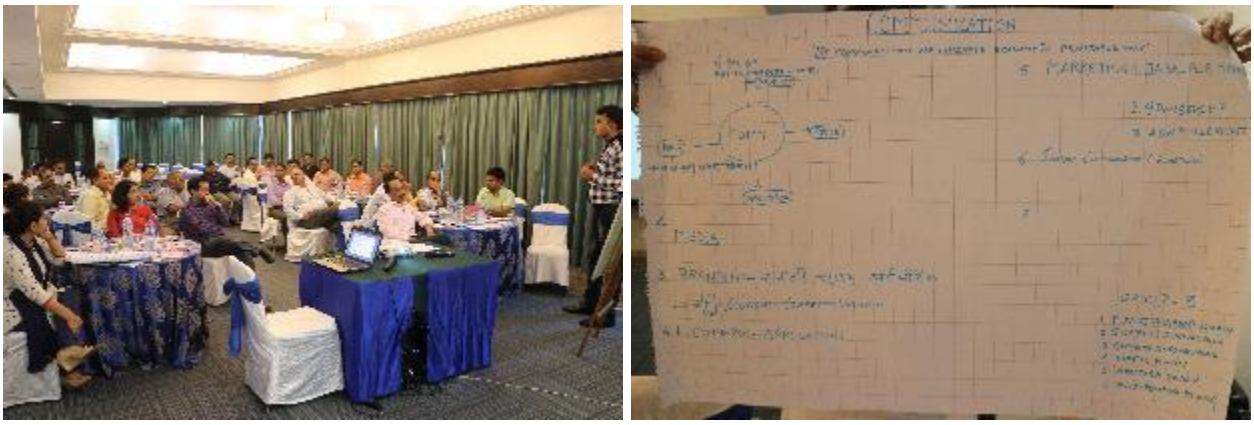


Figure 5 – The group presentation session. Participants can be seen presenting various aspects of city bus services, such as communications, contracting, and safety.

Day 3 began with a group presentation session. Participants were divided into groups and then asked to think of guidelines for public transport in a city of their choice, keeping in mind a broad, overarching aspect such as branding and marketing, gender safety, and contracting options. Participants were asked to discuss the same within their groups and present and defend their guidelines in front of other groups and faculty. The session was found to be extremely engaging, and featured intensive debate.

Thereafter, the day's sessions focused on concluding the previous day's discussions on city bus services, and shifted attention to safety issues in public transport. The sessions held included:

- A session on financing public transport in Indian cities led by Mr. Jain. The session highlighted various financing models, including innovative approaches such as advertising and land value capturing, and discussed how such models could help sustain public transport systems. Participants were shown the example of Bangalore, and engaged in a discussion on how innovative financing can help ensure profitability as well as high ridership.
- A session on integrated public transport, led by Mr. Jain. The session focused on paratransit and feeder systems like Tata Magic services and rickshaws, and how they could and why they should be better integrated with mainstream systems. The session took the example of Bhopal to highlight the various such transit systems in place, and the various issues that affect them, such as route overlaps, low wages, lack of regulation, and riders' safety. The session included a discussion on how these systems can be brought into a regulatory framework and help boost feeder systems to larger-scale urban transport.
- A session on safety in the design of public transport, led by Ms. Vasudevan. The session focused on how public transport infrastructure could be designed and operated in a way that could help reduce accidents and ensure easy and universal accessibility. Participants were shown an example of a bus terminal in Mumbai that is being redesigned by WRI India, and engaged in a discussion on how the terminal could be made safer for users. The discussion also extended to include a debate on facilities for pedestrians as opposed to ease of movement for vehicles. This discussion highlighted conflicting views, with many participants maintaining that vehicular congestion could not and should not be

compromised, and many others acknowledging that prioritizing pedestrian movement and limiting the use of cars would be far more beneficial. Some took this opportunity to request a future training session on pedestrian-friendly cities.

- A session on women's safety in public transport, led by Ms. Azra Khan. The session used the case of Bhopal to discuss the various challenges faced by women in using public transport, and how current safety measures were proving to be ineffective. The session began with a discussion on how women's economic productivity was countered because of lack of safety in public transport, and how existing measures like use of CCTV cameras and helplines were more reactive than anticipatory. The discussion then focused on the need for gender sensitization of public transport operators and staff, as well as the use of sensitive design to enforce confidence in women users, and counter rising cases of gender based violence in public contexts.

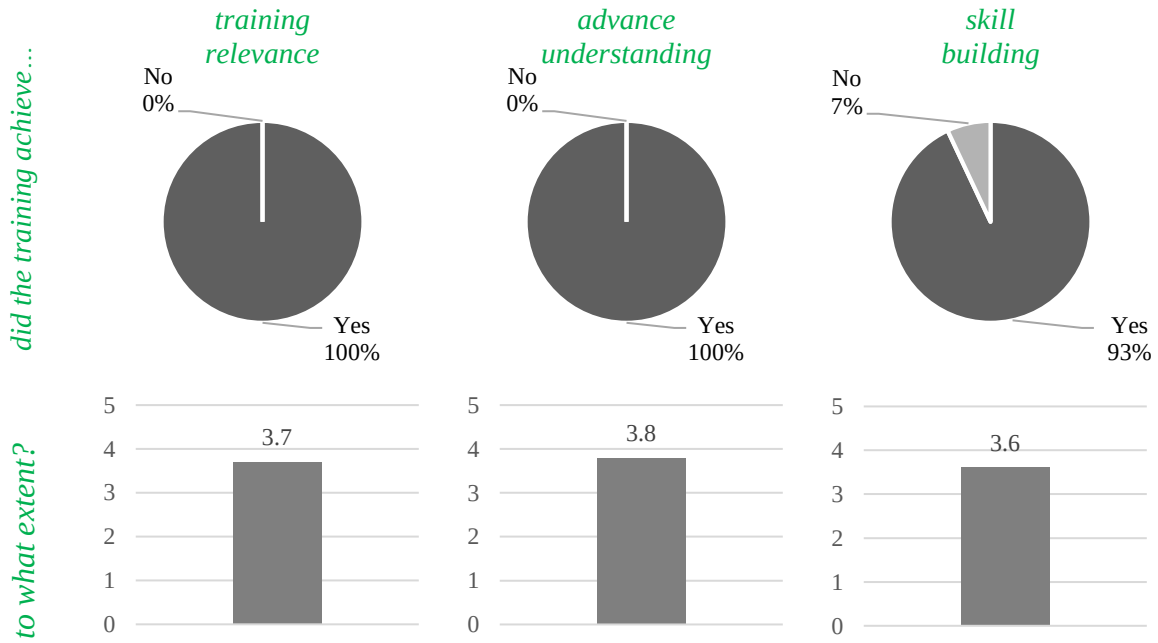
The day concluded with a wrap-up session where participants were invited to offer vocal feedback and suggestions for future learning capsules. Participants used this time to highlight the various learnings of the past three days, and many suggested that future modules could focus on exploring urban transport in the context of cities that currently lack such options. It was felt that such an approach would be very beneficial, as most participants came from similar cities, and were keen to explore how such options could be introduced there.

COURSE EVALUATION

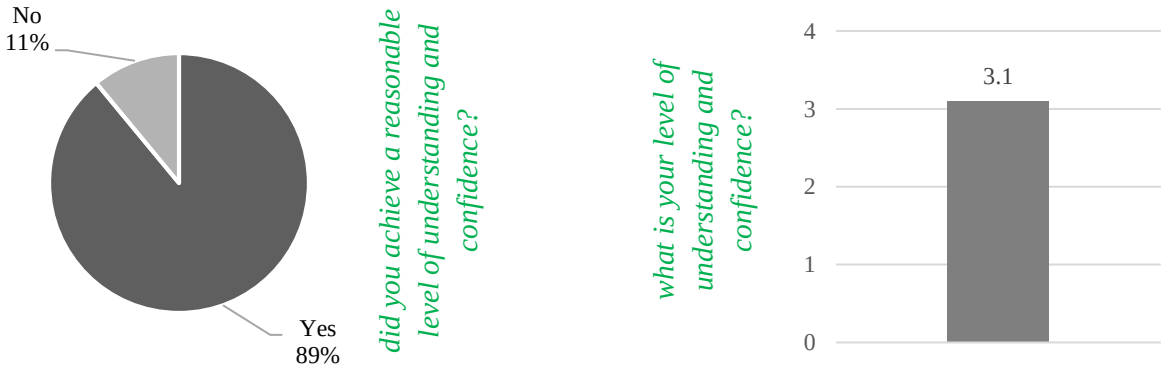
Participant's feedback was recorded in formats mandated by the Ministry of Urban Development, and an analytical overview of the same indicates that the capsule was received very positively by participants, much more so than the Orientation capsule. There was some feedback directed towards the use of English as a language of instruction at times, and the limited amount of time allotted to the site visit.

The feedback can be summarized as:

- Candidates unanimously approved of the training capsule and found it satisfactory. Notably, *all* participants stated that the training's content was relevant to their field of work, and felt that the same had helped advance their existing knowledge and understanding.



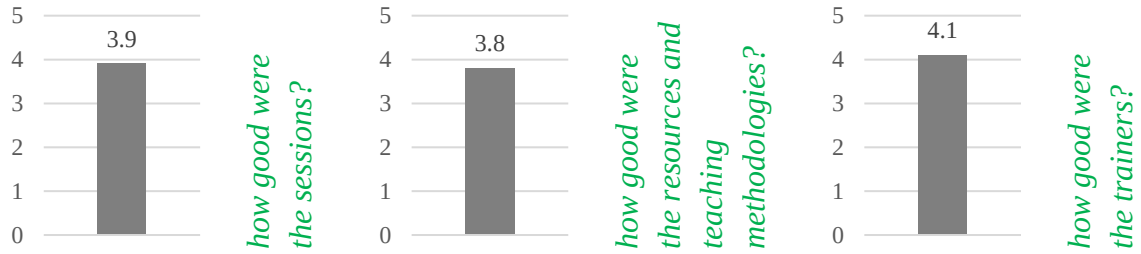
- Most candidates found themselves to have a reasonable understanding of the capsule's subjects, and felt confident enough to apply their learnings from the capsule in real-world contexts.



- A significant proportion of participants felt that the training had furthered their knowledge, and introduced them to new ideas and skills that they could use at the workplace.
  - ●● almost half *increased knowledge*
  - ●●● one third *discovered new ideas and practices*

- Most participants were keen on exploring the subjects taught in the training further. Some participants requested that future training programmes include case studies and learnings from smaller and medium sized towns.
  - ●●● one third *wanted to learn more application-based skills*
  - ●●●● one fourth *wanted to view more case studies*
  - ●●●● one fourth *wanted to meet project implementers*

- All sessions and trainers were favourably received, and were found to be supported by adequate resources. While they were reviewed individually, the cumulative feedback for all sessions was:
  - ●●●●●●●●●● 93% *found the sessions to meet or exceed expectations*
  - ●●●●●●●●●● 83% *found the resources and methodology satisfactory*
  - ●●●●●●●●●● 93% *found the trainers to have met or exceeded expectations*



More specific session-related feedback included:

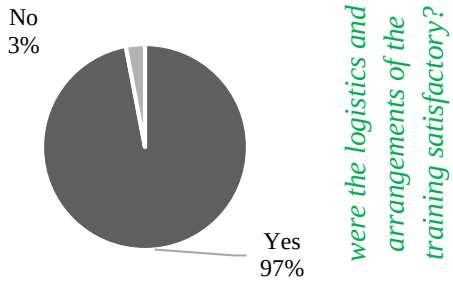
- Some critical feedback directed towards the use of English as a language of instruction in select sessions where the trainer, Ms. Vasudevan, was not adept at the use of Hindi. While participants broadly approved of these specific sessions, many felt that they would have benefitted more if the same were at least bilingual.

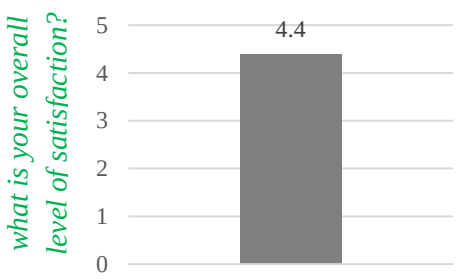
- Additionally, a significant number of participants from the all-male audience chose not to rate the session on Gender Safety in Public Transport without offering any explanation.

- Some participants felt that the selection of case studies could be improved by including experiences from smaller and medium sized cities, as well as experiences and learnings from failed projects in addition to successful ones.

- Participants felt that the current three-day format limited the amount of time that could be allotted to field visits. Many stated that they would have liked the visit to the iBus system to be longer and more intensive, possibly including greater interaction with the implementing agency, AICTSL, at their control centre.

- Training logistics were unanimously well received, with almost all participant approving of supporting arrangements made and the quality of the same.





- Some participants felt that the training's scope could be expanded to include other government departments, such as RTOs, Collectorates, Nodal Offices and Mayor Offices. They stated that these offices are important stakeholders in urban transport and development, and would greatly benefit from such a training.

WAY FORWARD

Participant feedback in this training capsule has been detailed as well as constructive, offering various cues for the design and detailing of forthcoming training capsules and exposure visits. Key takeaways in this regard include the following:

- The level of engagement displayed by participants, and their positive and constructive feedback, indicate great institutional interest in urban mobility, suggesting that the thematic focus on the same be retained. Of particular note were repeated requests to include case studies that reflect the conditions of smaller towns and cities of Madhya Pradesh, and discussions on *beginning* urban mobility services instead of optimizing them.
- Many discussions and debates through the training centered on the role of pedestrians as well as vehicular traffic in road design, especially in the contexts of safety and transit oriented development. The level of interest shown in these discussions indicates that future training capsules could focus on relevant subjects like non-motorized transport, public bike sharing, and streets for all.
- Session-specific feedback has also been especially useful, particularly that related to longer and more intensive site visits, and greater use of case studies. These points will be kept in mind while detailing forthcoming training modules.

At the same time, the training capsule suffered from two issues:

- A total of 42 participants were invited to the training, of which only 31 eventually attended. The difference in the expected and the actual turnout of participants, led to wastage of financial resources spent in ensuring adequate logistical arrangements such as boarding and lodging.
- The use of English as a language of instruction in some sessions reflected the trainer's comfort, but not necessarily the participants'. Care will be taken to ensure that session communication be conducted in a language that is participant-friendly in the future.

While the structure and content of the forthcoming training capsules are still under consideration, cit wil be ensured that the same reflect the feedback gathered in this and the previous capsule. WRI India will also work with the UADD to ensure that participant attendance is satisfactory in the forthcoming training modules.

APPENDICES

Appendix A - Trainers' Profiles

Prerna Vijaykumar Mehta

Ms. Prerna Mehta has more than a decade of experience in the fields of architecture and urban planning. She currently serves as Manager – Sustainable Cities at WRI India, wherein she offers technical advice and helps form and sustain strategic partnerships with governmental and non-governmental organisations with interests in urban development and sustainable transport. She has previously worked with a private, public, and civil society organisations, having contributed to a number of master plans, area and integrated development plans, project development and feasibility studies in the cities of northern India. She holds a Bachelors degree in Architecture from Nagpur University, and a Master's degree in Planning (specializing in Housing) from School of Planning and Architecture, New Delhi.

Umang Jain

Mr. Umang Jain has several years of experience in the sphere of urban transport. He currently serves as Managing Associate – Urban Transport at WRI India, wherein he contributes towards the optimisation of bus systems, paratransit systems, and their integration, across multiple cities. Key projects he has been part of include Jaipur's public bus improvement and the FedEx supported vehicles and fuel programme. He has previously served as a consultant to several transport planning practices, having contributed to projects such as bus services in Bathinda and preparing of RPF and concession agreements for mass transit operators across the country. He holds masters degrees in Economics, and in Planning (specialization in Transport) from School of Planning and Architecture, Delhi.

Priyanka Vasudevan

Ms. Priyanka Vasudevan has several years of experience in the urban development sector. She currently serves as Managing Associate – Urban Transport at WRI India, wherein she contributes to projects related to the planning, operational, and implementation aspects of bus services in cities. Key projects she has works on include the Bus Karo Plus programme, a platform for sharing best practices in Indian urban transit, and Mumbai based urban transport projects. She has previously worked in India and Australia, focusing on design, implementation, policy frameworks and strategic partnerships in the sphere of sustainable urban transport. She holds a masters degree in Urban Planning from the University of Queensland, Australia, and a bachelors degree in International Relations.

Rajeev Malagi

Mr. Rajeev Malagi possesses experience in architecture and planning, and currently serves as Senior Project Associate – Urban Development and Accessibility at WRI India, wherein he contributes towards Transit Oriented Development projects, focusing on safe accessibility to and around transit nodes. Key projects he has been part of include the Hubli-Dharwad TOD project. He has previously worked at a architectural practices in Bengaluru and Ahmedabad, being part of projects such as documentation of urban heritage in Bengaluru. He holds a masters degree in urban planning from CEPT University, and a bachelors degree in architecture from BMS College of Engineering, Bengaluru.

Azra Khan

Ms. Azra Khan possesses over four years of experience in the fields of urban development and transport. She currently serves as a consultant with WRI India, working on gender safety in public transport. She has also contributed to several urban development projects and research studies, apart from teaching at the School of Planning and Architecture, Bhopal. She holds a masters degree in Urban and Regional Planning from School of Planning and Architecture, Bhopal, and a bachelor's degree in Civil Engineering from Rajiv Gandhi Technological University, Hyderabad.

Prayash Giria

Mr. Prayash Giria has several years of experience in urban development practice. He currently serves as Senior Project Associate – Capacity Building at WRI India, wherein he supports the design and delivery of outward capacity building initiatives, like the Capacity Building for Urban Development programme. He has previously worked with a number of architectural, planning and policy-oriented practices, having been part of projects such as the India Youth Fund - a funding and capacity building window for India's urban youth, Delhi's nomination to UNESCO for World Heritage Site status, and Ahmedabad's riverfront development programme. He holds a masters degree in Urban Development Planning from University College London, and a bachelors degree in Architecture from School of Planning and Architecture, New Delhi.

Sabarmati Roy

Ms. Sabarmati Roy is a Research Consultant with WRI India and supports the organization's capacity building initiatives, including the Capacity Building for Urban Development programme. She holds academic qualifications English Literature and Book Publishing from the University of Calcutta and Shantiniketan University, and has previously worked with media and publication houses such as Ratna Sagar Publications Pvt. Ltd. and The Times of India.

Appendix B – List of Accompanying Documents

As mandated, this report is accompanied with the following excel files:

1. Database of participants
2. Database of participants' feedback from second capsule
3. Database of self-assessment responses by participants attending their second training
4. Training Calendar