



# International Workshop on Multimodal Transportation Planning & Integration - Best Practices and Technologies (“Smart Cities”)

September 13-15, 2017

Mumbai Metropolitan Region Development Authority, Mumbai, India

## Workshop Day 1: Wednesday, September 13, 2017

**Objective: Set the workshop context by providing an overview of challenges and opportunities in U.S., South and Southeast Asian planning environments**

Time	Session	Presenter
9:00-9:30	Arrival and Registration <i>(Note: Workshop participants staying at the Trident BKC Hotel should meet in the lobby at 8:45 am for a shuttle to MMRDA’s facilities.)</i>	
9.30-9:35	Introduction to the workshop & welcoming guest	<b>K. Vijaya Lakshmi</b> Chief, T&C
9:35-10:05	Welcoming Remarks	<b>U.P.S. Madan</b> Commissioner, Mumbai Metropolitan Region Development Authority  <b>Edgard Kagan</b> U.S. Consul General  <b>Dr. Nitin Kareer</b> Principal Secretary UDD1, Urban Development Department, Maharashtra Government  <b>Mukund Kumar Sinha</b> OSD (UT) & EO Joint Secretary . Ministry of Urban Development
10:05-10:10	Conclusion remark	<b>Jason Hill</b> U.S. Department of Transportation
10:10-11:20	<u>Workshop Overview and Country-Specific Presentations</u>  Regional Experience: Multimodal Transportation Planning and Integration of Innovative Technologies and Services. Bangladesh, Bhutan, Cambodia, Laos will provide institutional context and discuss recent transportation technology initiatives and challenges	Bangladesh Delegate Bhutan Delegate Cambodia Delegate  <u>Moderator:</u> <b>William Lyons</b> U.S. Volpe National Transportation Systems Center
11:20-11:30	Break	



11:30-13:00	<p><u>Country Specific Presentations (Continued)</u></p> <ul style="list-style-type: none"> <li>Nepal, Sri Lanka, and Vietnam will provide institutional context and discuss recent transportation technology initiatives and challenges.</li> </ul>	<p>Laos Delegate Nepal Delegate Sri Lanka Delegate Vietnam Delegate</p> <p><u>Moderator:</u> <b>Jason Hill</b> U.S. Department of Transportation</p>
13:00-13:45	Lunch	
13:45-14:45	<p><u>Country Specific Presentations (Continued)</u></p> <ul style="list-style-type: none"> <li>India Context: Governance and Planning Processes in India               <ol style="list-style-type: none"> <li>Metro Policy 2017</li> <li>Smart Cities initiatives</li> </ol> <p style="text-align: center;">Presentation and discussion</p> </li> </ul>	<p><b>Mukund Kumar Sinha</b> OSD (UT) &amp; EO Joint Secretary . Ministry of Urban Development</p> <p><b>Sajeesh Kumar N.</b> Director, Smart Cities Mission, Ministry of Urban Development</p> <p><u>Moderator:</u> <b>Jason Hill/ Sajeesh Kumar N.</b></p>
14:45-15:15	Discussion: Comparing and Contrasting U.S. and Indian Contexts, including Differences and Similarities to Planning Approaches, Regulatory Regimes, and Smart Cities	<p><u>Moderator:</u> <b>Jason Hill / Sajeesh Kumar N. / William Lyons</b></p>
15:15-15:30	Break	
15:30-18:00	Site Tour to 1. Mumbai Metro Operations Control Center 2. Monorail Operations Control Center	Organized by MMRDA
<p><i>Note: Participants staying at the Trident BKC will have transportation provided back from the Site Tour location.)</i></p>		



**DAY 2: Thursday, September 14, 2017**

**Objective: Review U.S.- and participant-based experiences with integrating emerging transportation technologies into the planning process**

Time	Session	Presenter
9:30-9:45	Morning Welcome: Recap of Day 1 and Introduction of Day 2  <i>(Note: Participants staying at the Trident BKC will have transportation provided back from the Site Tour location.)</i>	<b>William Lyons</b> U.S. Volpe National Transportation Systems Center
9:45-11:05	<p><i>Case Studies and Practitioner Dialogue: Experiences with Innovative Technology Applications</i></p> <ul style="list-style-type: none"> <li>Practitioners will present brief case studies focusing on: challenges, solutions, innovations, and future goals.</li> <li>Following each presentation will be a moderated conversation with audience participation.</li> <li>Key points and questions from presentations and discussions will inform later panels and group exercise</li> </ul>	<b>Marla Westervelt</b> Los Angeles County Metropolitan Transportation Authority  <b>Ramakant Jha</b> Former MD & Group CEO, GIFT City  <b>Shivanand Swamy</b> Professor, CEPT University  <b>Dr. Rohit Baluja</b> President, Institute of Road Traffic Education  <u>Moderator:</u> <b>William Lyons</b> U.S. Volpe National Transportation Systems Center
11:05-11:20	Tea Break	
11:20-13:00	<p><i>Case Studies and Practitioner Dialogue: Experiences with Innovative Technology Applications (con't)</i></p>	<b>Russell Glynn</b> U.S. Volpe National Transportation Systems Center  <b>Neel Paliwal</b> Asso Vice President-IT, Delhi Integrated Multi-Modal Transit Systems Ltd.  <b>Shrinivas Kowligi</b> E&Y  <b>Anirvan Mohanty</b> Manager, Eye Watch  <u>Moderator:</u> <b>Jason Hill</b> U.S. Department of Transportation
13:00-13:45	Lunch	



<p>13:45-15:00</p>	<p>Policy, Governance, and Planning for Emerging Technologies</p> <ul style="list-style-type: none"> <li>• Metro, Implications for land use planning and TOD</li> <li>• First/last mile connectivity and impact on existing modes</li> <li>• Integrated ticketing</li> </ul>	<p><b>Ronald Boenau</b> U.S. Federal Transit Administration</p> <p><b>Marla Westervelt</b> L.A. Metro</p> <p><b>Mr. Vikram Singhal</b> Ex. Director &amp; CEO M/s Doppelmayr</p> <p><b>Ashish Chandra</b> Director-Projects, PwC</p> <p><u>Moderated by:</u> <b>William Lyons</b> Volpe Center</p>
<p>15:00-15:15</p>	<p>Tea Break</p>	
<p>15:15-16:30</p>	<p>Hardware, Software, and the Role of Big Data in Smart Cities</p> <ul style="list-style-type: none"> <li>• Introduction to Intelligent Transportation Systems (ITS)</li> <li>• Importance of data standards and network architecture</li> <li>• Managing data and data-sharing agreements</li> <li>• MOD Sandbox and other FTA programs</li> </ul>	<p><b>Ronald Boenau</b> U.S. Federal Transit Administration</p> <p><b>Tom Matthew</b> Indian Institute of Technology - Bombay</p> <p><b>Ram Kandarpa</b> Booz Allen Hamilton</p> <p><u>Moderated by:</u> <b>Jason Hill</b> U.S. Department of Transportation</p>
<p>16:30-17:35</p>	<p>Multimodal Transportation Planning, Smart Cities and Shared Mobility</p> <ul style="list-style-type: none"> <li>• U.S. Context will provide an overview of U.S. Framework for Multimodal Transportation Planning, Smart Cities and Shared Mobility <ul style="list-style-type: none"> <li>○ Framework for regional transportation planning; performance-based planning.</li> <li>○ Concepts of smart cities, shared mobility, and implications for planning and governance.</li> </ul> </li> <li>• FTA MOD, Smart City Challenge, shared mobility research.</li> </ul>	<p><b>William Lyons</b> U.S. Volpe National Transportation Systems Center</p> <p><b>Faith Hall</b> U.S. Federal Transit Administration</p> <p><b>Ram Kandarpa</b> Booz Allen Hamilton</p> <p><u>Moderator:</u> <b>Jason Hill</b> U.S. Department of Transportation</p>
<p>17:30 - 17:45</p>	<p>Group Photo</p>	
<p>19:00 – onwards</p>	<p><b>Dinner hosted by MMRDA</b></p>	
	<p><i>(Note: Shuttle departs for participants staying at the Trident BKC Hotel at the end of the dinner.)</i></p>	



## DAY 3: Friday, September 15, 2017

**Objective: Identify long range opportunities for moving forward on integrating transportation technology into the planning process.**

Time	Session	Presenter
9:30-9:45	Morning Welcome: Recap of Day 2 and Introduction of Day 3 <i>(Note: Participants staying at the Trident BKC will have transportation provided back from the Site Tour location)</i>	<b>K. Vijaya Lakshmi</b> Chief, T&C
9:45-10:30	TOD Policy, Implications for land use planning and TOD  Role and importance of NMT and Multimodal Integration	<b>V.K. Phatak</b> Dean, Planning, CEPT University  <b>Shreekumar Kumaraswamy</b> , WRI
10:30-10:45	Break	
10:45-13:00	<i>Exercise: Identifying Opportunities, Prioritizing Goals, and Implementing Technologies Through the Planning Process</i> <ul style="list-style-type: none"> <li>Applying key concepts, challenges, and best practices in a hypothetical multi-modal planning scenario.</li> </ul> <i>NOTE: This exercise will take place in groups, which will be assigned during the break.</i> <hr/> Report out and discussion	<u>Led by:</u> <b>Jason Hill</b> U.S. Department of Transportation
13:00-13:45	Lunch	
13:45-14:15	<u><i>Looking to the Future: Concluding Discussions</i></u> <ul style="list-style-type: none"> <li>Laying a Foundation for Data Standards, Interoperability, and Integration in Planning Models</li> <li>Planning for Emerging Technology: Adaptive Policy at the Metropolitan and National Scale</li> </ul>	<b>Co-led by U.S. DOT and MMRDA</b>
14:15-14:35	Certificate Distribution	
14:35-14:45	Closing Remarks <i>(Note: Shuttle departs for participants staying at the Trident BKC Hotel.)</i>	<b>Sanjay Khandare</b> Addl. Metropolitan Commissioner MMRDA