



Urban Works Institute

Annual Report 2018

Update on Programme Areas

1. PARTICIPATION AND INPUTS ON NATIONAL LEVEL PROGRAMMES

1.1. NITI Aayog workshop on Smart Cities

A team of UWI attended NITI Aayog Workshop that was conducted in collaboration with University of New South Wales, Australia, on Smart Cities at India Habitat Centre. The speakers included professors from the University of New South Wales (UNSW), Sydney who presented their research on Smart Cities and big data while directors of Smart Cities mission India and various other organisations, spoke about their respective smart - initiatives in Indian cities.

1.2. Indian Roads Congress (IRC)

UWI is part of the H8 Committee on Urban Roads and Streets that was constituted in the year 2015 to prepare street design guidelines for urban roads. Six stand alone documents prepared/revised by the Committee were approved. UWI provided technical input for three: Manual for Planning and Development of Urban Roads and Streets, IRC 70: Regulation and Control of Mixed Traffic in Urban Areas, and Bus Rapid Transit Guidelines for Indian Cities.

UWI attended several committee meetings in Delhi to discuss the structure and the content of these documents, which required approval from the committee.

A national level workshop was jointly organised by IRC and WRI on planning and design of urban roads and streets. The aim of the workshop was to educate and sensitize engineers and key decision makers on the planning and design of urban roads. The workshop was an opportunity to introduce and discuss key IRC draft documents that are being prepared by H8 Committee of IRC. UWI is a part of the H8 committee and key contributor in the making of these documents. UWI presented the IRC Manual for Planning and Design of Urban Roads and Streets and IRC Bus Rapid Transit (BRT) Design Guidelines for Indian Cities' respectively.

1.3. Association of State Road Transport Undertakings (ASRTU)

The Association of State Road Transport Undertakings (ASRTU), the premier association of public bus operators in India, invited UWI, to present the BRT Standard at its 50th Anniversary Conference in Delhi. The presentation was very well received by the delegates that included public officials from across the country as well as the bus industry in India. ASRTU expressed its interest in collaborating with UWI and signed a MoU to improve bus transit systems in India.

ASRTU has requested UWI to conduct a set of workshops on: Strategic Mobility Planning, improving passenger service quality, bus rapid transit system, and electrification of vehicles. ASRTU also expressed their interest in forming joint study groups to research pertinent questions such as the existing structure and policy of taxation of public transport as well as ways and means to reinvigorate the stagnating share of public transport across the country.

1.4. Training on Electric Buses

Some members of the UWI team attended a three-day training session on Electric buses in Pune. The training session was organised by the Union Internationale des Transports Publics (UITP) which is an International Association of Public Transport and a passionate champion of sustainable urban mobility and attended by officials from State Transport Undertakings, Metro Rail corporations along with representatives from NITI Ayog. Case studies from European countries, USA and China were presented over the three days on topics ranging from battery technology to financing mechanisms. There were site visits to KPIT and TATA motors where the participants had the experience of watching manufacturing and testing of electric buses. It is the only worldwide network to bring together all public transport stakeholders and all sustainable transport modes.

2. HAND HOLDING WITH STATE GOVERNMENTS/CITIES ON SUSTAINABLE URBAN DEVELOPMENT PROGRAMMES

2.1. COMPLETE STREETS

2.1.1. Pune reclaims streets for people

Pune, with the technical support from UWI, broke ground on its ambitious Complete Streets networks - a 100km-network with its own financial resources and 45km through support from the National Smart Cities Mission. The first phase of these street design projects on JM Road and DP Road has already been lauded by the country, owing to the vibrancy of these redesigned streets.

As the first step towards redesigning the 100km network, UWI assisted Pune Municipal Corporation to empanel four nationally acclaimed architecture and urban design firms. The first phase of reconstruction under the Smart City Mission commenced on DP Road in 2017. Similarly, JM Road, was also revamped to reclaim space for the people, enabling a wider footpath and cycle track.

The designs abide by the *Street Design Guidelines and Standards* that was prepared by the Pune Corporation, with technical input from UWI. The Guidelines provide an overview of various elements that go into designing streets making them universally accessible, and also provide standard templates for different sizes and uses of streets.



JM Road, Pune

2.1.2. Pune paves way for a Bicycle Plan

Pune's Bicycle Plan, approved by the General Body, paves way for the creation of a 400 km bicycle-track network in the city. UWI was a member of the Bicycle Advisory Committee that monitored the progress of the plan on behalf of the Pune Municipal Corporation. Regular meetings were held by the Committee to review the proposed plan. Two key outcomes of the Plan include: 400 km of cycle tracks and cycle-safe-roads, estimated at Rs 3.5 billion (~USD 55 million), and an institutional reform that requires the formation of a 'Cycling Department' that is presently underway.

2.1.3. Pune implements a public bicycle sharing system

Pune approved a dockless public bicycle sharing system of 13,000 bicycles and 800 stations. A pilot of 2500 cycles was implemented in 2017 that received a great review from the residents; and, an additional 8000 cycles are planned to be implemented by 2019. Prior to the launch of the public bicycle sharing system, UWI was involved in several consultation meetings with Pune Municipal Corporation and the service providers to provide input on the service and operations of the system.



Public Bicycle Sharing System on JM Road, Pune

2.1.4. Complete Streets work in Nashik

Complete Streets in Pune inspired several cities in the State as well as the nation. Nashik Municipal Corporation, with the technical support from UWI, floated a tender to appoint design consultants for the redesign of proposed a 50 km complete streets network across the city.

In addition, UWI also partnered with Nashik District Maratha Vidya Prasarak (NDMVP) College of Architecture to work on designing a 8 sq km area, guided by UWI's Complete Streets Toolkit. During the course students re-designed six streets and developed a walking and cycling network plan that was presented to the Nashik Municipal Commissioner, and presented in an exhibition to the city.

The response to the exhibition was positive! The introduction of concepts like “more parking induces more traffic” proved to be thought-provoking for passersby. A major highlight of the event was the visit of the Chairperson of the Nashik Standing Committee, Mrs Himgauri Adke, who was enthusiastic about the students’ proposal and showed keen interest in understanding modern street design concepts.



Complete Street Exhibition by NDMVP students in Nashik

As a pilot project, the Municipal Corporation approved the redesign of Shraddha Mall Road, with technical design input from UWI. The construction is underway and expected to be complete in the coming months.

In addition to walking improvements in the city, UWI has also been working closely with the Nashik Cyclists Association to plan and design cycle tracks across the city. The team has been meeting the cycling association regularly to identify routes and network plans for implementation.

2.1.5. Commissioners' Exposure Visit to Pune

As a step towards sensitising the Corporation Commissioners of Erode, Madurai, Salem, Tiruppur, and Vellore, and the Engineers from the office of Commissionerate of Municipal Administration (CMA), Tamil Nadu Urban Finance and Infrastructure development Corporation (TUFIDCO) and CMA initiated an exposure visit to Pune, facilitated by UWI. This day long visit was aimed at demonstrating good practices of public-private partnerships, command and control centre, complete streets, and cycle sharing systems.



Tamil Nadu's exposure visit to Pune

2.1.6. Pedestrianisation of T Nagar in Chennai

UWI has been working with NGOs such as Care Earth in Chennai to identify ways in conserving the biodiversity and greening of Thyagaraya Road. 700m of the total 1.4 km length of this street is to be converted into the Pandy Bazaar Pedestrian plaza, and the remaining stretch will be revamped with wider footpaths and street furniture. UWI has had several consultation meeting with the project consultants to identify the different species of trees, herbs and shrubs that will be planted throughout the stretch.

2.1.7. 22 km of Complete Streets tendered out in Chennai

UWI provided technical assistance to finalise the Request for Proposal (RfP) for the selection of consultants to redesign roads in Theyagaraya Nagar, as part of the Chennai Smart City initiative - Area Based Development (ABD). As part of the orientation programme for new street design work being undertaken, UWI was requested by Chennai Corporation, to conduct capacity development workshops on the principles of street design.

2.1.8. Engagement in Puducherry

UWI was invited to Puducherry to meet with the Local Administration Department (LAD) Secretary and Smart City CEO, Transport & Tourism Secretary, Transport Commissioner, Tourism Manager along with other stakeholders to discuss potential collaboration on street design work in Puducherry. The team also met with the Tourism

Department to discuss the existing status of street design in the french town area, and were request to review the existing DPR.

UWI was request by LAD Secretary to provide input on the design tools for speed reduction. UWI was requested to present the same to the Lt.Governor Kiran Bedi. The Lt.Governor was inspired by the DB Road and TV Swamy Road intersection testing picture (in Coimbatore) and wanted to conduct similar tactical urbanism interventions in Puducherry.



2.1.9. Smart City Sustainable Urban Transport Initiatives in Madurai

Various cities across Tamil Nadu have realised the importance of creating streets for people - for walking and cycling - including Madurai. UWI has been working with various line agencies in Madurai including BSNL, TNSCP, Dept.of.Tourism, HR&NC, TNSTC, TNEB and Tangedco, Traffic Police, NGOs, and the Municipal Corporation to develop a complete streets master plan for Madurai. The city has also requested assistance from UWI to provide technical input for other projects such as pedestrianisation of key streets, Vaigai riverfront development, parking management system implementation, and city bus operations.

2.1.10. Complete Streets Engagement with MAWS and GIZ

UWI in collaboration with the Tamil Nadu Commissionerate of Municipal Administration (CMA) and GIZ Smart-SUT organised a day long workshop on 'Designing streets for walking and cycling'. The workshop paved way for the Smart Cities through Smart Streets Programme that aims to transform urban cores to liveable, safe cities. The Programme brings together 10 Tamil Nadu cities –

Coimbatore, Madurai, Salem, Thanjavur, Vellore, Tiruppur, Tirunelveli, Tiruchirappalli, Thoothukudi and Erode – selected under the National Smart Cities Mission. These cities have been allocated approximately 2500 crores towards the transformation of 500 km of streets, in total.



Smart Cities through Smart Streets workshop for 10 Tamil Nadu cities

2.1.11. KfW mission to Coimbatore: Round-table discussion on smart city and climate friendly initiatives

A team from KfW Development Bank visited Coimbatore as part of Indo-German financial cooperation mission. Coimbatore was chosen as one of the three smart cities to be developed by German Government in partnership with Government of India. In this regard, KfW team wanted to explore and understand community level engagement in various initiatives taken up by the city.

Coimbatore City Municipal Corporation (CCMC) with UWI organised a round table discussion for KfW team to discuss ongoing efforts and infrastructure needs for Coimbatore; these include: urban mobility initiatives, restoration of lakes, and renewable energy sourcing. The meeting was followed by a site visit to Model Roads pilot stretch, proposed lake front development, and proposed BRT corridors.



2.1.12. Public Bicycle Sharing system in Ranchi

The public bicycle sharing system in Ranchi was approved by the Cabinet of the state government for a coverage area of around 11 sq

km, with 1200 cycles and 120 stations. UWI provided technical input for the Request For Proposal for the selection of operator, in partnership with the State Urban Development Authority. UWI was invited for the pre-bid meetings hosted by the Urban Development Authority to provide input for technical clarifications to the questions raised by the bidders. UWI also facilitated a public bicycle sharing system training program for the engineers, urban planners and city managers of five urban local bodies of Jharkhand.

Today, the city has commenced construction of the system and has inspired other cities in the State including Dhanbad and Jamshedpur, to implement a similar system. The UWI team was invited to Jamshedpur and Dhanbad to assist a feasibility study of the system. The team met with their respective Commissioners and are discussion way forward for its implementation.



Construction of public bicycle sharing system in Ranchi

Twin stations start cycle of change



WHEELS IN MOTION: A cycle station being built on Kanke Road in Ranchi on Thursday. (Prashant Mitra)

A.S.R.P. MUKESH

Ranchi: Clogged arteries, here come cycles.

The urban development department's ambitious cycle sharing project under Smart City to give Ranchi commuters an eco-friendly alternative to fuel guzzlers kicked off on Thursday with construction work on cycle stations or docks.

Ahmedabad-based company Chartered Speed, which will oversee the urban development department's project and build 120 cycle docks in Ranchi, started work at two sites — near Reliance Mart and Chandni Chowk — both at posh Kanke Road area for the cycle project that is eyeing a rollout in May.

Under the plan, 1,200 cycles will operate from 120 docks, but the project will start with 600 cycles. Hundred cycles have already arrived in Ranchi from Germany and are being assembled here. Anyone can approach a dock with

valid ID papers to rent a cycle by paying subscription and user charges. An individual can keep a cycle for up to 10 hours a day. Subscription rates are Rs 30 a day, Rs 200 a month and Rs 1,000 a year. This apart, there are nominal user charges while the first 30 minutes are free.

State urban development Agency (SUDA) director Rajesh Sharma told this paper they hoped the cycle project would help many people with affordable, clean commute. "We're hoping this project defines the city's traffic system and helps people get last-mile connectivity without depending much on other modes of transport. It will also end illegal rickshaw and auto menace and help people stay fit," he said.

Asked if the scheme would do well in Ranchi, Faraz Ahmed of Institute for Transportation and Development Policy, a non-government agency that works in different cities on transport issues, said studies suggest Ranchi was the ideal place. "Our studies suggest over half the

city's 14 lakh population depend on non-motorised forms of commute daily. What's more, cycling is a clean form of transport," he said, adding they were working with the state government on the project.

An official of urban development department said Ahmedabad's Chartered Speed, hired for six years initially, had been tasked to run and operate the project.

"They are investing in bringing the cycles and setting up stations. We are providing them space for stations. This apart, we will pay them Rs 83 per cycle per day. This apart, they can generate revenue through advertisements," he said.

A site official from urban development at Chandni Chowk said the German cycles were theft-proof and rust-proof. "Each cycle has rear and front lights, adjustable seats based on the rider's height and automatic lock. The cycles are rust-proof and have puncture-free tyres, GPS system, leg cover and basket to carry items up to 10kg," he said.

2.1.13. Complete Streets workshops in Ranchi

UWI facilitated a number of workshop on complete streets to bring awareness for the need of quality walking and cycling infrastructure in the city. The first workshop was conducted for the members of the Ranchi Urban Partnership, followed by a training programme on 'Design of inclusive streets' for the fourth year Architecture and Urban Planning students of Birla Institute of Technology.

UWI has also facilitated a workshop for the engineers, urban planners and city managers of various urban local bodies of Jharkhand as part of the AMRUT training programme organised by the Indian Institute for Human Settlements.



2.1.14. Varanasi Smart City Complete Streets Workshop

Varanasi Smart City Complete Streets Workshop - Dr. Sameer Sharma, Additional Secretary (Ministry of Housing and Urban Affairs)

invited UWI to attend Varanasi Smart City Complete Streets Workshop. UWI was asked to review and comment on the street and junction design proposals prepared by the consultants. UWI was also asked to present proposals on street sections. The meeting was attended by Mr. Sameer Sharma, Dr. Nitin Bansal, Municipal Commissioner, Varanasi, Consultants and members from various organisations and departments such as Traffic Police, INTACH, IUT, TCPO and NIUA. UWI presented the street section proposals.

UWI has attended several Varanasi Smart City meeting to review and provide feedback on the complete streets work proposed by the consultants. The feedback was well received by the Additional Secretary of the Ministry of Housing and Urban Affairs.

2.1.15. UWI engagement in Delhi

The Delhi Government has proposed an engagement with UWI on initiatives to increase the mode share of sustainable modes of transport, i.e. public transport, walking, and cycling, by proposing an expansion and improvement in the facilities provided for these modes. The key outcomes discussed were: to draft a non-motorised transport policy for the State under Project Samman, to improve access, efficiency and user experience of public bus transport, and to invest in gender responsive public transport -improve women and girls' access to public transport.UWI will help the government towards the planning of the above mentioned tasks.

2.2. PARKING MANAGEMENT

2.2.1. Parking Management in Ranchi

Becoming one of the pioneering cities in parking management in the country, Ranchi implemented a progressive on-street parking management system on its busiest thoroughfare, Mahatma Gandhi Marg, with a twelve-fold increase in revenue. Inspired by the success of the pilot, the city has proposed to refine and expand the system to cover all key locations. The state of Jharkhand has also proposed to adopt a state-level parking policy.

Prior to the adoption of the Policy, UWI team along with the Mayor of Ranchi and officials from the Municipal Corporation conducted several site visits and study to understand the parking management model.



Parking Management on MG Road

2.2.2. Capacity Development workshop for parking management in Pune

In collaboration with GIZ, the Sustainable Urban Transport Project and the Transformative Urban Mobility Initiative (TUMI), UWI facilitated a workshop on parking management for government officials, as well as an open event for decision makers in Pune, with international parking expert Dr. Paul Barter. The workshop was supported by the Pune Municipal Corporation Commissioner and the Mayor, and received a good response from participants.



Workshop on parking management in Pune

2.2.3. Pune adopts a Parking Policy

In a laudable move, Pune Metropolitan Corporation has approved a public parking policy that aims to manage on-street parking through

an efficient paid parking system. The Corporation heralds a new era of travel demand management by regulating on-street parking. UWI provided technical expertise to draft the Policy. The Policy introduces an efficient paid parking system, an intelligent transportation system that facilitates payment, and the creation of a management cell that oversees implementation. The outcome - a demand-based parking system that smoothens traffic movement - is avant-garde in India.



Designated parking spaces in Pune

2.2.4. Travel Demand Management in Delhi

UWI is in engagement with the Shakti Foundation for a report on Travel Demand Management for Delhi. The focus of the report is on congestion pricing. UWI will assist the report by outlining the methodology, understanding relevant case studies, planning and implementation process and facilitate consultation meeting.

2.3. PUBLIC TRANSPORT

2.3.1. Chennai prepares a detailed project report for a bus-rapid-transit system

Over the year, UWI has been a part of the technical review committee for the bus-rapid-transit detailed project report. UWI has attended several high level stakeholder meetings convened by the Planning Secretary to discuss various aspects of the system, which include:

- 2.3.1.1.** Service plan: UWI, in partnership with C40, have attended several meetings with the consultants to discuss service plans for the bus-rapid-transit corridors. UWI has provided support

in analyzing the routes in detail, and review the congestion at various bus stations including the Ponnammalle bus station.

- 2.3.1.2.** Corridor review design: UWI has assisted the review of designs for the BRT corridors. To better understand the proposed designs, UWI and partners have conducted site visits to major terminals, such as at Poonamallee, to study the existing conditions for better informed proposed designs.

UWI has been instrumental in guiding the bus-rapid-transit stakeholder consultations meetings along with Chennai Metropolitan Development Authority and Tamil Nadu Road Development Company. UWI and partners including C40 and Chennai City Connect, along with the consultants, facilitated seven public consultation on three days at various locations along the proposed BRT corridors in Chennai.



Chennai BRT meeting

2.3.2. Chennai plans to improve the performance of the city bus system

UWI in partnership with Chennai City Connect (CCC) and C40 is working with the Transport Secretary to identify the challenges and way forward for the operations of the state's Transport undertakings. UWI has been attending regular meetings with the Transport Secretary and other partners to also discuss route.

UWI is working on a white paper on "Performance of City Bus Systems in Major Indian Cities", that has assisted the state identify 10 projects that the Metropolitan Transport Corporation (MTC) can undertake to improve the system. The first draft was shared with the

Secretary which will be further discussed with officials from the transport department and Chennai Corporation.

The Transport secretary also requested UWI to be appointed as the official hand holding agency to the Transport Department for successful implementation of all its initiatives to improve existing public transport in major cities and towns of Tamil Nadu.

2.4. STATE URBAN TRANSPORT POLICY

Over the year, UWI has attended several meetings and workshops with the Maharashtra State Urban Development Department (UDD) to discuss the draft State Urban Transport Policy (SUTP). This draft policy aims to facilitate the use of sustainable modes of urban transportation. With UWI's technical input, the draft policy has been finalised in consultation with five cities of the state - Pune, Aurangabad, Nashik, Mumbai and Pimpri-Chinchwad. Several training and capacity developments programs for the officials from these cities were facilitated by UWI.



SUTP meeting with Mumbai Metropolitan Region Development Authority

2.5. GENDER AND TRANSPORT

UWI and Safetipin have released a policy brief on Women and Transport in Indian Cities. The draft was released on 13 June 2017 at a roundtable discussion on Gender and Transit, organized by UWI, Safetipin and UN Women with participation from 30 women's groups, international organizations, professionals and academic institutions.



Launch of the Women and Transport Policy Brief

UWI is also working in partnership with Janaki Devi Memorial College (JDMC) to conduct Safety Audits around Bus Terminals in Delhi where 16 bus terminals will be assessed by students from JDMC. The program focuses on assessing the accessibility of bus terminals pedestrians. As part of the program, the students will conduct safety audits around the bus terminals, assess them and create a report at the end of the program.



Workshop with JDMC students