Awards for Best Practice Projects in Urban Transport

9th Urban Mobility India Conference & Expo 2016

Planning Mobility for City's Sustainability

www.urbanmobilityindia.in

PREFACE

Each year, the Ministry of Urban Development, Government of India, constitutes an Awards Selection Committee to consider and recommend projects for which awards are given for excellence in urban transport / best practice projects during the annual flagship event known as Urban Mobility India (UMI) Conference-cum-Exhibition. This year, the UMI-2016 event is being held from 8th to 11th November, 2016 at the Mahatma Mandir in Gandhinagar, Gujarat.

Accordingly, the Ministry constituted the Awards Selection Committee on 13.07.2016 (Annex – I) to consider and recommend awards for excellence in urban transport in the following 5 categories:

a) Best NMT (Non-Motorised Transport) Project.
b) Best City Bus Service Project.
c) Best Urban Mass Transit Project.
d) Best Intelligent Transport System Project
e) Best Initiative for Improved Road Safety.

2. The Ministry had invited entries for awards in a prescribed format at Annex – II from the Chief Secretaries of all State Governments and Union Territories, including Principal Secretaries of Urban Development and Transport, Municipal Commissioners, Development Authorities, etc. by 15th September, 2016.

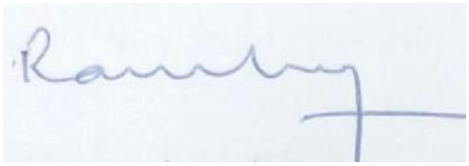
3. A total of 33 entries were received by the closing date, which were duly considered by the Committee as per evaluation indicators at Annex – III. The Committee short listed 18 entries for the next round. The Committee after going through the detailed presentations by the short listed organizations and documents available, recommended two award winners for excellence in urban transport and seven commendable initiatives whose details are given in this publication.

4. I am pleased to inform that the recommendations of the Committee have been accepted by the Ministry of Urban Development. The awards will be conferred by the Hon'ble Minister of State (Independent charge) for Planning,

Minister of State for Urban Development, Housing and Urban Poverty Alleviation during the valedictory session of the Urban Mobility India Conference, 2016 scheduled on 11th November, 2016.

5. The objective of this publication is to enlighten and encourage cities and organizations working in the area of urban transport to emulate excellence in their urban transport projects and to come forward with entries to be considered for awards during UMI, 2017.

6. I take this opportunity to thank the Ministry for reposing confidence in me, the Committee Members for their co-operation and contribution in finalizing the awards and the Institute of Urban Transport (India) for technical and logistics support.



(M. Ramachandran)
Former Secretary to Government of India
&
Chairman, Awards Selection Committee

Table of Contents

BEST NMT PROJECT

COMMENDABLE INITIATIVE: (I) G – Bike, Cycle Sharing Project, Gandhinagar

The project was launched by Gujarat Urban Development Agency (GUDA) on 21st March 2016 with 100 cycles provided at eleven cycle stands across the city. The stands operate for sixteen hours between 6 a.m. to 10 p.m. No deposit or any other fees are charged. Just an identity proof is enough. The project is welcomed by all sections of society. The cycles can be used for four hours without any charge. User can take cycle from any one of the stands and return to any stand depending on convenience. The cycles are redistributed during the night to allow equal strength at the dawn. On an average, more than 700 users are benefitted by the cycle sharing project.

The project is operated in a PPP mode. The cycles are donated by GSFC and GNFC, PSUs of Government of Gujarat. The stands are manned and serviced by Vipul Cycle Stores, Gandhinagar based agency. The maintenance cost of approx Rs. 30 Lakhs is borne by GUDA. A special cycle track is developed at a cost of Rs.13 Lakhs.

Looking to the warm response of the citizens, GUDA aims to expand the project by opening new stands, increasing number of cycles to 400 in a phased manner. In order to inculcate safety awareness, it is planned to procure helmets to be given along with the bicycle. GUDA may charge token fee of Rs. 5/hour from the first hour of hiring.

The Awards Selection Committee selected this out of 10 entries in this category as a good NMT initiative, steadily popularizing the use of cycles. The pilot stage has been completed. GUBA is planning to cover the entire city. Hence, this project has been selected for special award as a commendable initiative.

COMMENDABLE INITIATIVE: (II) Sanjhi Cycle, Karnal

A Public bicycle sharing (PBS) launched in a small city is an opportunity to exhibit how cities should incorporate sustainable transport system with minimal investment and increase accessibility without dependence on motorized transport. These tier II cities are our future magnets for growth, and thus, it is the right time for action to promote a healthy lifestyle and sustainable mobility options in these cities. Sanjhi Cycle Karnal is a pilot project in the state of Haryana, which was successfully launched on 22nd June 2016 as a joint venture of Karnal Police and Municipal Corporation of Karnal.

Key Features:

The project is operated on a PPP model with private partner 'Pioneer', being entitled to advertisement right and revenue collection. This intervention by Karnal Police and Municipal Corporation is a holistic approach towards operation of a public service such as PBS. However, ownership of the system remains with the Municipal Corporation and the responsibility of security of the same is on Karnal Police. The system is affordable, with free half hour ride and Rs10 for every next half hour. The plan is envisaged on a phase wise development process to cover all major points of trip generation and attraction within the city. The project is also supported by non-motorised transport (NMT) friendly infrastructure development. The system is semi-automated with GPS based smart card and key. The RFID based tracking in the smart card and cycle key is a theft control mechanism. The automated fare collection helps in protecting the system from revenue leakage.

Benefits

The system helped in creating awareness towards sustainable mobility amongst residents. It led to NMT friendly infrastructure change. Currently, construction of 30km cycle track and 40 km of footpath is planned. A pilot project for 5km street improvement plan incorporating 'Streets for All' design concept was announced by CM, Haryana. Following this an intersection improvement plan for 5 intersections was approved.

There are other in-system benefits that allow residents to park their cycles in the PBS docking station for free. This step is considered a major move to encourage residents to cycle. As a result of this, residents have also donated extra cycles for Sanjhi.

Achievements

This environment friendly form of shared mobility was widely accepted as a mode of transport for daily commuting and not merely for leisure. It was recorded that on an average each cycle is used 1.6 times a day for mean trip length of 3.3kms. It was found that 61% used the PBS cycles for commute to work followed by 27% who used it for commute to educational institutions and only 12% leisure users.

The Awards Selection Committee selected this out of 10 entries in this category as a creditable initiative from a small city to popularize NMT in the form of bicycles. Substantial coverage of the city is planned. Hence, the project has been selected for special award as a commendable initiative.

BEST CITY BUS SERVICE PROJECT

AWARD WINNER: Best City Bus Service, Dharwad, (NWKRTC)

The North West Karnataka Road Transport Corporation (NWKRTC) has been the pioneer in providing need based transport services to the common public. The city service project submitted for the award is one amongst them. In modern times, especially changed economic scenario after India signed the GATT agreement, the growth of urban centers became enormous. This has led to the pressure on the existing urban infrastructure.

NWKRTC addressed this problem with a different perspective. Urbanization means not migration of the people to urban centers but providing the services available in urban areas to the two tier cities & villages located in the urban agglomeration. Sustainability of the transport operation is a big challenge because of the nature of business. The vehicle and bus stations constitute the important public transport infrastructure. The onetime capital invested in it, will yield result for a long period.

NWKRTC conducted a survey to identify the two tier cities which have the potential to become the commercial and economic hubs and planned to introduce the city services in these areas. Thereby these cities can absorb the pressure on the urban centers. Most of these cities are District head quarters / in the list of to be declared district HQs. The city services operation was started with the assistance of Government of Karnataka and Government of India under the Sustainable Urban Transport Fund (SUTF) & Jawaharlal Nehru Urban Renewable Mission (JnNURM) scheme respectively. 48 buses are in operation under SUTF. Knowing the result of the scheme, the Government of India sanctioned 280 buses with 80% funding under JnNURM scheme. Now 69 buses have been deployed in the city operation and remaining will be scheduled to be deployed by 31st March 2017. This delay is due to deployment of India Norm IV vehicles at urban centers in order to conserve the environment. The construction of one city bus depot under this scheme helped to improve the maintenance of vehicles and reduced the breakdown rate.

The project has brought about a revolutionary change in the standard of living of the people living in the area through easy accessibility to health and urban facilities. The labour can easily move to the nearby cities to work for their livelihood. The girl child can continue higher education with the availability of city connectivity.

This project has good features to be emulated elsewhere in two-tier cities near the capital centers.

The Awards Selection Committee selected this out of 7 entries as an award winner based on the excellent initiative for connecting twin towns (Hubli and Dharwad) by city bus services and also by connecting economic nodes, in the process creating a sustainable public transport system.

COMMENDABLE INITIATIVE: Rajkot City Bus Service

Rajkot city is spread over an area of 129.34 square km. It is the 28th urban agglomeration in India and is ranked 22nd in the "World's fastest growing cities & urban areas" for the period 2006 to 2020. Rajkot was awarded 7th clean city of India in Swachh Bharat Mission.

Rajkot is the centre for social, cultural, commercial, educational, political and industrial activity for the whole of Saurashtra region. It is strategically located in the centre of Saurashtra Region in the Aji basin. Rajkot is spread on both the banks of Aji River which cuts through the city. It is divided into 18 wards and average density is 12,735 person/Km. Draft Comprehensive Mobility Plan 2031 has been prepared under "The Gujarat Town Planning and Urban Development Act, 1976". It has excellent provision of road network for Urban Mobility and in addition to this to make sustainable mass transportation. Transit Oriented Zone (TOZ) with high density on both sides of the corridors are proposed in the development plan 2031. Current scenario of road network is 1,595 km, with road width varying from 3 meter to 45 meter. Out of this 31.85 % roads are having 9 to 45 meter width. So it gives excellent road network for mass transportation.

Rajkot Municipal Corporation (RMC) took the initiative to start city bus service, previously operated through net cost model by a Private operator (Raj City Bus Service & VTCOS), which failed. So presently, RMC started city bus service from 10.10.2013 on gross cost model with fleet size of 30 buses in first phase and within next 6 months it expanded the fleet size to 60 buses in

second phase. In third phase, additional 30 buses have been added. Total fleet size of 90 buses are under operation at present in 45 routes of Rajkot city of 700 km route length covering major educational institutes and industrial zones. Since 1.4.2015, the fleet is operated by RRL. Daily ridership is 27,000.

The Awards Selection Committee selected this project out of 7 entries as a definite beginning made to move away from the existing transport system relying on three wheelers etc. by introducing organized public transport system. This project works on gross - cost model which is rarely practiced in India. It has an extensive route coverage catering to the city population. Hence, it has been selected for special award as a commendable initiative.

BEST URBAN MASS TRANSIT PROJECT

AWARD WINNER: Integrated Mass Transit System (with focus on Bus Rapid Transit System), Surat

Surat, with its 4.6 million population (2011) is India's eighth and Gujarat's second most populous city. The city is not only considered as the economic capital of Gujarat but also has been identified as the 4th fastest growing city globally. In 2011, the population of the city is estimated to cross 10 million mark in the next 20-25.

Existing City transport system of Surat is predominantly road based; it consists of informal intermediate para transit, City Bus Services, private vehicles and recently introduced BRTS Services. In Surat, motorization rates are one of the highest. Today there are 25 lakh registered vehicles in the city and each day about 500 vehicles are added. With this pace of motorization, the long term assurance of rapid mobility and high accessibility can only be made possible through development of high quality public transport (collective mobility systems) coupled with quality pedestrian and bicycle infrastructure.

Efforts towards bridging the gaps in public transport infrastructure are also underway. About 102 kms of BRTS network has been planned of which about 65km is functional and rest is at the stage of completion. To support accessibility to city's economic centre, i.e. the old city, a High Mobility Corridor is proposed to ensure rapid mobility and support economy. Also, the city bus plan of 515km network is under implementation which shall serve as a feeder network to the city's mass transit network. The city bus plan has identified 44 (city and sub-urban) routes that shall cover 94% of urbanized areas in SMC region with a headway between 6-12 minutes. Fleet of 875 buses is already under different stages of procurement. The buses under procurement are compatible with both BRTS as well as city bus system.

An integrated multi-modal system is proposed to integrate BRTS, high mobility corridor (proposed), city bus services, sub-urban bus services, Metro (proposed) and urban ferry system (proposed) to provide seamless connectivity and mobility across the city. Surat is exploring smart mobility solutions through citywide common fare media. The city has already introduced S-Connect card for its services and is also implementing ITMS, AFCS and ATCS for ensuring service levels.

Surat is also developing Comprehensive Mobility Plan for city mobility and provides opportunities for transit-oriented development promoting compact city and enable integration with other modes.

The project shall be implemented by Surat Sitilink Ltd. (SSL), an SPV developed under Surat Municipal Corporation for management and operations of Surat BRTS system. Sitilink is a regulatory agency and all its operations are planned through a set of PPP arrangements.

The Awards Selection Committee selected this project out of 6 entries. It is an organized city bus service providing proper integration with the BRTS providing a high mobility corridor, use of smart card, AFC system, etc. adjudged the best in this category, which can be replicated in other cities as well.

COMMENDABLE INITIATIVE: Short Term Mass Transit Solution for Simhastha 2016, Indore

Once every 12 years, Ujjain city in the state of Madhya Pradesh in India, becomes a hotbed of Hindu religious festivities. Devotees from all over India and around the globe converge to this holy city for a moth to partake in the biggest events in the Hindu calendar, the Simhastha Mela or Kumbh Mela.

Ujjain is an ancient city situated on the eastern bank of the Kshipra River, it was the most prominent city on the Malwa plateau of central India for much of its history. It emerged as the political centre of central India around 600 BC. Today, Ujjain is the largest city in Ujjain district of Madhya Pradesh and is the administrative centre of Ujjain district and Ujjain division. With a population of 5,15,215 and a population density 3400/sq km (8800/ sq mi), Ujjain is amongst the big and prominent cities of Madhya Pradesh.

Simhastha attracts millions of pilgrims to Ujjain. Although the total expected footfall in 2016 was estimated at 50 million for the month-long event, all expectations were defied with a total footfall of close to 75 million.

Atal Indore City Transport Services Limited (AICTSL) was given the responsibility for operating the pre-designed (by Ujjain Municipal Corporation) public transit network during Simhastha owing to its expertise and accomplishments in the past.

After running the pre-planned network for 3 days, AICTSL officers found the debilitating flaws in the system and took swift measures to develop a new routing plan for Ujjain that simulated a "Funnel Type Model" rather than the more widely recognized "Hub and Spoke Model" to ensure operational efficiency. School buses, Ujjain city buses among others (total 500 buses) featured in the total fleet of buses acquisitioned for operations in Ujjain.

Round the clock operations coupled with dynamic scheduling proved to be the saving grace. Constant information dissemination was taken up using PA systems and AICTSL employees on all the 5 hubs built for operations. Information boards and hoardings providing directions were also put up throughout the city.

Emergency facilities (Ambulance, first aid booths, fire engines etc.) potable water, toilets were provided at all the hubs at all times with occasional free snack and beverage distribution drives.

400 wardens, security supervisors and guards etc., were deployed for maintaining law and order during Simhastha. GPS tracking devices were installed in all the buses for real time supervision and tracking.

Along with intra Ujjain operations, AICTSL also provided bus operations from Indore to Ujjain and return. These operations were run from 4 depots setup in Indore and were undertaken for 9 days (3 days each for a "Shahi Snan"). An astounding 1.53 lakh passengers used this facility, each of whom had been insured by AICTSL to the tune of Rs.1 lakh.

It stands to AICTSL's prowess and success that during the one month event. Not a single major accident or injury was reported.

The Awards Selection Committee selected this project out of 6 entries as one of its kind initiative well implemented during the Simhastha Mela when very large number of pilgrims assembled. It was planned and executed within short time, well coordinated and with various positives. The project was selected for award as a commendable initiative.

BEST INTELLIGENT TRANSNPORT SYSTEM PROJECT

COMMENDABLE INITIATIVE: (I) Integrated Depot Management System (IDMS) under strengthening of transport system schemes, Gangtok

IDMS Integrated (Having different parts but working together as a unit)

The main purpose of IDMS is to combine all locations and its functions into a single software system to generate online information with the central command at the IDMS control room. IDMS is highly scalable and a very secure system Depot Computerization completed (Phase I)- Online system Cloud Deployment for Data Storage.
The system has been deployed in Cloud storage environment

Benefits

- Major reduction in System Maintenance
- Highly secured data protection
- Highly scalable and very easy Disaster recovery in case of an emergency.

The software solution and operational integration is powered by Aeon Software Pvt Ltd. Mumbai

- Project is mainly divided into two categories :

  - Phase I – Depot management –Location Based
  - Phase II – Passenger Information system - Vehicle based

Phase I -List of Modules:

- Passenger Transport Management System (PTS)
- Inventory Management System (IVS)
- Vehicle Management System (VMS)
- Assets Management System (AMS)
- HR Management System (HRMS)
- Goods Transport Management System (GTMS)
- Supervision Collection Management System (SCMS)
- GPS Vehicle Tracking & Passenger Info System (VTS&PIS)

Phase II –Passenger Information System - Vehicle based -2 modules

- Passenger Information system
  - In bus LED displays Routes information
  - Next stop text display on the LED
  - Voice announcement for the next stop
  - Bus terminals would display the scheduled buses for the passengers.
  - Highly beneficial to differently able persons like visually impaired and deaf/dumb

Electronic Ticketing-

Electronic Ticketing machine deployed in both starting Depots

- All Depots are completely migrated to E-ticketing. No paper tickets are issued anymore.
- En route hand held machine ticket.
- **Benefits achieved**:
  - Tickets sold data easily available on day-to-day basis without manual intervention of data collection
  - Ready MIS reports are available on the go which allows proactive decision making.
  - Pre-printed tickets no longer required
  - Collection reports day-to-day available

Passenger Transport Management System(PTS) -

- Routes and duties allocations computerized
- Daily Vehicle scheduling & personnel allocation computerized
- Waybill, Fuel Challan all documents now computer generated
- **Benefits**
  - Efficiency can be closely monitored since data of Cancelled trips/Kms/Personnel allocation on day-to-day available daily.
  - Time taken for Vehicle and Personnel allocation has been drastically reduced

Inventory Management System (IMS)-

The main activity under this module include:

- Requisition for purchase
- Material management computerised from Purchase Orders to Materials in/out
- Digital document generation of PO, Challan, Requisition slips etc from the system
- Receipt and issue of material
- Overall material stock position readily available
  - Material shortage /excess can be easily envisaged and inventory costs lowered

- Fuel positions daily available online, hence shortage can be avoided due to predictive consumption pattern
- Vehicle idle time due to non-availability of material is reduced, hence higher on road ratio of vehicle achieved.

Vehicle Management System-

- Workshop computerised with Job-Card system.
- WS book Vehicle history is maintained electronically.
- Scheduled Preventive maintenance for docking/ vehicle inspections introduced
- **Benefits**
  - Vehicle history enables easy and faster decisions on early repairs and prevent breakdowns.

Goods Transport Management System (GTMS)-

This module will capture the trucks & tankers movement and generate related documents for transport

- Indent & Challan generation
- Registering demands/issuing vehicles and billing and Invoicing is computerised in a single system.
- **Benefits**
  - Ready Billing and invoicing system for Army/Petroleum companies and Private individuals
  - Through the centralised system HO can monitor the unfulfilled demand and can proactively arrange for vehicle.
  - Better Commercial deployment due to availability of ready information**.**

Supervision Collection Management System (SCMS)-

This module will capture the data of toll/taxes collection at the check posts

- Generation of Payslip (to be submitted to the Bank counter for payment)
- Generation of Collection receipt not prone to forgery or duplicacy.

- **Benefits**

  - Charge structure configured in the system, enables easier and faster processing
  - Bank payment receipt can be easily matched with the system report on daily basis
  - Centralized system enables the overview of all the centres into a single system
  - Information available on daily or anytime basis/vehicle/client wise /user wise

Auction/Assets –

This System should facilitate record and update of all fixed assets of the department.

- Vehicle valuation
- Get the details of auctions vehicle of SNT & third party.
- Monitoring the auction details
- Third Party Billing
- Generation of third party vehicle wise/dept wise reports
- Benefits:
- Can quantify the expenditure saved on repair and maintenance of all govt. vehicles
- Creates data base for maintenance planning

The Awards Selection Committee selected this out of 6 entries as integrated depot management system is the first of its kind in Indian cities. This is a unique initiative to further improve upon transport in a hill town and can be replicated in other cities as well. The project was selected as a commendable initiative.

COMMENDABLE INITIATIVE: (II) J Caard, Jabalpur

CURRENT URBAN TRANSPORT SCENE

In Jabalpur the intra-city public transport system is essentially road based with semi floor buses, e rickshaws, cycle rickshaw and auto rickshaws. The Jabalpur City Transport Services Ltd. (JCTSL) has been incorporated to provide a dependable solution for Public Transportation. JCTSL owns 119 semi low floor buses which are run by the private operator on PPP model. These buses provide the facility of transportation to almost every part of the city. The average daily ridership of these buses is about 55,000. The next popular mode of transportation in the city is auto rickshaw which is almost 10,000 in number. As compared to both the modes the buses are better in terms of providing services.

NEED OF PROJECT

The main objective of the project is to reduce the use of hard cash in public transport system, create a system to Automatic Fare Collection and increase the level of service of Public transportation in city. Present system of Fare Collection includes ETM (Electronic Ticketing Machine) and PVC passes. In ETM paper ticket is generated in exchange of hard cash which is collected by the conductor. It gives no check to JCTSL about the tickets generated. Whereas the PVC passes are provided with some concession to promote the use of public transportation. These passes are printed with validity and issue date, user's details (like name, photo), pass details (like category, route number), bar code etc. and have to be printed every month. This Fare Collection System has many drawbacks like revenue leakage, inconvenience, user in acceptance, duplication of passes etc. which have to be overcome. In the light of above challenges it is essential to switch to such a system of fare collection.

Technologies for Public Transport

1. Automatic Fare Collection in Public Buses:
   a. Entry and Exit Validating machine, with automatic stage based fare collection.
   b. Ability to update fare tables over-the-air.
   c. ETM with printer.
   d. GPS based stage change.
2. Dashboard in every 2 hours during operating hours.
3. Companion Mobile App

4. NFC based front-end system.
5. Cloud based back end system.

Innovative financing mechanisms

1. T+1 settlement of cashless fare collection into the account of JCTSL,
2. Dual implementation if Semi-closed prepaid instrument with:
    a. RFID Customer Card & NFC Merchant Device.
    b. Online mobile wallet with 2-F authentication.
    c. Offline RFID card and Online Mobile Wallet.

Association of the private sector

AFC Partner -Technology Service Provider, NIPON which is a private company manages, as a technology service provider,

Lead Bidder – The lead bidder in this project is SIMPAL which is again a private company and would perform following functions:

a. Merchant Aggregation**.**
b. Manage Non-Financial Use Cases.
c. Invest in the front-end ecosystem**.**
d. Distribution & Marketing.
e. Service Outlets.

Integrated public transport systems

In public transport system the J-card would be used for AFC in JCTSL buses, E-rickshaws, for payments in bus terminals like ISBT, for road side amenities like parking lots. Hence it can be seen as financial integration of transportation system.

The Awards Selection Committee selected this project out of 6 entries as it helps in cash free and paperless transaction not only in public transport sector but also in small scale retail sector and all other utility services. The project also helps to generate employment through NULM scheme. Hence, it was selected as a commendable initiative.

BEST INITIATIVE FOR IMPROVED ROAD SAFETY

COMMENDABLE INITIATIVE: Safety Begins with Team Work, Chandigarh.

The aim of the project is prevention of road traffic crashes and to minimize the injuries and damage they cause by effective law enforcement action supported by the role of awareness raising campaigns among people about traffic rules & regulations. Engaging civil society, academia, private sectors and philanthropic persons for effective execution of four pronged strategy of 4Es i.e. Education, Enforcement, Engineering changes and Emergency care training. Citizen volunteers having knowledge of public dealing are involved as "Marshals". They accompany the traffic police officials during their special traffic rules enforcement drives as well as traffic safety awareness campaigns. Road Safety Cell set up at Children Traffic Park Sector 23, Chandigarh to impart education regarding traffic rules and regulations to general public including school / college students, vehicle drivers and other road users etc. in association with "Honda Motorcycles and Scooter India Private Limited". Mobile exhibition vans for giving lectures & showing educational and road accident related films at markets, tourist places etc. NGOs like "Arrive Safe" and "Tamanna" are actively involved in organising road safety campaigns like street functions, awareness walk and rally etc. Promoting helmet and seat belt wearing etc. by engaging celebrities from different fields i.e. Sachin Tendulkar, Kangna Ranaut etc. PEC(Punjab Engineering College) sharing their technical ideas in introducing effective technology i.e. Alco-Sensor, E-Challaning system etc. Fortis Hospital, Inscol Hospital etc providing first aid training to all traffic staffs to strengthen pre hospital care and immediate post crash response.

Benefits:-

Through public awareness participation process of enforcement of traffic rules and regulations became transparent and effective. In 2015, 3,23,503 challans issued and 49,220 people were made aware about various rules & regulations. "Marshal" scheme facilitate traffic police to optimize use of existing manpower. Now 82 marshals are involved in this project. Dedicated road safety fund for awareness campaigns effectively are being utilized. A separate institutional set up prepared at CTP Sector 23 dedicated to awareness campaigns and collecting & maintaining data base regarding all accidents in the city.

Achievements:-

The initiative bore a positive results as desired. There is positive impact on major components of Urban Mobility i.e. accident, congestion, environment. Number of fatal accidents decreased in the city despite the tremendous increase in traffic flow.

Reduced traffic congestion on city roads. Number of traffic jam calls have reduced from 3415 in 2015 to 2259 (till 15th October) 2016.

Measures such as ban on movement of heavy vehicles on internal roads, no entry zone, smooth & fast travel speed have resulted in decreased air & noise pollution in the city. A lot of girls have started to wear helmets which is a remarkable achievement of the project.

The Awards Selection Committee selected this project out of 4 entries as it addresses the road safety requirements of the city by taking very definitive and protective actions to enforce traffic regulations and bring about more measures by involving the public on a consistent basis. Hence, it was selected as a commendable initiative.

Annex – I

Awards Selection Committee

No. 14011/32/2016-UT IV
Government of India
Ministry of Urban Development
(UT-IV Desk)

Nirman Bhawan, New Delhi
Dated the 13th July, 2016

Subject: Annual Conference & Exhibition on Urban Transport – "Urban Mobility India (UMI) – 2016 (8th -11th November, 2016) – Constitution of Award Selection Committee – regarding .

This is to inform you that, as in previous years, an Annual Conference & Exhibition on Urban Transport is being organised by this Ministry. This year the dates of UMI are November 8th – 11th, 2016 and the venue is Mahatma Mandir, Gujarat. It has been decided that, on this occasion, the Ministry of Urban Development will give Awards for Excellence in Urban Transport in the following categories:

a) Best NMT (Non Motorized Transport) project
b) Best City Bus Service
c) Best Urban Mass Transit Project
d) Best Intelligent Transport System project
e) Best Initiative for Improved Road Safety

2. An Award Selection Committee, as under, has been constituted for this purpose:

S.No.	Name	Designation	
1.	Dr. M. Ramachandran	Former Secretary, MoUD	Chairman
2.	Shri Mukund Kumar Sinha	OSD (UT) & Ex-officio JS, MoUD	Member
3.	Prof. Jagan Shah	Director, National Institute of Urban Affairs	Member
4.	Shri K. K. Joadder	Chief Planner, TCPO	Member
5.	Prof. Geetam Tiwari	Professor, IIT Delhi	Member
6.	Shri B. I. Singal	Former DG, IUT	Member
7.	Ms Annapurana Vacheswaran	Director, TERI	Member
8.	Prof. Sanjay Gupta	Professor, School of Planning and Architecture, Delhi	Member
9.	Dr. O. P. Agarwal	World Bank Advisor & Former DG, IUT	Member
10.	Prof. Shivanand Swamy	Associate Director, CEPT University	Member
11.	Shri C.L. Kaul	Executive Secretary, IUT	Convener

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3. The Committee as a whole or in small groups may visit the actual project site(s) to complete the assessment before making a recommendation.

4. This issues with the approval of competent authority.

(Raj Kumar Singh)
Director (UT-I)
Tel. No. 23072798
Fax: No. 23063304

To

The Chairman and all members of the Committee

CC: PS to UDM

PSO to Secretary (UD)/PPS to AS(UD)/PPS to OSD(UT) & EOJS

Annex – II

Format for submission of entries for Awards for Excellence in Urban Transport

S. No.	Particulars	
1	**Awards Category under which proposed and why**	
2	**Name of Project**	
3	**Person to be contacted with contact details** i. Name: ii. Designation: iii. Department: iv. Organization: v. Phone: vi. Email: vii. Fax:	
4	**Brief description of the current Urban Transport scene** (maximum 250 words)	
5	**Current Status of Project**	
6	**Was the project executed in time? Please indicate** i. Start date ii. Contractual completion date iii. Actual completion date	
7	**Description of the project , need for the project, objectives and actual achievement** (maximum 250 words) (as applicable)	
	• **Improvement in Travel speed. (Yes/No)** (please specify the increase in numbers and other details in maximum 100 words)	
	• **Reduction in accidents. (Yes/No)** (please specify the reduction in percentage and other details in maximum 100 words)	
	• **Reduction in green-house gas emissions. (Yes/No)** (please specify the reduction in numbers and other details in maximum 100 words)	
	• **Reduction in air and noise pollution.**	
	• **Reduction in energy consumption.**	
	• **Any other benefits** (maximum 250 words)	

S. No.	Particulars	
8	**Public response to the project** (maximum 250 words) with attachments;	
9	**Project outline with key features** i. Estimated cost ii. Actual cost on completion • **Contribution of** i. Center ii. State iii. ULB Government. • **PPP Model. (Yes/No)** (if yes specify details in maximum 100 words) • **Economic Benefits (EIRR)** • **Financial profile (FIRR)** • **Revenue as % to operation Cost.**	
10	**Does this project addresses various elements of NUTP, 2006 (Yes/No)** (if yes specify details in maximum 250 words)	

Annex – III

Evaluation Indicators for Entries

Category	Evaluation /performance measures	Indicators
1. Best NMT project	i. Increased usage	Increase in Passengers carried /day
	ii. Increased Modal share	Increase in share of trips by NMT (%)
	iii. Increased supply	Availability of NMT/10000 population
	iv. Improved Accessibility	a. population served within 400m from NMT stops/stands b. NMT network length/sq. km of area
	v. Improved Safety	Reduction in Accidents per lakh trips or veh km.
2. Best City Bus service	i. Increased ridership	Increase in Passengers carried /day by bus system
	ii. Increased modal share	Increase in trips by public transport (%)
	iii. Improved Accessibility	a. population served within 400m from bus stops b. bus route network length/sq km area
	iv. Improved Vehicle utilisation	Increase in Km performed per bus .day
	v. Improved reliability	Increase in share of on- time bus trips to total bus trips
	vi. Improved operations	Increase in Daily bus operated trips /Daily scheduled bus trips
	vii. Improved ITS	Increase in ITS components used in bus operations
	viii. Improved User satisfaction	a. Improvement in overall user rating for bus services b. % users satisfied for various bus services parameters such as reliability, comfort, safety, accessibility, economical. etc.

Category	Evaluation /performance measures	Indicators
3. Best Urban Mass Transit Project	i. Increased ridership	Increase in Passengers carried /day by mass transit system
	ii. Increased Modal share	Increase in trips by mass transit (%)
	iii. Increased seamless travel	Number of stations with intermodal transfer facility in transit network
	iv Transport cost savings	Transport expdr. per pass (or pass km) on transit and other modes
	v. Energy efficiency	Energy costs /(pass)or pass km on transit and other modes
	vi. Travel Time savings	Travel time per pass(or pass km) on transit and other modes
	vii. Reduction in congestion	Improvement in Travel speeds along transit corridor
	viii. Improved Safety	Reduction in Accidents per lakh trips (or vehicle km)
	ix. Economic vitality	Improved land values along transit corridor
4. Best ITS Project	i. Improved reliability	Increase in share of on- time bus trips to total bus trips
	ii. Reduced travel cost	Decrease in Travel cost/pass (or pass km)
	iii. Better incident management	i. Decrease in Incidents /km road length ii. reduced incident response time
	iv. Reductions in emissions	GHG Emissions per pass.or per passkm or per capita
	v. Reduction in energy costs	Reduced Energy cost/pass (or pass km)
	vi. Improved information system	Time spent in accessing information /pass
	vii. Wider use of ITS components	Number of ITS components
	viii. Improved network performance	Reduction in Travel time /pass (or Pass km)

Category	Evaluation /performance measures	Indicators
5. Best initiative for Improved Road safety	i. Reduction in accidents	Decrease in Accidents /10,000 registered vehicles for fatal, injurious and overall
	ii. Reduced accident cost	Est .Accidents cost /capita
	iii. Improved mobility environment	i. Increase Modal share (%) in favour of public transport ii. increase in modal share of NMT (%)
	iv. Improved awareness amongst public	Population covered through awareness campaigns
	v. improved mobility for differently abled	Share of differently abled in public transport trips Share of road length with facilities for differently abled
	vi. Increased Use of technology	Increase in Use of technology in collecting, analysing and management of traffic accidents.

Organised by

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