Ecomobility Readiness Assessment

Are India's cities ready for sustainable transportation?
A focus on non-motorized transport

CITY PROFILE

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PREFACE (THE GENESIS)

The figures everywhere say it all: India is urbanizing at an unprecedented and astonishing rate. Our cities will hold over 800 million citizens by 2051. These 800 million people will be constantly moving from point A to B to C, getting from home to work, trying to make ends meet. A large proportion of this population will be dependent on public modes and affordable means of transportation.

The strain on resources and immense pressure caused by this growing population has resulted in congested, polluted, crowded cities with increasing motorization. Understanding what cities and city governments can do, and how they are positioned to address the issue of sustainable mobility or ecomobility is the core of this assessment.

In October 2011, participants from around the world gathered at the Ecomobility Changwon 2011: the first world congress on mobility for the future of sustainable cities. Organized by ICLEI - Local Governments for Sustainability, in partnership with the host city of Changwon, Republic of Korea, the congress provided a platform for city representatives, mobility experts and urban practitioners from the world to have dialogue on mobility concerns in the world's cities.

Deliberations for developing an assessment project for Indian cities began at this stimulating venue, and took shape over the coming months. Ultimately, ICLEI South Asia, the South Asian wing of ICLEI Global, in partnership with Innovative Transportation Solutions (iTrans) Pvt. Ltd., and the Indian Heritage Cities Network Foundation (IHCN-F), launched this project in May 2012 with the funding support of the Shakti Sustainable Energy Foundation, and the institutional support of the Institute of Urban Transport and the encouragement of the Ministry of Urban Development, Government of India.

WHAT DOES THE ASSESSMENT AIM TO DO?

This project seeks to review the strengths and gaps of local governments in terms of their policy, capacity, resources and awareness towards non-motorized transport projects, as well as their willingness to implement non-motorized projects in their cities.

EXPLANATION

READINESS
- The willingness to do something
- The state of being fully prepared for something

While there are several initiatives and studies being conducted to ascertain the facilities available for non-motorized transport in Indian cities, and corresponding policies are being put in place to improve the quality of NMT in our cities, there has been no study undertaken to determine the existing capacities in city agencies to tackle the issue of non-motorized transport.

This study of over 20 cities provides just this information, with the aim of enabling decision-makers to put in place policies, programmes and projects that not only respond to the capacities and conditions at the local level, but also serve to improve them.

NON-MOTORIZED TRANSPORT
- Transportation powered without motorization
- Walking, bicycling, and variants such as skates, skateboard, push scooters, rickshaws, wheelchairs

ECOMOBILITY
EcoMobility is an environmentally friendly and socially inclusive way of transportation, including cycling, wheeling, walking and the use of public transportation, with special focus on intermodality.

5 Es CONCEPT
To ensure that all aspects of ecomobility are captured in a comprehensive and structured manner, the readiness assessment tool developed under the project covers a series of questions divided into 5 'E's: engineering, education, encouragement, enforcement and evaluation. Each 'E' in turn has questions pertaining to planning, policy, institutions, financials and implementation.

BACKGROUND

In India the definition of NMT gains several dimensions – the passenger cycle rickshaws and the goods rickshaws and the various handcarts modifications by the street vendors add to the variety of the NMVs; and their use for delivery and ferrying people and goods add to their purpose as modes of livelihood, last mile connectivity and as public transport systems.

A number of national and sub-national policies including NMT either as a critical component or key focus, exist and continue to be developed. Ultimately, the responsibility of implementing these policies rests with the local governments. These policies, while holistic and forward- thinking, do not necessarily take into account the existing conditions in city level decision-makers, and thus are not always suitable to the cities. Some of these policies/programmes are:

- The National Urban Transport Policy, which ultimately needs to be implemented in cities by local levels of government, clearly lists out the role of NMT as a last mile connector for the urban transport systems and as an independent mode for short distances.
- The National Mission for Sustainable Habitat, under the Prime Minister's National Action Plan on Climate

Change, has constituted a sub-committee specifically focusing on urban transport. The sub-committee listed out eight principles of sustainable urban transportation, of which the first two are 'walk' and 'cycle'

- The Ministry of Urban Development has developed Service Level Benchmarks for urban transport to be undertaken by all Indian cities. These service level benchmarks specifically address aspects of NMT
- The Jawaharlal Nehru National Urban Renewal Mission (JNNURM), launched in 2005, gave power to cities to undertake large scale infrastructure projects, including urban transport. City Mobility Plans prepared under the JNNURM were critiqued as lacking focus, and being rushed.
- A working group to provide recommendations on urban transport was set up for the formulation of the country's 12th Five Year Plan. This working group very clearly outlines the key role of NMT, and has recommended ear marking of funds within a city's roads development budget for walking and cycling facilities.

PROJECT INTRODUCTION NEED, METHODOLOGY AND APPROACH

As listed above, there are several ambitious large scale developments taking place at the national level to focus on NMT as a key mode in Indian cities, however, these initiatives do not take into account the ground level realities in Indian city governments.

The Ecomobility Readiness Assessment project aimed to bridge this gap, by assessing the actual levels of policy, resource and capacity development required at the local level in order to effectively implement NMT projects.

NMT is a key component of Indian cities already, whether as a last mile connector, to provide access to mass transit systems, or in heritage cities where it is a historically embedded into the cities' fabric.
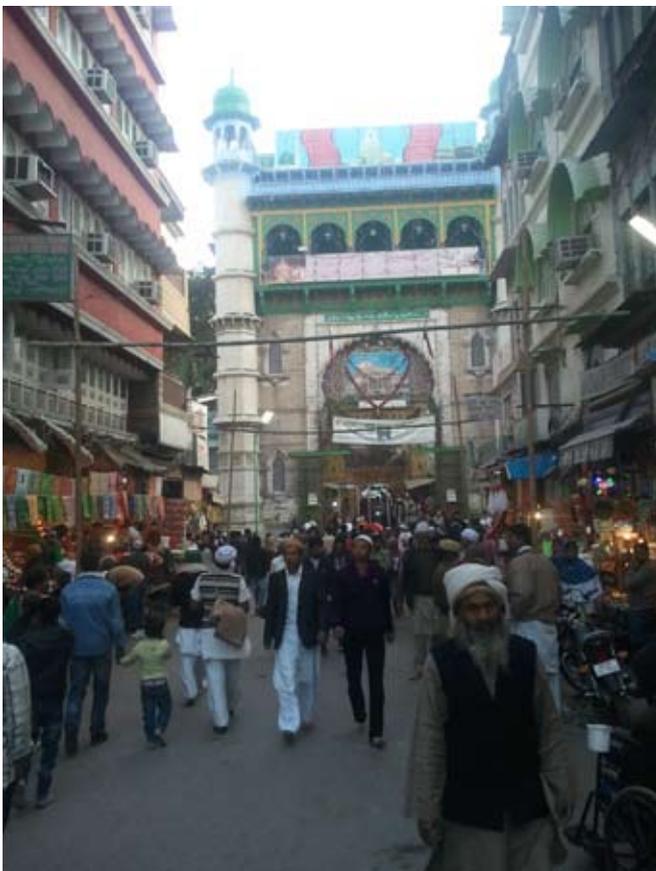
MAIN ACTIVITIES UNDER THE PROJECT

Step 1: Desktop review

This review provides a baseline of the status and information available at national level, and begins to give indication of the segregated actions that have been undertaken at the local level to address NMT till now.

Step 2: Inviting cities to participate in the assessment

Cities in the country were invited to take part in this assessment by providing a snapshot of information about the status of their city's NMT and through a signed commitment to carry out the assessment. Of 87 cities invited, 34 cities responded positively.

Step 3: Development of assessment tool

In order to most effectively capture the breadth of information required for accurately assessing the status of cities' NMT, a simple, yet comprehensive excel-based tool was developed. This tool was intended to inform the project by not just assessing the situation, but allowing the project team to pin point areas of improvement required in cities.

Step 4: Assessment in cities

The assessment was undertaken on ground in the participant cities. The tool was primarily designed to be a self-assessment tool by the cities. The tool consisted of questions by category, with a list of options in the answers column, where cities could pick the most accurate option. Each answer was graded from 1-5 and points added up to give each cities total score. The assessment was undertaken through interviews with the relevant city teams,

Step 5: Assessment matrix and recommendations basket

The completed assessment scores were compiled to show how cities stack up against each other, what areas of improvement are required, and what are the key interventions that need to be put in place to further the agenda of NMT at local level.

HOW TO READ THIS REPORT

This NMT readiness assessment project is summed up in three reports. The first report deals with the readiness assessment results of the 28 cities studied. It highlights the process followed in selecting the cities, developing the assessment tool, carrying out the assessment in the cities, the results and recommendations that followed from an analysis of the assessment results.

The second report (this one) details the profile of each city that participated in the assessment, and the third report is a comprehensive compilation of all the supporting documents of the project.

AGRA

Uttar Pradesh

POPULATION
15,74,542 (Source: Census, 2011)

AREA (SQUARE KILOMETERS)
141 (Source: Agra City Development Plan)

NAME OF CITY GOVERNMENT
Agra Nagar Nigam (ANN)

**DATES OF CITY ASSESSMENT**
12 December 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr D K Singh (Commissioner, ANN)
- Mr Dharamvir Gupta (Chief Engineer, ANN)
- Mr Manish Kumar, Manager, CURE – NGO (Agra)
- Mr Ravindra Kumar, Secretary, Agra Development Authority
- Mr Ishtiyaq Ahmed Magrani (Chief Town Planner, Agra Development Authority)
- Mr B M Tiwari (Superintendent of Police, Traffic Police, Agra)

Home to the world famous Taj Mahal, Agra is a busy tourist centre, along with supporting commerce and hospitality. The city boasts three World Heritage Sites namely – the Taj Mahal, Fatehpur Sikri and Agra Fort and innumerable other monuments of national and international importance.
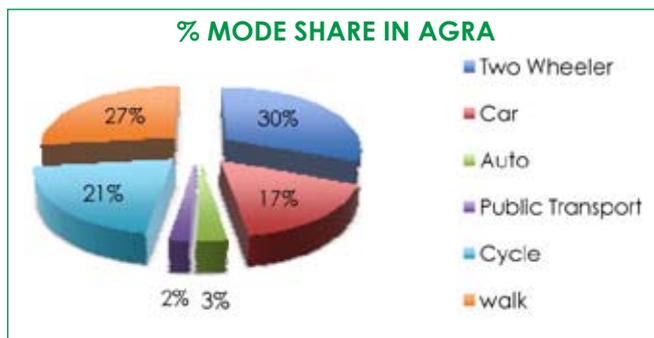
% MODE SHARE IN AGRA

- Two Wheeler 30%
- Car 17%
- Auto 3%
- Public Transport 2%
- Cycle 21%
- walk 27%

Source: Traffic and Transportation Policies and Strategies for Urban Areas, MoUD, 2008

EXISTING GOOD PRACTICES AND INITIATIVES

Low emission zone around the Taj Mahal area

UNDERTAKEN/IMPLEMENTED BY
Taj Trapezium zone pollution (prevent and control) authority under Ministry of Environment and Forests, Government of India

TYPE OF INITIATIVE
Policy and implementation

A low emission zone around the Taj Mahal area has been designated in order to preserve the historic monument from dangerous pollutants. Electric rickshaws (battery operated) and animal drawn vehicles are made available to reach the Taj Mahal from a designated parking place which is approximately 2km away.

"Non motorized transport has not been planned for till the recent past but that is fast changing, recent debates during the preparation of the City mobility plan"

Mr D K Singh
Commissioner, Agra Nagar Nigam

CITY READINESS ASSESSMENT PERFORMANCE

There is a mandatory evaluation framework for transport projects that has measurable milestones.

Engineering

Education

Encouragement

Enforcement

Evaluation

Implementation

Financial

Institutions

Planning

Policy

40%
30%
20%
10%
0%

There is little emphasis on education and encouragement programs that promote walking and cycling in the historic city except promotion of battery operated vehicles to reduce carbon emissions.

City Contact

Agra Nagar Nigam
Tel: +91-562-2520616
Web: www.nagarnigamagra.com Email: amcagra@yahoo.com

AIZAWL

Mizoram

POPULATION
2,91,822 (Census, 2011)

AREA (SQUARE KILOMETERS)
129

NAME OF CITY GOVERNMENT
Aizawl Municipal Council (AMC)
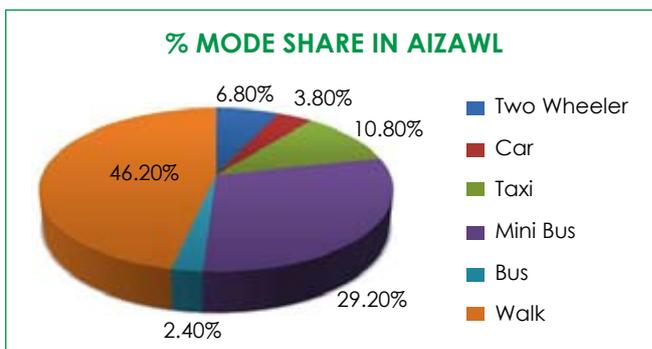
DATES OF CITY ASSESSMENT
14-15 February 2013

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Executive Engineer (AMC)
- Executive Officer. AMC
- Director- Urban Development and Poverty Alleviation, Government of Mizoram
- Superintending of Police, Aizawl Police
- Chief Engineer, Public Works Department, Government of Mizoram
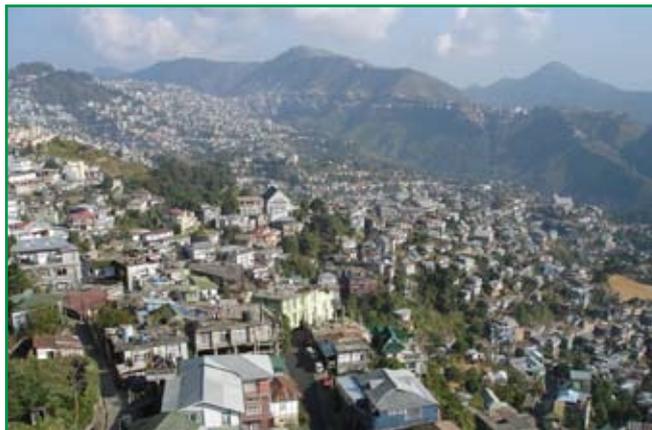
Aizawl is the state capital of Mizoram state with tremendous urban growth in the recent past. The population of Aizawl City is growing at a very rapid pace, creating complex problems in urban development and management coupled with constraints of unstable hilly terrain condition.

% MODE SHARE IN AIZAWL

- 6.80% Two Wheeler
- 3.80% Car
- 10.80% Taxi
- 46.20% Mini Bus
- 29.20% Bus
- 2.40% Walk

Source: Aizawl city mobility plan, 2008

EXISTING GOOD PRACTICES AND INITIATIVES

Walking the only NMT mode

TYPE OF INITIATIVE
Good practice

A city characterized by steep ramps and staircases, a high percentage of trips made in Aizawl are by walk. Aizawl is struggling to resolve the issues of daily commuting with its particular challenges that require innovative solutions to improve walkability.

> *"It is true that city should have a focus on NMT but in the case of Aizawl we need a scientific approach to resolve the issues of pedestrians"*
>
> *Mr Vanlalsawma, Executive officer*
> *Aizawl Municipal Council*

CITY READINESS ASSESSMENT PERFORMANCE

As cycling has no possibility in the city there is little emphasis on promoting walking and cycling in the city with no focus on encouragement campaigns

All traffic police officers are aware of these penalties and implementing the same regularly

Engineering

Education

Encouragement

Enforcement

Evaluation

Implementation

Financial

Institutions

Planning

Policy

80%
70%
60%
50%
40%
30%
20%
10%
0%
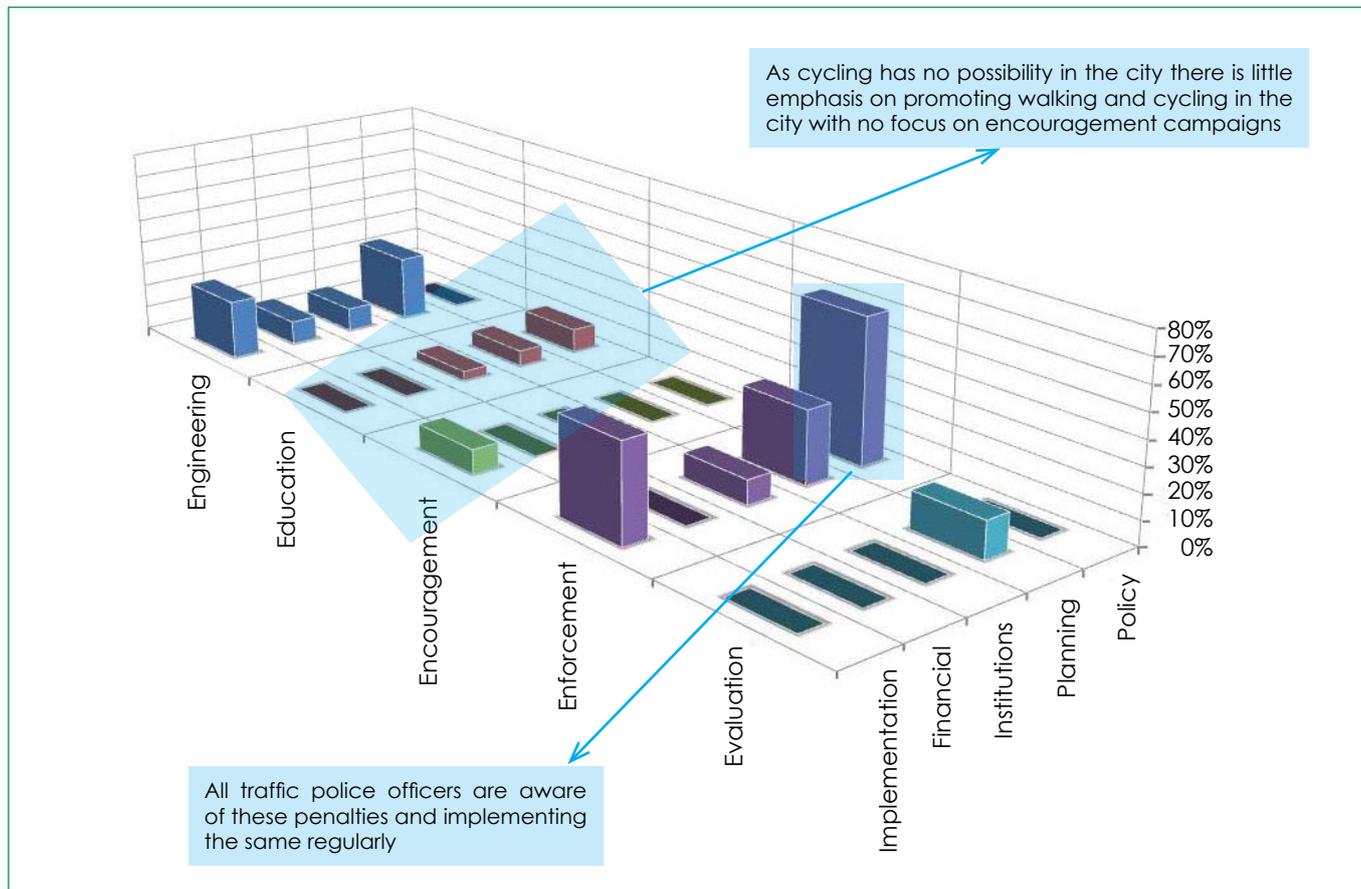
City Contact

Aizawl Municipal Council
Tel: +91-389-2350235
Web: www.amc.mizoram.gov.in Email: amcmizoram@gmail.com

AJMER

Rajasthan

POPULATION
542580 (census, 2011)

AREA (SQUARE KILOMETERS)
53.8 (Ajmer City Development Plan, 2006)

NAME OF CITY GOVERNMENT
Ajmer Nagar Nigam

DATES OF CITY ASSESSMENT
22-23 January 2013

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Ms Vineeta Shrivastava, Chief Executive Officer, Ajmer Nagar Nigam
- Mr Arvind Kumar, Assistant Engineer (Transport), Ajmer Nagar Nigam
- Mr Praveen Mathur, MDS University, Ajmer
- Mr Virendra Singh Rathod, Motor Vehicle Inspector, Regional Transport Authority, Ajmer
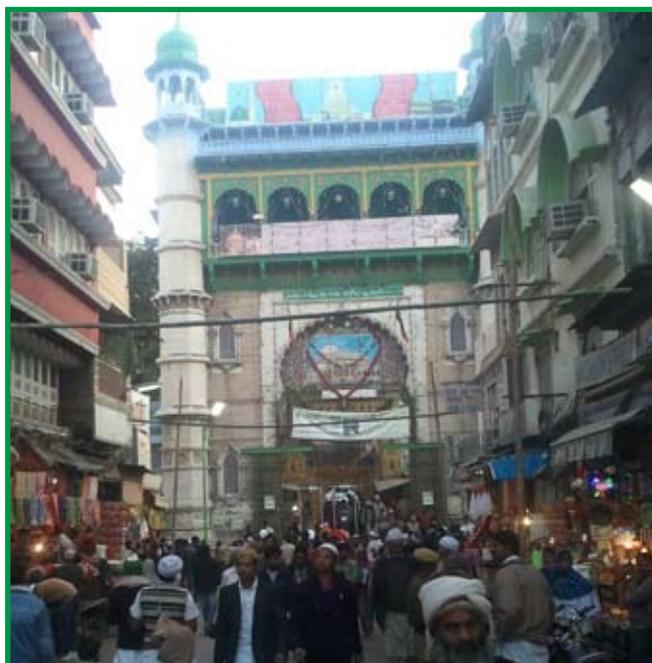
Ajmer has evolved around a religious core synonymous with the city. In its present form the city constitutes of an organic inner city, which is distinct in its character from the peripheral area, which has developed in the last two centuries. As one of the major destinations of the state there is a huge attraction of tourist population in the city especially to the Dargah Sharif area which is cordoned off as an NMT zone.

EXISTING GOOD PRACTICES AND INITIATIVES

Pedestrian only zone

TYPE OF INITIATIVE
Partial Implementation

A 2 km area around the Ajmeri Sharif dargah in the city of Ajmer is pedestrianized for the ease of the millions of devotees visiting the dargah. Cycle rickshaws are available to serve the elderly and differently abled. There are other heritage areas in the city which can be intervened with similar efforts.

> "Since Ajmer has historically been a visiting place for tourists, better facilities for NMT should be carefully considered to create a safer environment for tourists."
>
> *Ms Vineeta Shrivastava, CEO*
> *Ajmer Nagar Nigam*

CITY READINESS ASSESSMENT PERFORMANCE

Enforcement is high in the city as the transport authority has considerable knowledge on road safety and also prioritises pedestrians and cyclists on the road.

Though city has a usual floating population, there is a least emphasis on encouraging non motorised transport.
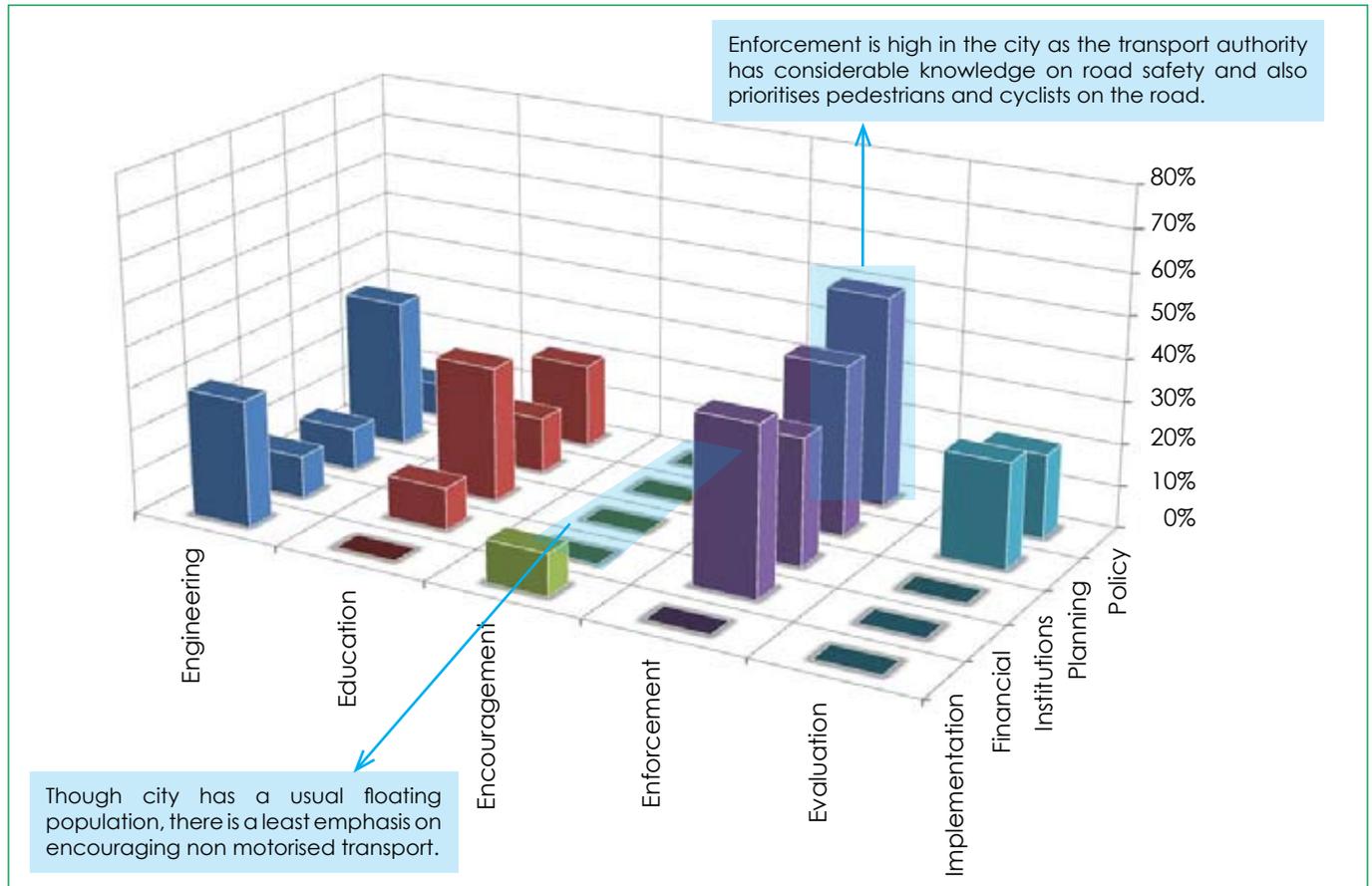
City Contact

Ajmer Nagar Nigam
+91-145-2429953
Web: www.ajmermc.org Email: ajmermc@gmail.com

BHUBANESWAR

Orissa

POPULATION
837737 (Census, 2011)

AREA (SQUARE KILOMETERS)
135 (Bhubaneswar City Development Plan,)

NAME OF CITY GOVERNMENT
Bhubaneswar Municipal Corporation (BMC)

DATES OF CITY ASSESSMENT
03-05 January 2013

| IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Mr Sanjib Kumar Mishra (Municipal Commissioner, BMC)
- Mr. Injeti Srinivas, IAS (Principal Secretary), Ministry of Housing and Urban
- Development, Government of Orissa
- Associate Town Planner, Bhubaneswar Urban Development Authority
- Mr. Binod Kumar Das, Assistant Commissioner of Police (Traffic), Bhubaneswar
- Police

Bhubaneswar is one of the oldest planned cities in India. The city's prime activity is administration and tourism. Bhubaneswar is an important trade center for the state. Handicrafts plays major role in bringing foreign exchange. It is also one of the first cities in India to have separate cycle tracks for safe commuting of NMT.

% MODE SHARE IN BHUBANESWAR
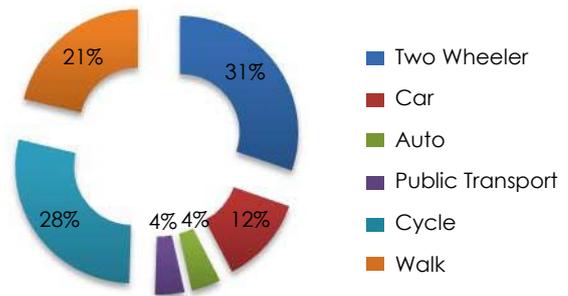
- Two Wheeler — 31%
- Car — 12%
- Auto — 4%
- Public Transport — 4%
- Cycle — 28%
- Walk — 21%

Source: Traffic and Transportation Policies and Strategies for Urban Areas, MoUD, 2008

EXISTING GOOD PRACTICES AND INITIATIVES

Cycle tracks

UNDERTAKEN/IMPLEMENTED BY
Public Works Department

TYPE OF INITIATIVE
Implementation

One of the first cities in India to have non -BRT cycle tracks constructed by PWD, termed as a model road in the city. But the facilities are currently used minimally and sometimes overrun by two wheeled motor vehicles. Though there is high scope for NMT in the city the cycle tracks have not been extended beyond this model road.

"It is very important to facilitate awareness programs along with provision of facilities which yield better results in making people shift towards NMT"

Mr Sanjib Kumar Mishra, Commissioner Bhubaneswar Municipal Corporation

CITY READINESS ASSESSMENT PERFORMANCE

ULBs does sponsor NGOs to organize awareness campaigns to encourage walking and cycling

Major roads in city are covered with footpaths and cycle tracks with about 50% of the roads having footpaths

80%
60%
40%
20%
0%

Engineering
Education
Encouragement
Enforcement
Evaluation
Implementation
Financial
Institutions
Planning
Policy
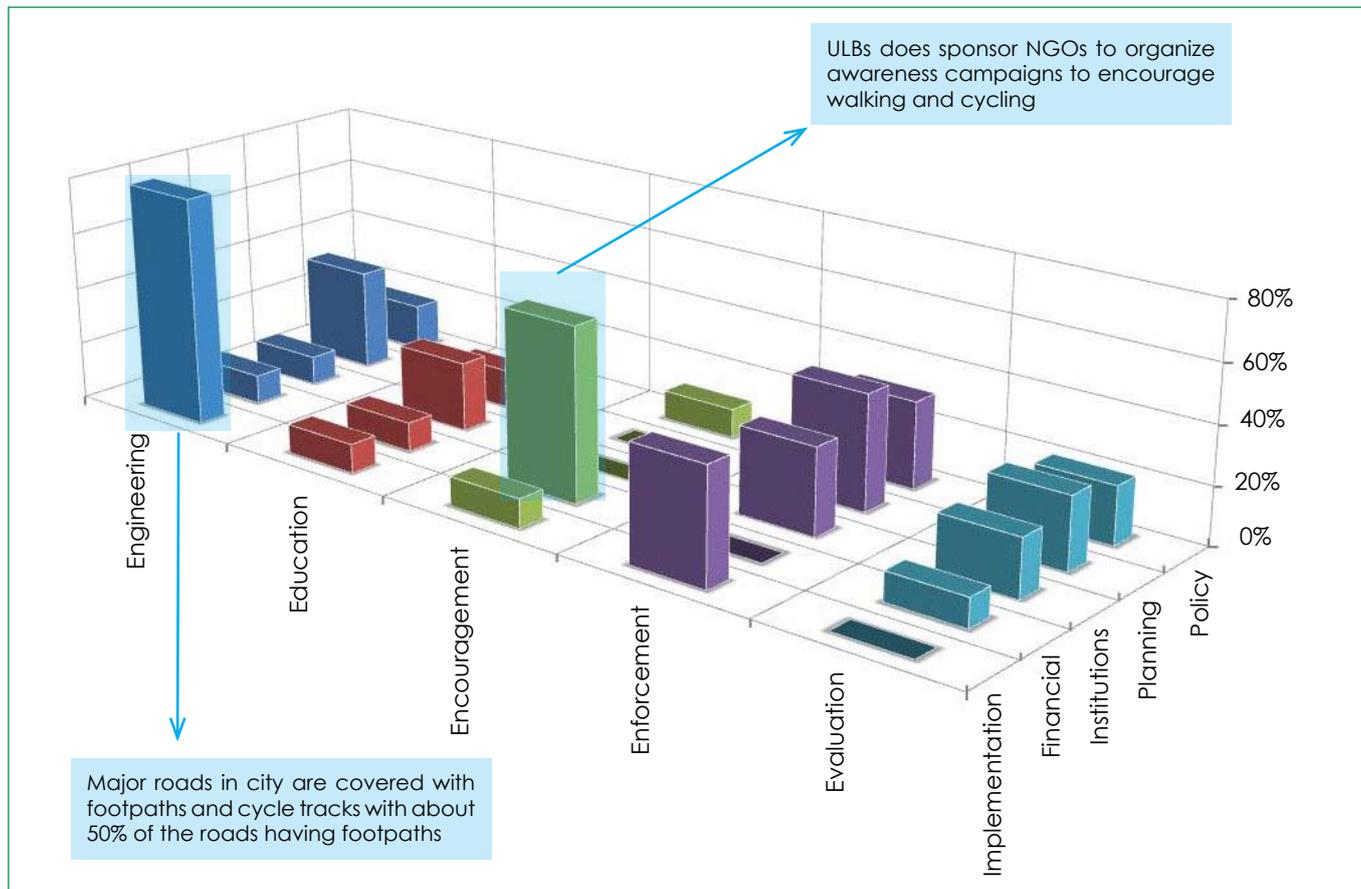
City Contact

Bhubaneswar Municipal Corporation
Tel: +91-674-2431253
Web: www.bmc.gov.in Email: commissioner@bmc.gov.in

COIMBATORE

Tamil Nadu

POPULATION
1061447 (Census 2011)

AREA (SQUARE KILOMETERS)
135 (City Development Plan, Coimbatore)

NAME OF CITY GOVERNMENT
Coimbatore City Municipal Corporation

DATES OF CITY ASSESSMENT
27-28 November 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Chief Town Planner, Coimbatore City Municipal Corporation
- Executive Engineer, Coimbatore City Municipal Corporation
- Mr T K Ponnusamy, Municipal Commissioner, Coimbatore City
- Municipal Corporation
- Mr A Lakshmanan, Executive Engineer, Coimbatore City Municipal Corporation
- Representative of RAAC (NGO)
- Deputy Commissioner of Police (Law and Order)

Coimbatore with its growing economy and rapid industrialization is a major trade and commercial center for the region. The city has high vehicle to population ratio due to inadequate public transport. The city has plans to implement a BRT system and other efficient public transport measures to overcome the dependence on personal vehicles.

% MODE SHARE IN COIMBATORE

- Two Wheeler
- Car
- Auto
- Public Transport

35%
51%
8%
6%
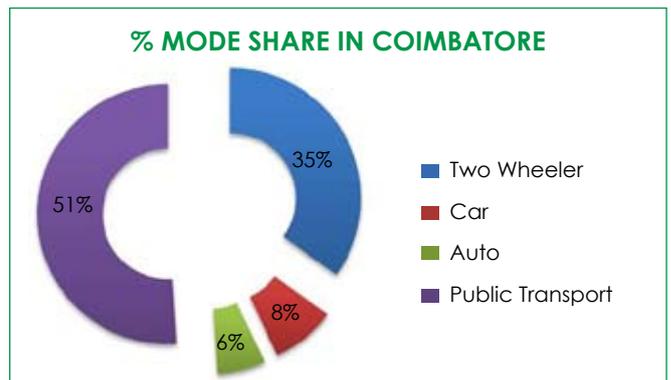
Source: Coimbatore city mobility plan, 2007

EXISTING GOOD PRACTICES AND INITIATIVES

Wider walkways provide safer commuting!

UNDERTAKEN/IMPLEMENTED BY
Coimbatore City Corporation

TYPE OF INITIATIVE
Partial Implementation

The racecourse road in Coimbatore has wider segregated walkways, which showcase the importance of wider footpaths for safer and more pleasant walking for pedestrians.

"Cycle parking infrastructure is an important aspect and must be looked at strategically for each street in the city".

Chief Town Planner

CITY READINESS ASSESSMENT PERFORMANCE

Strict penalties framed for encroachment of footpaths are implemented regularly

Execution knowledge of engineering projects are comparatively at city level

Allocation of funds to different parameters that promote NMT has been least prioritized
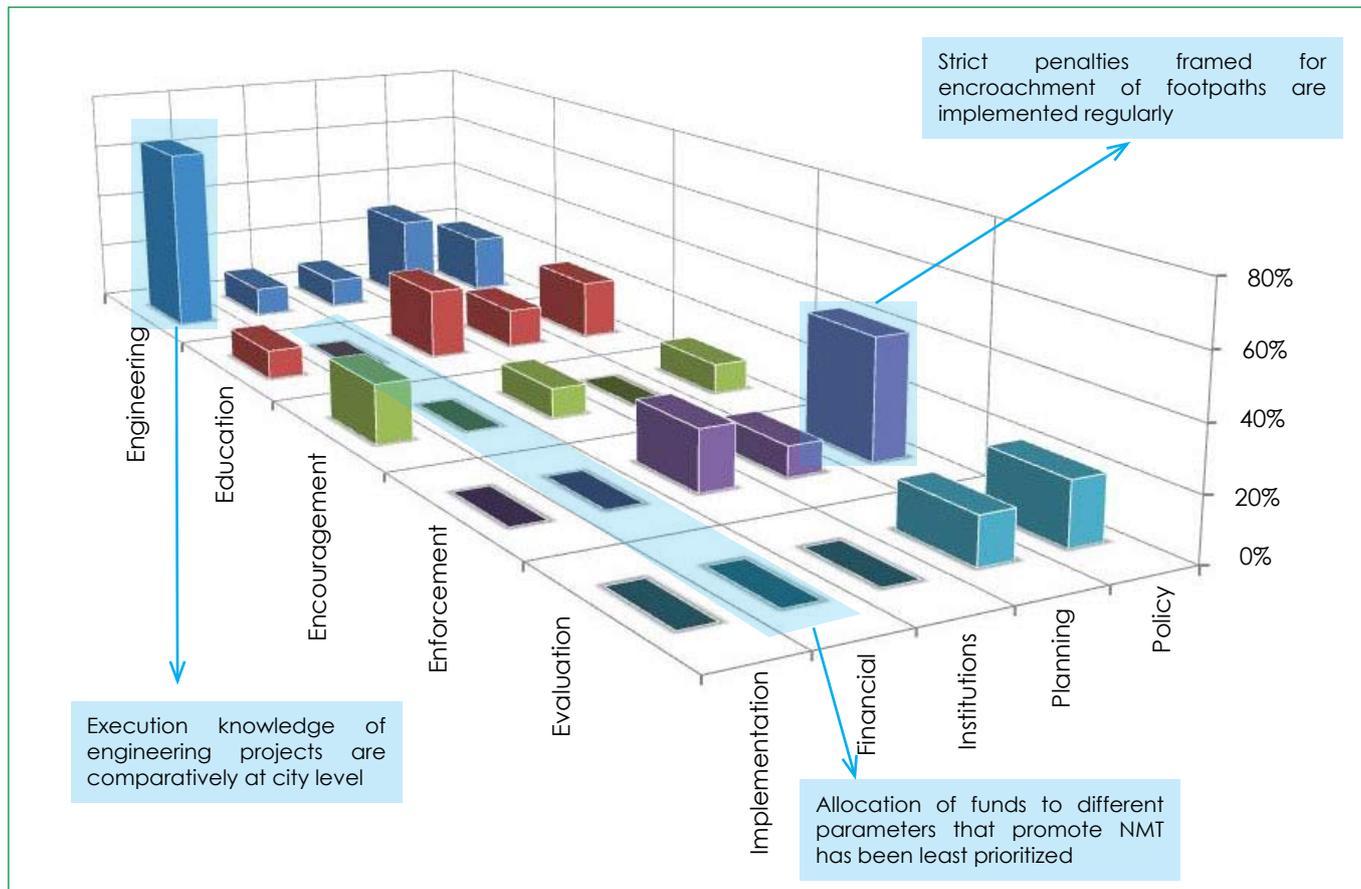
City Contact

Coimbatore City Corporation
Tel: +91-422-2390167
Web: www.ccmc.gov.in Email: commr.coimbatore@tn.gov.in

FARIDABAD

Haryana

POPULATION
1404653 (Census, 2011)

AREA (SQUARE KILOMETERS)
207.88 (Faridabad City Development Plan, 2006)

NAME OF CITY GOVERNMENT
Municipal Corporation Faridabad

DATES OF CITY ASSESSMENT
29 November 2012

Faridabad is one of the cities of the National Capital Region (NCR) around Delhi and accordingly it has strong linkages with Delhi. NH 2 from Delhi-Mathura passes through the length of the city and is the central axis of the city of Faridabad. As one of the major industrial hubs the cities travel pattern is dependent on public transport and Intermediate public transport and also predominantly NMT.

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr Anil Mehta, Executive Engineer, MunicipalCorporation Faridabad
- Mr. Vijay Pratap, Assistant Commissioner of Police (Traffic), Faridabad Police
- Mr Dammu Suresh, IAS, Commissioner, Faridabad Municipal Corporation

EXISTING GOOD PRACTICES AND INITIATIVES

Pilot provision of wider footpaths

UNDERTAKEN/IMPLEMENTED BY
Faridabad Municipal Corporation

TYPE OF INITIATIVE
Partial Implementation

Wider footpaths have been provided along the corporation premises in Faridabad that set a firm example for the city to provide wider footpaths and cycle tracks as a large part of the city's population comprises industrial workers.

"The aspect of NMT should be included in all stages of the planning process right from the city master plan where we can understand the need of the NMT users and can provide facilities that are sustainable for future."

Mr Anil Mehta, Chief Engineer
Faridabad Municipal Corporation

Evaluation committees have been instituted at the city level with legislative backing to ensure results of evaluation of impacts are taken cognizance of

No initiatives taken at city level to promote cycling and walking. NGOs are not actively involved in campaigning cycling and road safety issues.

Engineering

Education

Encouragement

Enforcement

Evaluation

Implementation

Financial

Institutions

Planning

Policy

80%
60%
40%
20%
0%
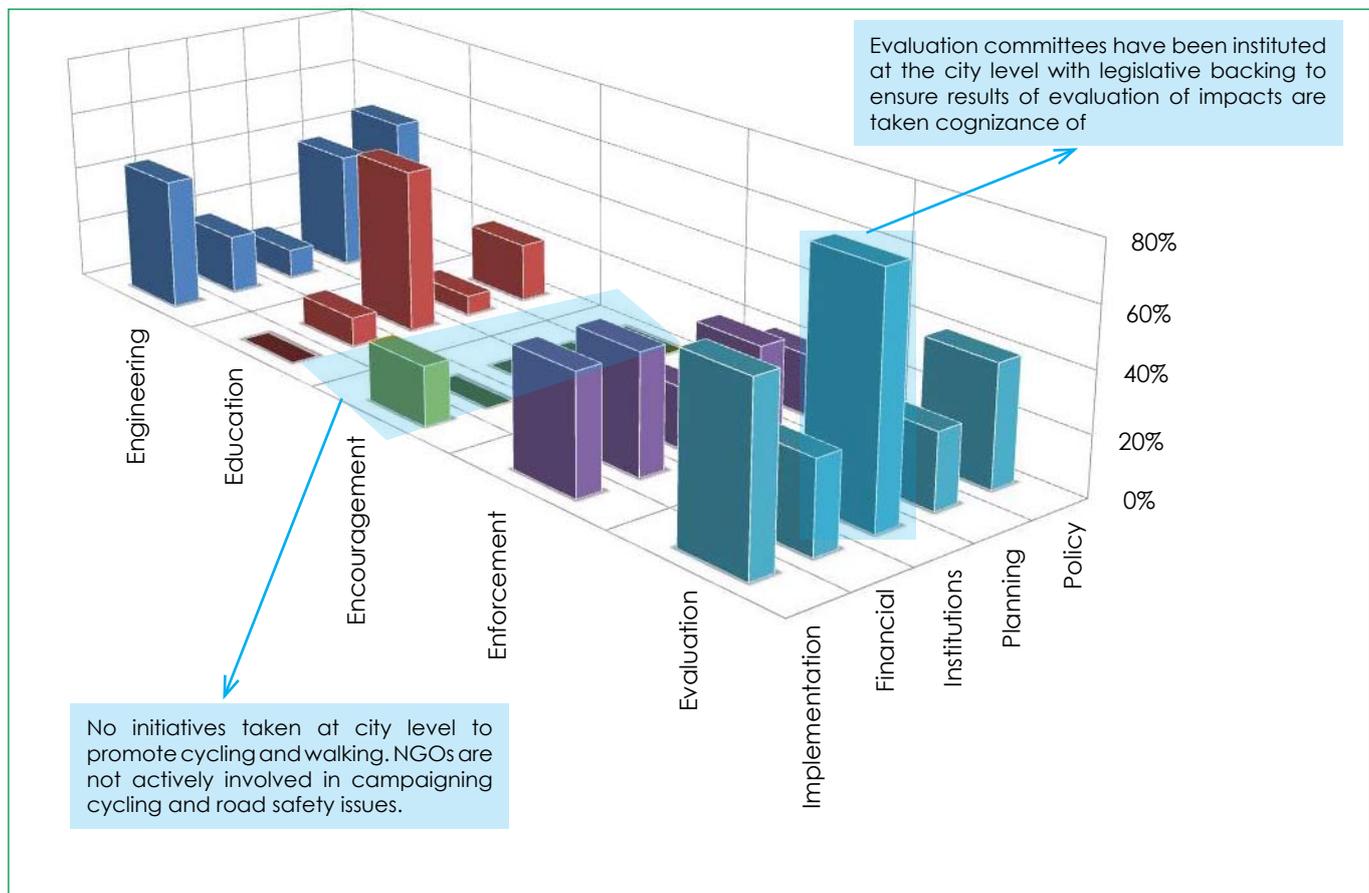
City Contact

Faridabad Municipal Corporation
Tel: +91-129-2416464
Web: www.mcfbd.org Email: contact@mcfbd.org

GUNTUR

Andhra Pradesh

POPULATION
651,282 (Census, 2011)

AREA (SQUARE KILOMETERS)
45.71(Guntur City Development Plan, 2006)

NAME OF CITY GOVERNMENT
Guntur Municipal Corporation

DATES OF CITY ASSESSMENT
04-05 November 2012

IS THE CITY A JNNURM CITY?	No
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Mr Kuthati Sudhakar, Municipal Commissioner, Guntur Municipal Corporation
- Mr Nagesh Babu, Executive Engineer, Guntur Municipal Corporation
- Mr V Bhasker Reddy, Deputy Superintendent of Police, Guntur Police

Guntur city in Andhra Pradesh is a regional urban centre of prime importance due to the surrounding agricultural villages. There is frequent migration of people from surrounding areas which has affected the growth of the city and thus impacted the travel demand in the city.

EXISTING GOOD PRACTICES AND INITIATIVES

Cycle tracks along outer ring road

UNDERTAKEN/IMPLEMENTED BY
Guntur Municipal Corporation

TYPE OF INITIATIVE
Plan in progress

Guntur Corporation is planning to turn the limited space available along the new outer ring as a cycle track where people with interest can cycle in the morning hours. The project is yet to be finalized.

"Cycling and walking are the primary modes of transport in smaller cities like Guntur, which need to be prioritized in all stages of planning, and provided better facilities; however the available road space is very low to cater all needs."

Mr K Sudhakar
Ex. Municipal Commissioner
Guntur Municipal Corporation

CITY READINESS ASSESSMENT PERFORMANCE

ULB sponsor NGOs and seek sponsorships from corporates to conduct group rides and conduct campaigns to promote cycling
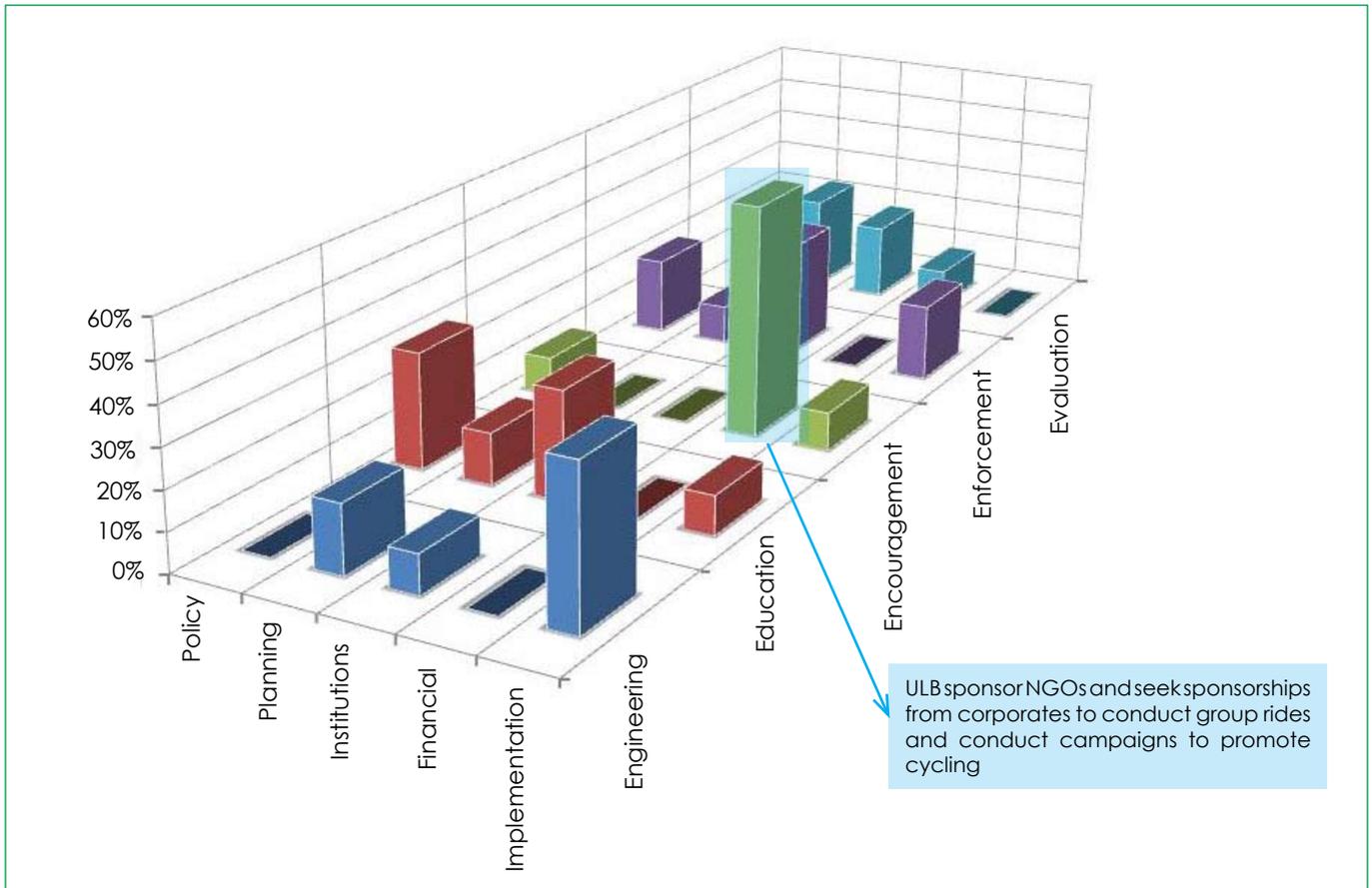
City Contact

Guntur Municipal Corporation
Tel: +91-863-2220242
Web: www.gunturcorporation.org Email: commissioner@gunturcorporation.org

GURGAON

Haryana

POPULATION
876,824 (Census, 2011)

AREA (SQUARE KILOMETERS)
207 (Source: Expression of Interest submitted by city)

NAME OF CITY GOVERNMENT
Municipal Corporation Gurgaon

DATES OF CITY ASSESSMENT
12-15 October 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr Sudhir Rajpal, Municipal Commissioner, Municipal Corporation Gurgaon
- Mr Anil Kumar Rao, Joint Commissioner (Traffic), Gurgaon Police
- Mr BS Singroha, Chief Engineer, Gurgaon Municipal Corporation
- Mr RK Kakkar, Superintending Engineer, Haryana Urban Development Authority

Gurgaon is a major business center located close to Delhi and falls under National Capital Region. The city is observing increase in business with rapid increase in population leading to haphazard vehicular growth. The current transport scenario in city is observing many challenges, especially large numbers of personal automobiles. Projects such as the Rapid Metro Rail are being implemented to address these challenges.

EXISTING GOOD PRACTICES AND INITIATIVES

Motivation for Cycling

UNDERTAKEN/IMPLEMENTED BY
Community Driven

TYPE OF INITIATIVE
Community Participation

While realising the importance of Health and Environment the citizens of Gurgaon has initiated to commute by bicycle atleast one day in a week which is further supported by various community groups to look forward to provide better facilties by Local Government

"The safety of pedestrians and cyclists have been always prime priority for traffic police and we have specific programs for school children on road safety right from the primary level."

Sri Anil Kumar Rao, IPS
Joint Commssioner (Traffic)
Gurgaon Police

CITY READINESS ASSESSMENT PERFORMANCE

Traffic police conduct planned drives to reduce speed and enforce pedestrian and cyclists priority at junctions and pathway
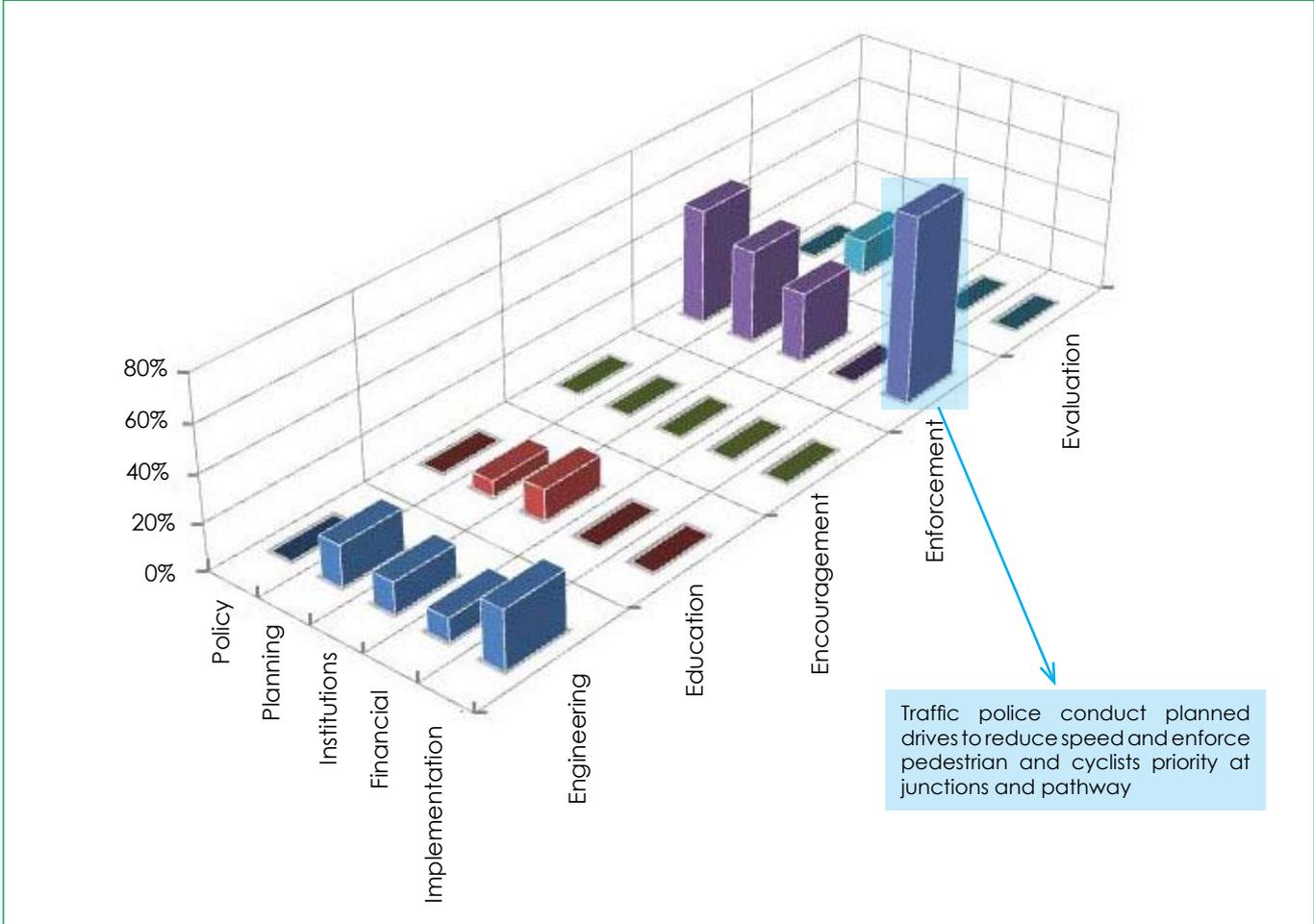
City Contact

Gurgaon Muncipal Corporation
Tel: +91-124-2220011
Web: www.mcg.gov.in Email: contact@mcg.gov.in

HARIDWAR

Uttarakhand

POPULATION
225235 (Census, 2011)

AREA (SQUARE KILOMETERS)
12.17 (Haridwar City Development Plan, 2007)

NAME OF CITY GOVERNMENT
Nagar Nigam Haridwar

DATES OF CITY ASSESSMENT
04-05 February 2013

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Sri Harsh Vardhan Mishra- Apar Nagar Ayukth, Nagar Nigam Haridwar
- Mr A.K.Pandey, Municipal Engineer, Nagar Nigam, Haridwar
- Mr Anil Tyagi, Executive Engineer, Haridwar Urban Development Authority
- Mr SS Thomar, Executive Engineer, Public Works Department, Haridwar
- Mr Dobriel, Traffic Inspector, Haridwar Police

Haridwar is a major pilgrim city in North India, attracting people from different parts of the country, hosting about 8 million tourists every year. The highest percentages of pilgrims are observed in Hari ki Pauri area which is partly pedestrianized.

EXISTING GOOD PRACTICES AND INITIATIVES

Designated NMT road

UNDERTAKEN/IMPLEMENTED BY
Haridwar Municipal Council

TYPE OF INITIATIVE
Implementation

The service road along the river Ganga is provided to cater to pilgrims during festival periods. During the off-season, this road is used predominantly as an NMT corridor. The whole corridor is protected with entry and exit gates.

"Most improvement plans so far have been concentrated on the Hari ki Pauri area which has a major influx of pilgrims but there are other areas in the city which have local markets and low income population and need to be provided with better facilities."

Sri Harsh Vardhan Mishra, Apar Nagar Ayukth
Haridwar Municipal Council

CITY READINESS ASSESSMENT PERFORMANCE

NMT circulation maps are in a preliminary stage of development by ULB/NGOs

Strict penalties have been implemented regularly for encroachment of foot path

Engineering
Education
Encouragement
Enforcement
Evaluation
Implementation
Financial
Institutions
Planning
Policy

80%
60%
40%
20%
0%
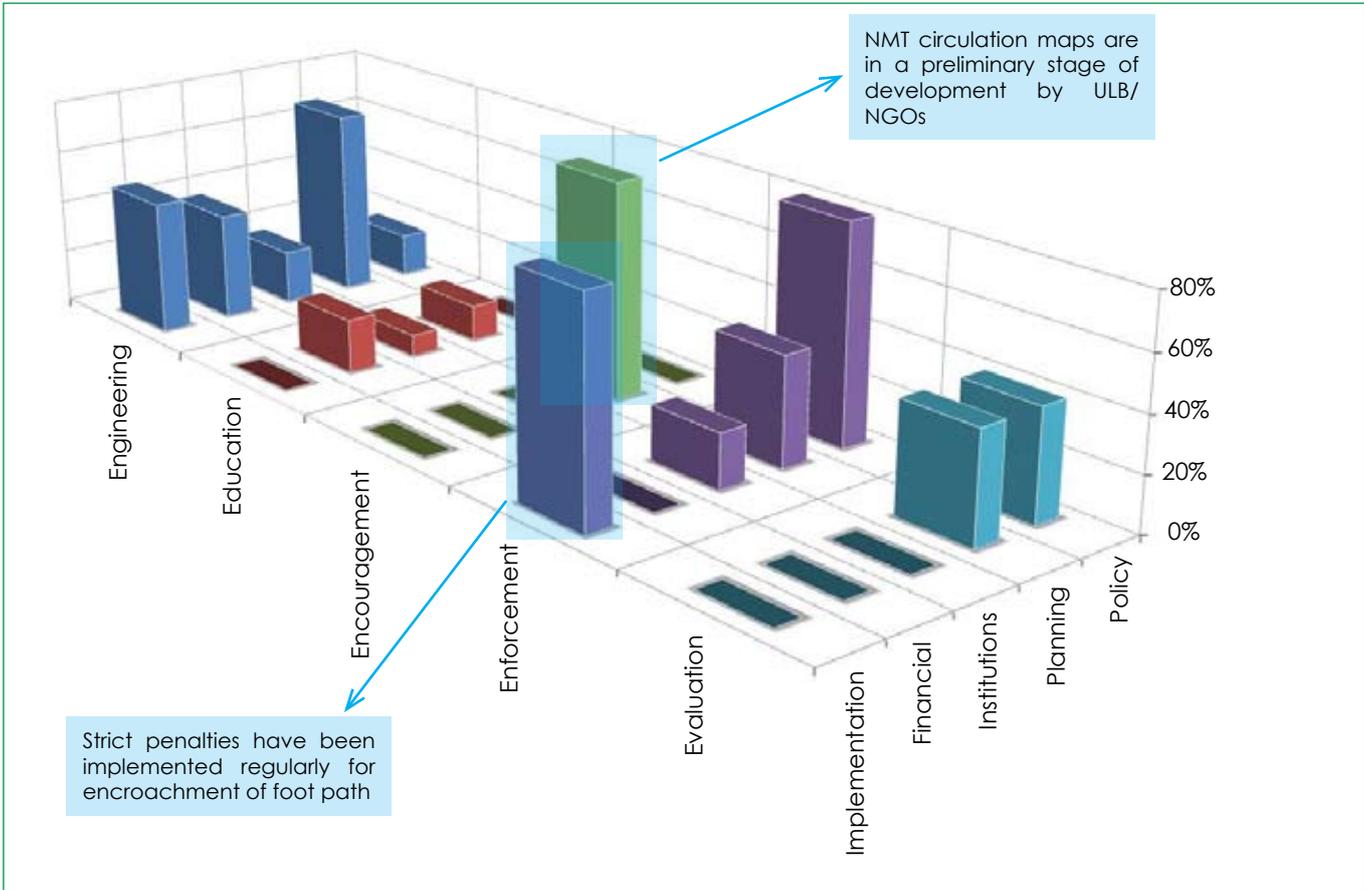
City Contact

Haridwar Nagar Nigam
Tel: +91-1334 227006
Web: www.nagarnigamharidwar.org Email: nagarnigamharidwar@gmail.com,

HOWRAH

West Bengal

POPULATION
10,72,000 (2001) (Howrah City Development Plan, 2007)

AREA (SQUARE KILOMETERS)
51.74 (Howrah City Development Plan, 2007)

NAME OF CITY GOVERNMENT
Howrah Municipal Corporation

DATES OF CITY ASSESSMENT
18-19 February 2013

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Mr D P Dutta, City Engineer, Howrah Municipal Corporation
- Ms. Mamta Jaiswal, Mayor, Howrah Municipal Corporation
- Mr A K Chaturvedi, IPS, Deputy Commissioner of Police (Traffic), Howrah Police

Howrah is an industrial city located within the Kolkata Metropolitan Area in West Bengal. The city's specific role in the Kolkata Metropolitan District (KMA) is as an industrial and transportation center. The Howrah railway station, one of the nation's biggest railway junctions, is located within the HMC area. . As an industrial center for the Kolkata region, the major mode of transport within Howrah has always been dominated by cycles and rickshaws.

EXISTING GOOD PRACTICES AND INITIATIVES

Pedestrians just prefer walkways not expressways

TYPE OF INITIATIVE
Implementation

The old bridge in Howrah has wide walkways that help thousands of commuters to cross and reach destinations in Kolkata, which is a classic example for effective provision and usage of walkways.

"Howrah has been a major industrial center for the Kolkata region and also caters to a huge percentage of floating population from surrounding areas. The city has to be retrofitted to be usable by pedestrians and cyclists."

Mr D P Dutta, City Engineer
Howrah Municipal Corporation

Traffic police is concerned about designs for speed reduction of MV but not specifically at grade crossing of NMT. Penalties are being implemented regularly on encroachments of footpaths

Approved state transport policy and city transport vision in the CDP has been included
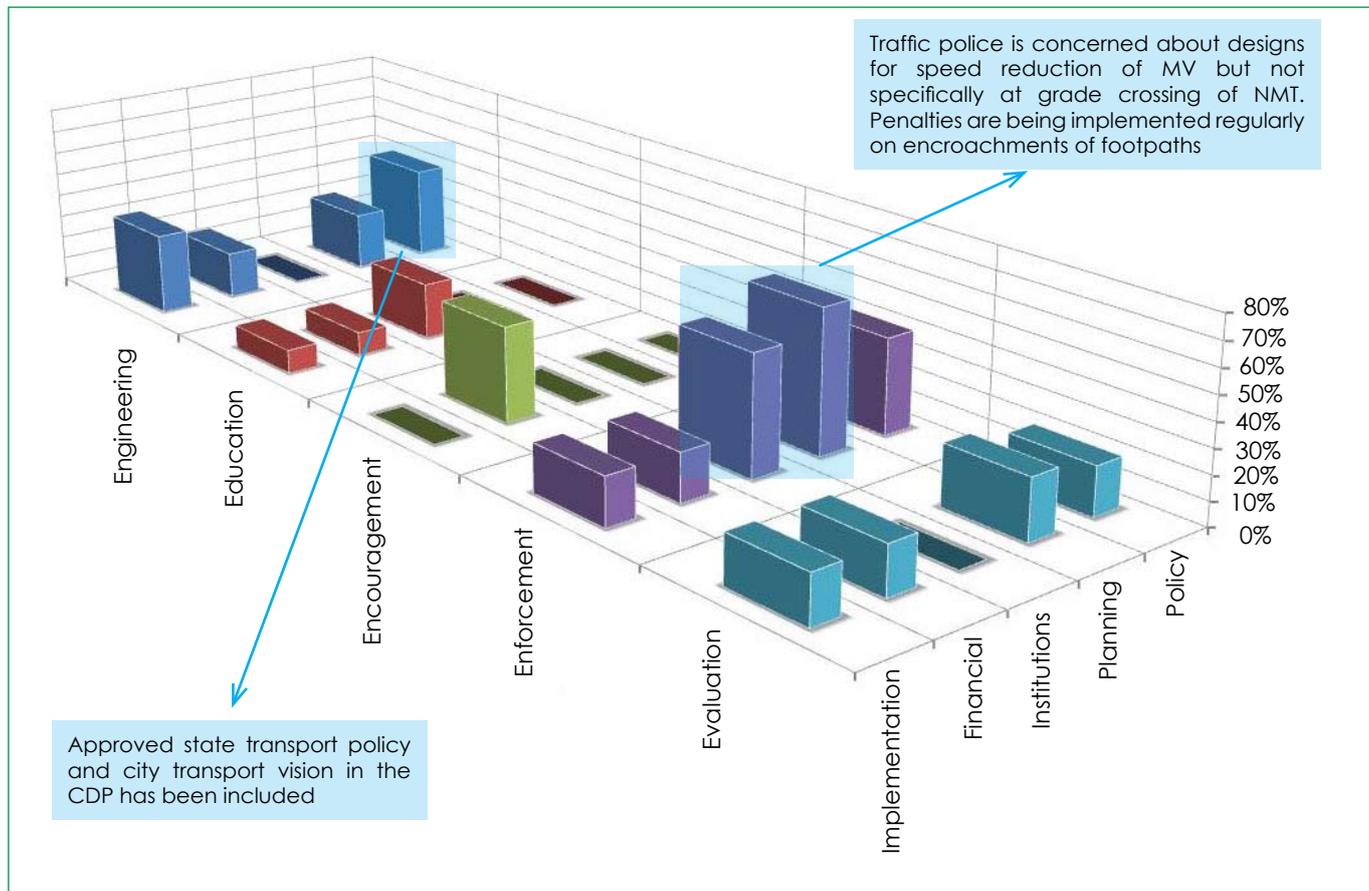
City Contact

Howrah Municipal Corporation
Tel: +91-33-26383211

HYDERABAD

Andhra Pradesh

POPULATION
77,49,334 (2001) (Expression of interest submitted by city)

AREA (SQUARE KILOMETERS)
625 (Expression of interest submitted by city)

NAME OF CITY GOVERNMENT
Greater Hyderabad Municipal Corporation (GHMC)

DATES OF CITY ASSESSMENT
November 2012

| IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr M T Krishna Babu, IAS, Municipal Commissioner, GHMC
- Mr K Dhananjaya Reddy, Additional Commissioner (Planning), GHMC
- Mr Narender Rao, Additional Chief City Planner, GHMC
- Mr C V Anand, IPS, Additional Commissioner of Police (Traffic), Hyderabad Traffic Police

Hyderabad, the capital city of Andhra Pradesh, is located on the cross roads of the rivers, Krishna and Godavari. Hyderabad is not only the administrative capital but also the economic and financial capital of Andhra Pradesh.Hyderabad is also one of the most emerging metropolitan cities in India. Inorder to resolve the mobility issues and provide better public transport the city is coming up with metro rail which could manage the travel demand for the current and future generations.

% MODE SHARE IN HYDERABAD
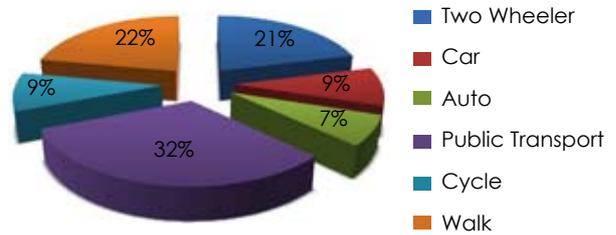
- Two Wheeler — 21%
- Car — 9%
- Auto — 7%
- Public Transport — 32%
- Cycle — 9%
- Walk — 22%

Source: Traffic and Transportation Policies and Strategies for Urban Areas, MoUD Report, 2008

EXISTING GOOD PRACTICES AND INITIATIVES

Special Cycle Zone

UNDERTAKEN/IMPLEMENTED BY
Hyderabad Cycle Club

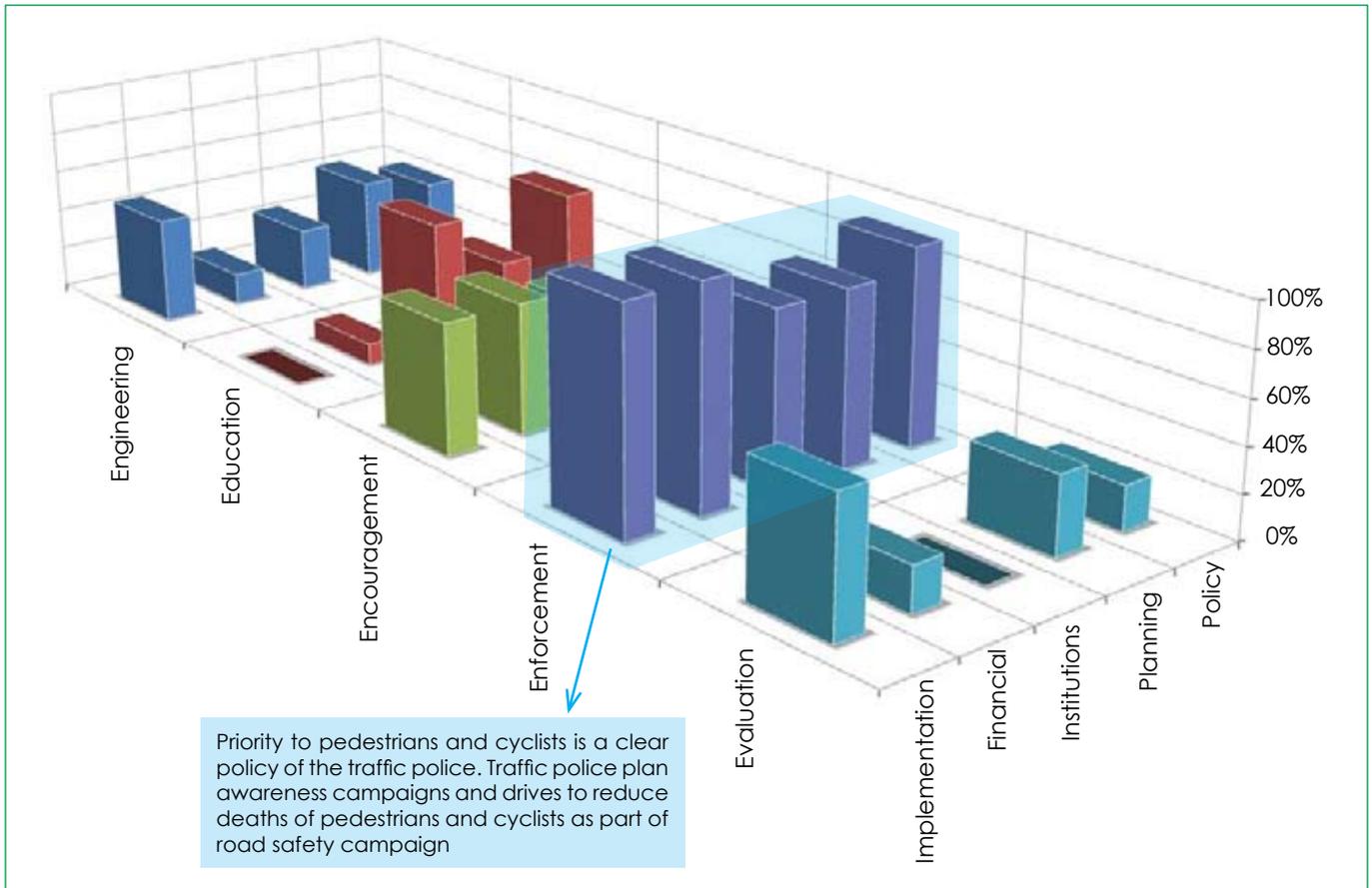**CATEGORY OF INITIATIVE**
Community driven initiative

DESCRIPTION
Necklace road in Hyderabad is a major draw for locals and also visitors, which turns completely car free in the early hours of every day. During this time, the road is open only to walkers and bicyclists where cycles are available on a rental basis maintained by the Hyderabad Cycling Club.

"Pedestrians and cyclists have always been a priority for traffic police in the city. We often communicate and participate in campaigns that encourage walking and cycling, but there is still a gap in facilities for safe walking in the city and also otherwise we can have a separate pedestrian act which possibly lead to provision of better facilities."

Mr C V Anand, IPS, Additional Commissioner of Police, Hyderabad Traffic Police

Priority to pedestrians and cyclists is a clear policy of the traffic police. Traffic police plan awareness campaigns and drives to reduce deaths of pedestrians and cyclists as part of road safety campaign

City Contact

Greater Hyderabad Municipal Corporation
Tel: +91-40-23224564
Web: www.ghmc.gov.in Email: commissioner@ghmc.gov.in

KALYAN & DOMBIVLI

Maharashtra

POPULATION
1246381 (Census 2011)

AREA (SQUARE KILOMETERS)
67.65 (Kalyan-Dombivli City Development Plan)

NAME OF CITY GOVERNMENT
Kalyan Dombvli Municipal Corporation

DATES OF CITY ASSESSMENT
16-18 February 2013

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr Sudhir Raut, General Manager (Transport), Kalyan-Dombivli Municipal Transport (KDMT) Undertaking
- Meeting with Mr. Raghuvir Shirke, Assistant Town Planning Officer, Kalyam-Dombivli Municipal Corporation
- Mr. Powar, Assistant Commissioner of Police (Traffic)

Kalyan Dombivli a major industrial center of the area, and also a satellite town for Mumbai with major influx of population into the city. In order to promote safe walking for pedestrians, the city has constructed skywalks which is located close to the major bus stand.

EXISTING GOOD PRACTICES AND INITIATIVES

Horse carriages for public transport

UNDERTAKEN/IMPLEMENTED BY
Community driven

TYPE OF INITIATIVE
Community driven initiative
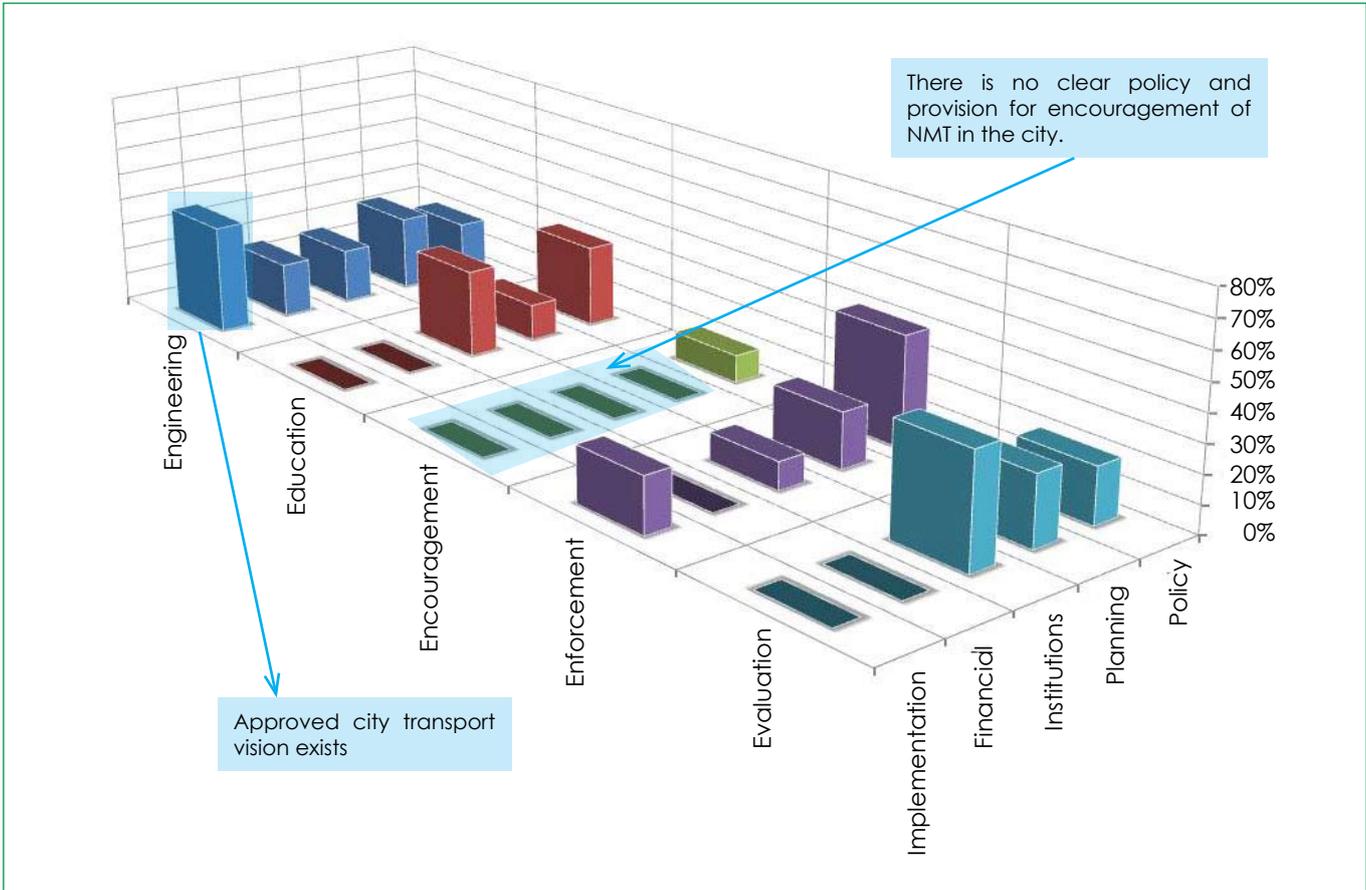
DESCRIPTION
Horse carts have been traditionally plying in the Kalyan-Dombivli area to transport passengers along major routes in the city. These carriages are now losing popularity due to the improving city bus services.

> "Strict discipline is needed in the city to improve mobility: discipline and cajoling go hand in hand."
>
> *Mr Sudhir Raut*
> *General Manager(Transport), KDMC*

CITY READINESS ASSESSMENT PERFORMANCE

There is no clear policy and provision for encouragement of NMT in the city.

Approved city transport vision exists

City Contact

Kalyan Dombivli Municipal Corporation
Tel: +91-251-2204065
www.kdmc.gov.in

COCHIN

Kerala

POPULATION
6,18,000 (2001) (City Development Plan, 2002)

AREA
94.88 (City Development Plan, 2002)

NAME OF CITY GOVERNMENT
Corporation of Cochin
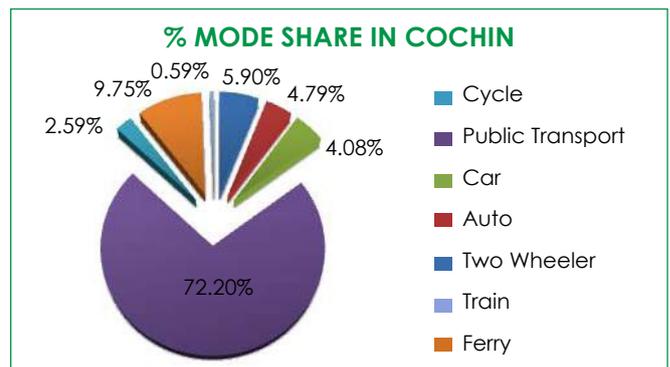
DATES OF CITY ASSESSMENT
20-21 December 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr Ajit Patil, IAS, Secretary, Corporation of Cochin
- Mr Nahas, City Engineer, Corporation of Cochin
- Mr M R Ajit Kumar, IPS, (Deputy Inspector General and District Police chief), Kochi City Police
- Mr K J Sohan, Chairman, Town Planning Committee, Corporation of Cochin

The city of Kochi in Kerala is a scenic coastal city. Having access to three types of transportation systems – road, rail and water – the city is a well-established regional commercial centre. The overall road network in Kochi comprises narrow streets, especially in the historical Fort Kochi area. The city is planning for a metro system to manage the future travel demand.

% MODE SHARE IN COCHIN

- 0.59%
- 5.90%
- 9.75%
- 4.79%
- 2.59%
- 4.08%
- 72.20%

Legend:
- Cycle
- Public Transport
- Car
- Auto
- Two Wheeler
- Train
- Ferry

Source: Traffic and Transportation policies and strategies for Urban areas, MoUD report, 2008

EXISTING GOOD PRACTICES AND INITIATIVES

**Inland water ways**

TYPE OF INITIATIVE
Community driven initiative

Inland waterways in Kochi were predominately used until 2000s when the concept of bridges came up as most of the people started using road transportation. Though there is no NMT in inland water ways but if studied and developed properly, the network potentially can be used as cheaper, faster and cleaner public transport in the city.

"Kochi has high potential for promoting NMT. For example, leisure corridors can be developed along the back waters, and the existing narrow streets can be completely converted to NMT friendly streets, but the upcoming policies and plans are not satisfying the needs of NMT users."

Mr K J Sohan
Chairman, Town Planning Committee
Corporation of Cochin

CITY READINESS ASSESSMENT PERFORMANCE

Approved comprehensive mobility plan has a separate section on NMT.
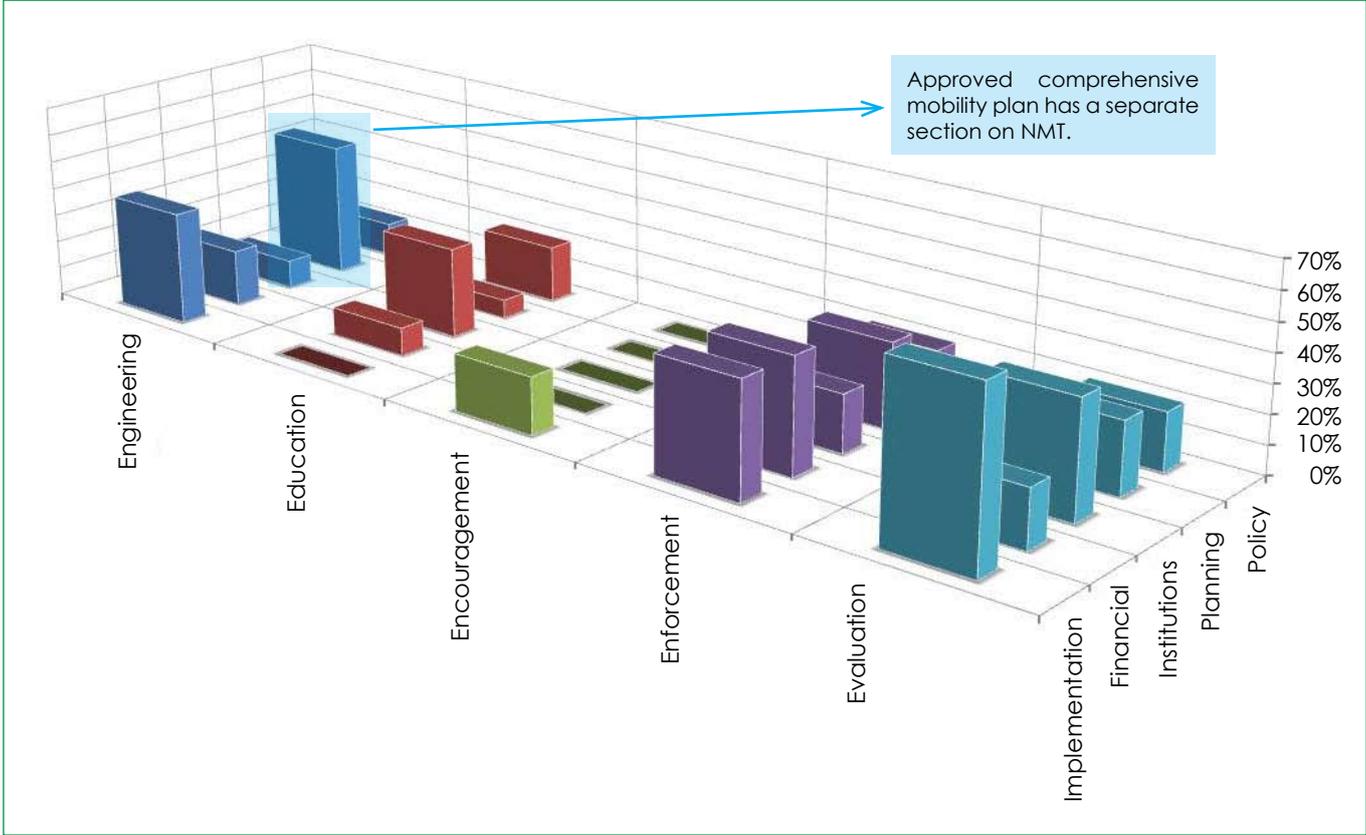
City Contact

Cochin city corporation
Tel: +91-484-2369007
Web: www.corporationofcohin.net Email: kochicorpsecretary@gmail.com

LUCKNOW

Uttar Pradesh

POPULATION (YEAR)
2815601 (Census, 2011)

AREA (SQUARE KILOMETERS)
162.7 (Lucknow City Development Plan, 2006)

NAME OF CITY GOVERNMENT
Lucknow Municipal Corporation

DATES OF CITY ASSESSMENT
17-18 January 2013

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr Shrivastav, Additional Commissioner, Lucknow Municipal Corporation
- Mr. S K Jain, Executive Engineer, Lucknow Municipal Corporation
- Mr. Ravi Jain, CTP, Lucknow Development Authority
- Assistant Commissioner of Police (Traffic)

Lucknow is the administrative capital of the largest state in India, with a rich cultural heritage and history. The key characteristics that determine its economic base include – the position of the city as an administrative centre, a centre for education and tourism. The city is coming up with a BRT system to resolve its mobility issues, while a few interventions made to promote NMT in the Hazrat gunj area which has predominant pedestrian influx.

EXISTING GOOD PRACTICES AND INITIATIVES

Pedestrian facilities and street design in Hazratgunj area

UNDERTAKEN/IMPLEMENTED BY
Lucknow Municipal Corporation

TYPE OF INITIATIVE
Partial Implementation

The Hazrat Ganj area in Lucknow is a historically important centre of Lucknow. The area was recently restored to its historical glory, including wide footpaths and street furniture.
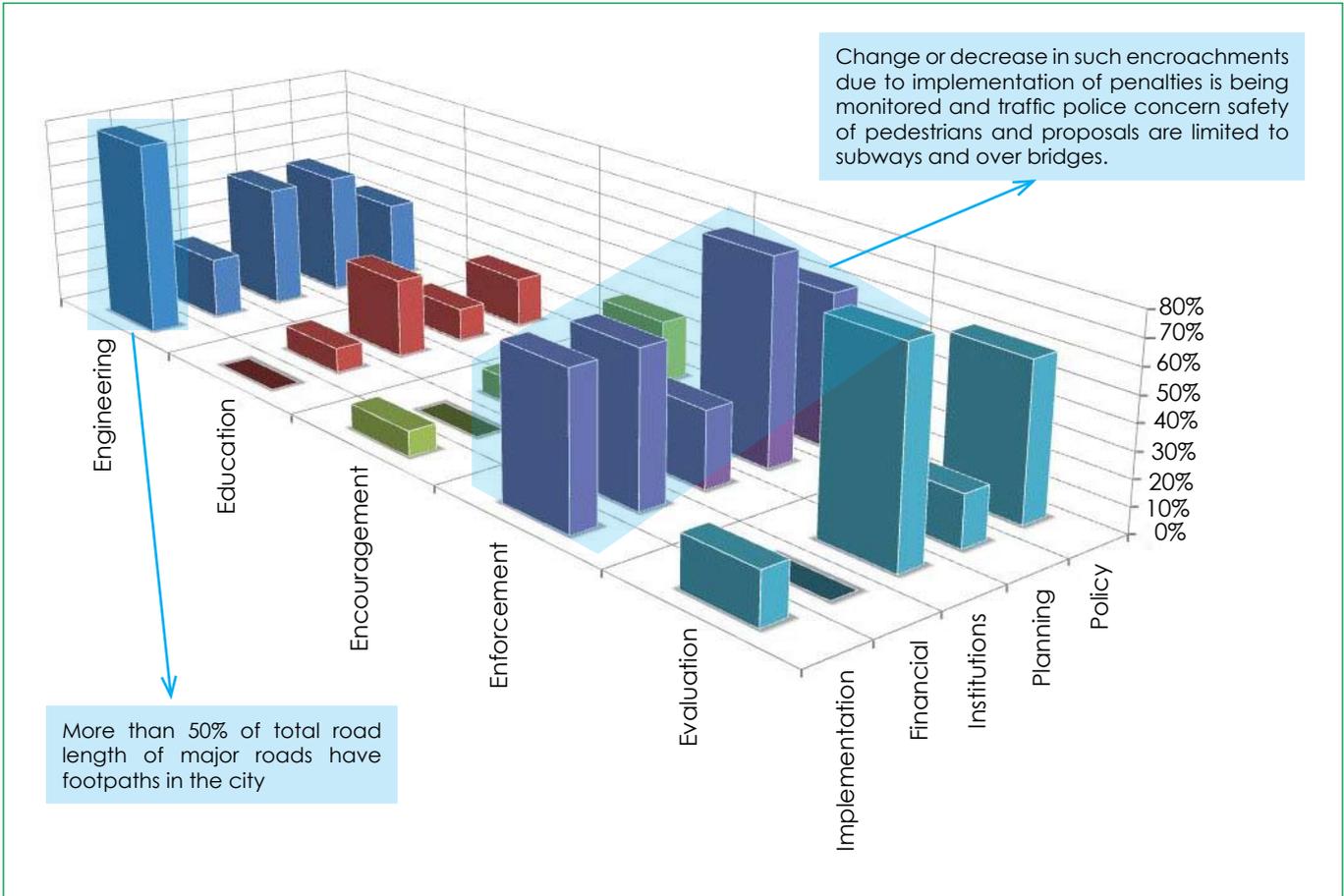
"It is a good strategy to promote NMT for short distances, however space is the bigger constraint to provide additional facilities for cycle lanes in the busiest corridors but with big public transport projects like MRT underway it is a good idea to promote NMT in the city."

Mr Shrivastava, Additional Commissioner
Lucknow Municipal Corporation

CITY READINESS ASSESSMENT PERFORMANCE

Change or decrease in such encroachments due to implementation of penalties is being monitored and traffic police concern safety of pedestrians and proposals are limited to subways and over bridges.

More than 50% of total road length of major roads have footpaths in the city

City Contact

Lucknow Nagar Nigam
Tel: +91-522-2622440
Web: www.lmc.up.nic.in Email: nnlko@up.nic.in

MADURAI

Tamil Nadu

POPULATION
1016885 (Census, 2011)

AREA (SQUARE KILOMETERS)
51.69 (Madurai City Development Plan, 2006)

NAME OF CITY GOVERNMENT
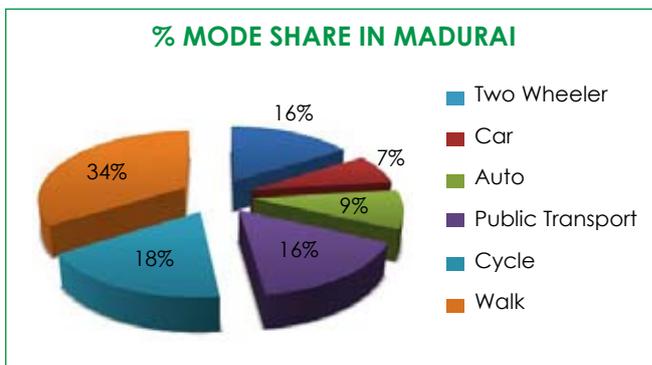Madurai Corporation

DATES OF CITY ASSESSMENT
19-20 November 2012

Madurai is an ancient temple town in the state of Tamil Nadu, home to the famous Meenakshi Amman temple. Tourism related activities flourish in the city, since Madurai serves as a transit place for religious tours to other southern towns.

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Mr R Nanthagopal, Municipal Commissioner, Madurai Corporation
- Mr Mathuram, City Engineer, Madurai Corporation
- Mr Anshul Mishra, District Collector, Madurai District
- Mr Madhan Kumar, DHAN Foundation
- Deputy Commissioner of Police (Law and Order)

% MODE SHARE IN MADURAI

- Two Wheeler — 16%
- Car — 7%
- Auto — 9%
- Public Transport — 16%
- Cycle — 18%
- Walk — 34%

Source: Traffic and Transportation policies and Strategies for Urban Areas. MoUD Report, 2008

EXISTING GOOD PRACTICES AND INITIATIVES

Non-motorized zone around the temple area

UNDERTAKEN/IMPLEMENTED BY
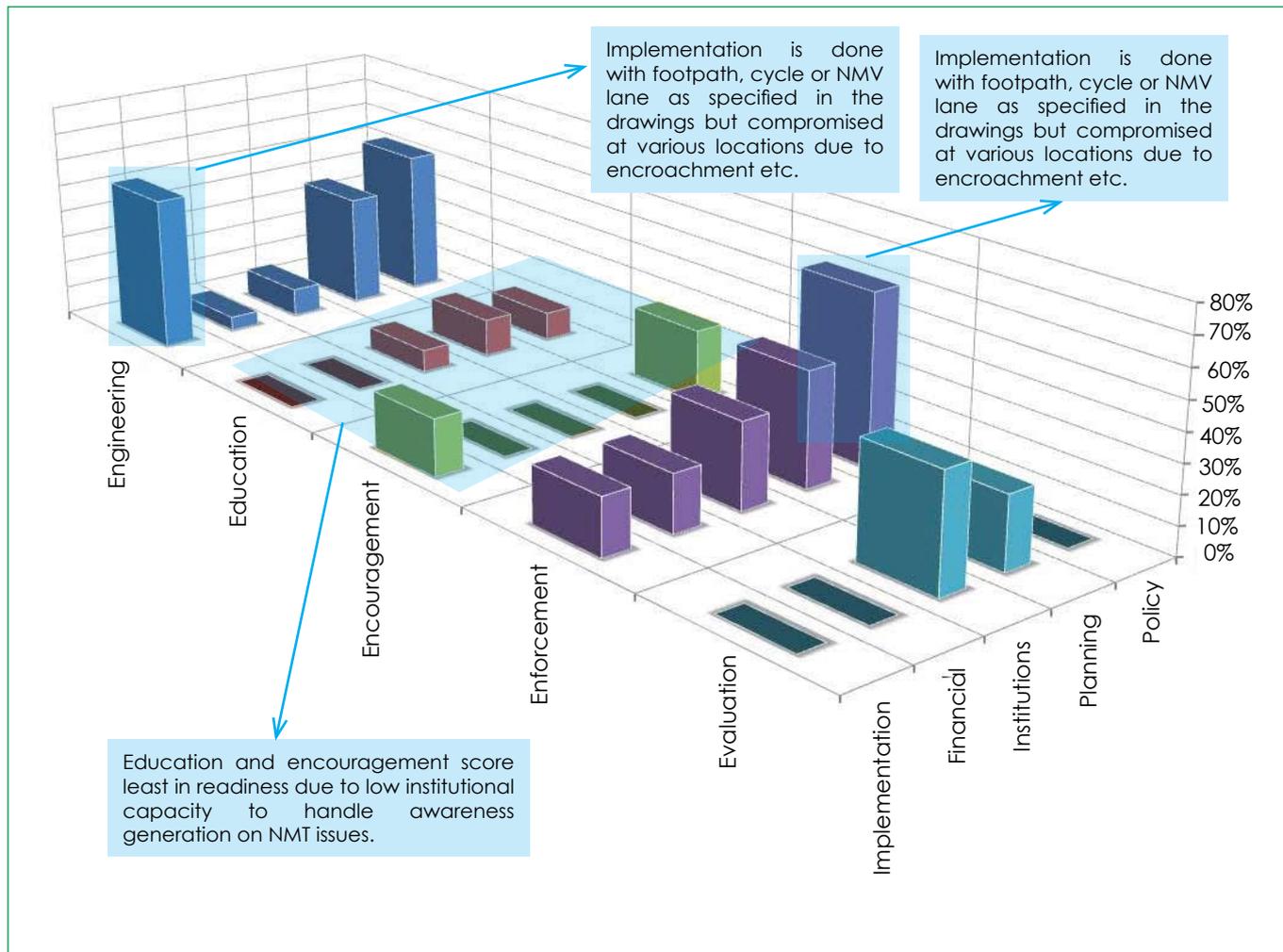Madurai Corporation and traffic police

TYPE OF INITIATIVE
Policy and implementation

A 2km radius around the world-famous Madurai Meenakshi temple is cordoned off for motorized traffic to enable the large numbers of visitors to approach the temple safely. As it is a world heritage site, the area also has restrictions to the height of building allowed around.

CITY READINESS ASSESSMENT PERFORMANCE

Implementation is done with footpath, cycle or NMV lane as specified in the drawings but compromised at various locations due to encroachment etc.

Implementation is done with footpath, cycle or NMV lane as specified in the drawings but compromised at various locations due to encroachment etc.

Education and encouragement score least in readiness due to low institutional capacity to handle awareness generation on NMT issues.

City Contact

Madhurai Corporation
Tel: +91-452-2538080
Web: www.madhuraicorporation.in Email: mducorp@yahoo.com

MYSORE

Karnataka

POPULATION
887446 (Census 2011)

AREA (SQUARE KILOMETERS)
128.42(Comprehensive Traffic and Transportation
Study, 2012)

NAME OF CITY GOVERNMENT
Mysore City Corporation

DATES OF CITY ASSESSMENT
17-18 December 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

**KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR
ASSESSMENT**

- Mrs Asha Bharathi, Assistant Director, Town Planning,
  Mysore City Corporation
- Mr Padmanabham, Assistant Executive Engineer,
  Mysore City Corporation
- Town Planning Member (Mysore Urban Development
  Authority)
- K.L.Sudheer, Police Commissioner (Mysore Police)
- Dr. Manjula, IAS (Director of Urban Land Transport,
  Bangalore)
- Mr C.G.Betsurmath, IAS, Commissioner, MUDA

Mysore is an educational, commercial and administrative centre and also an important tourist and heritage centre. The street pattern of the city is more or less a grid-iron pattern with arterial roads from the centre of the city outwards in all directions. The Mysore Palace is the focal point from where all the arterial roads start and run radially leading to nearby towns and cities. The historical central area of the city has major footfalls while most of the road network has wide footpaths to accommodate pedestrians for safer commuting.

EXISTING GOOD PRACTICES AND INITIATIVES

Initiative 1: Pilot implementation of cycle tracks

UNDERTAKEN/IMPLEMENTED BY
Mysore City Corporation

TYPE OF INITIATIVE
Partial implementation

Cycle tracks in Mysore have been constructed on a pilot basis to know the cost of implementation for all elements of proper street design. The city has plans to develop NMT corridors around the palace area in the central area of Mysore. Mysore has already begun making interventions by providing wider walkways and pedestrian priority signals in the central area of the city.

Initiative 2 : Priority to pedestrians

UNDERTAKEN/IMPLEMENTED BY
Mysore City Corporation

TYPE OF INITIATIVE
Implementation

Mysore also has the advantage of wide and shaded green pavements and pathways in the central area. This needs to be adequately maintained and further enhanced upon. Pedestrian priority signals are also commonly seen in the city.

Initiative 3: Cycling to school
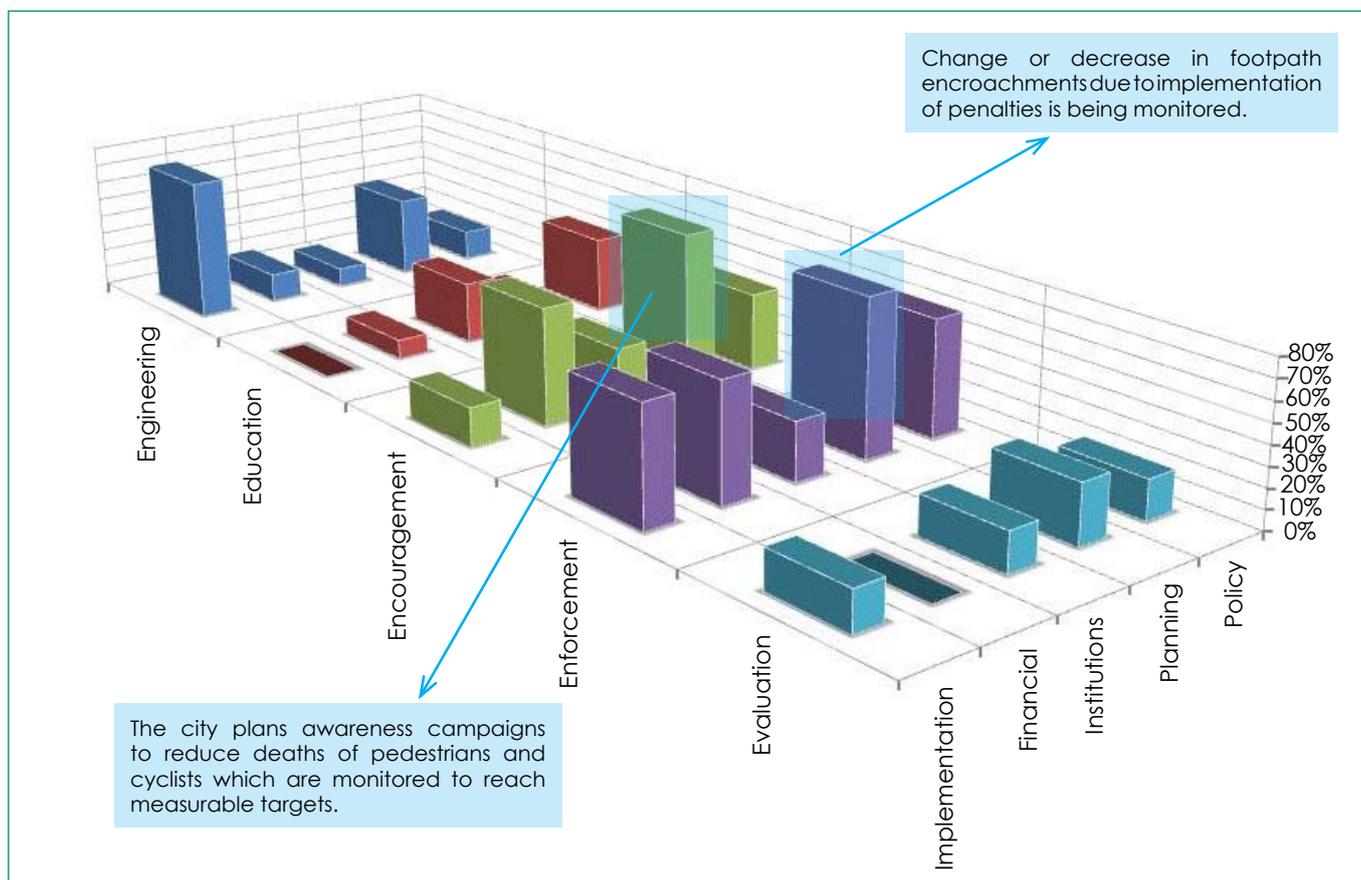
UNDERTAKEN/IMPLEMENTED BY
Community driven

Mysore is also one of the few remaining larger cities in the country where young students cycle their way to school. Large and proper parking spaces for the students have been provided in most schools. Making designated cycle tracks along the roads thus becomes a priority in a city like Mysore, so as to ensure safety of the school children riding these bicycles and also encourage this ecofriendly NMT way of travelling.

"Cycling should definitely promote in every city, facilities for safer riding should be provided. In fact I use bicycle to reach office everyday except having any busy schedules."

*C.G. Betsurmath, IAS
Commissioner, MUDA*

CITY READINESS ASSESSMENT PERFORMANCE

Change or decrease in footpath encroachments due to implementation of penalties is being monitored.

The city plans awareness campaigns to reduce deaths of pedestrians and cyclists which are monitored to reach measurable targets.

City Contact

Mysore City Corporation
Tel: +91-821-2418803
Web: www.mysorecity.gov.in Email: comm_mcc@yahoo.co.in

NAINITAL

Uttarakhand

POPULATION
44,000 (City Development Plan, Nainital)

AREA (SQUARE KILOMETERS)
11.73(Expression of interest submitted by city)

NAME OF CITY GOVERNMENT
Nainital Municipal Council/ Nagar Palika Nainital

DATES OF CITY ASSESSMENT
1-2 February 2013

IS THE CITY A JNNURM CITY?	No
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr Dinesh Sharma, Nagar Abhiyanta (Engineer), Nagar Palika, Nainital
- Mr Nazar Ali, Executive Officer, Nagar Palika, Nainital
- Mr Ramesh Joshi, Junior Engineer and other engineers at Lake Development Authority

The city of Nainital is the headquarters of the Nainital Lake District and Kumaon Mandal. Of the hill towns in the state of Uttarakhand, Nainital occupies a unique place. Known for its salubrious climate and scenic beauty, the town is a popular destination in the northern tourist circuit. Most of the individual trips in the city are completed either by walk or two wheeler. Walking is predominant as the city constitutes narrow streets and steep gradients.

EXISTING GOOD PRACTICES AND INITIATIVES

Initiative 1: Cycle Rickshaw Taxi

UNDERTAKEN/IMPLEMENTED BY
Community driven initiative

TYPE OF INITIATIVE
Implementation

DESCRIPTION
Cycle rickshaws in Nainital ply on the mall road, an overall stretch of 1.5 km, which consists of upper road and lower road. Organized by a union, these cycle rickshaws charge a fixed price per trip, serving local residents and tourists. There are traffic restrictions all day long with pedestrian only zones at particular times every evening.

Initiative 2: Walkways along the lake

UNDERTAKEN/IMPLEMENTED BY
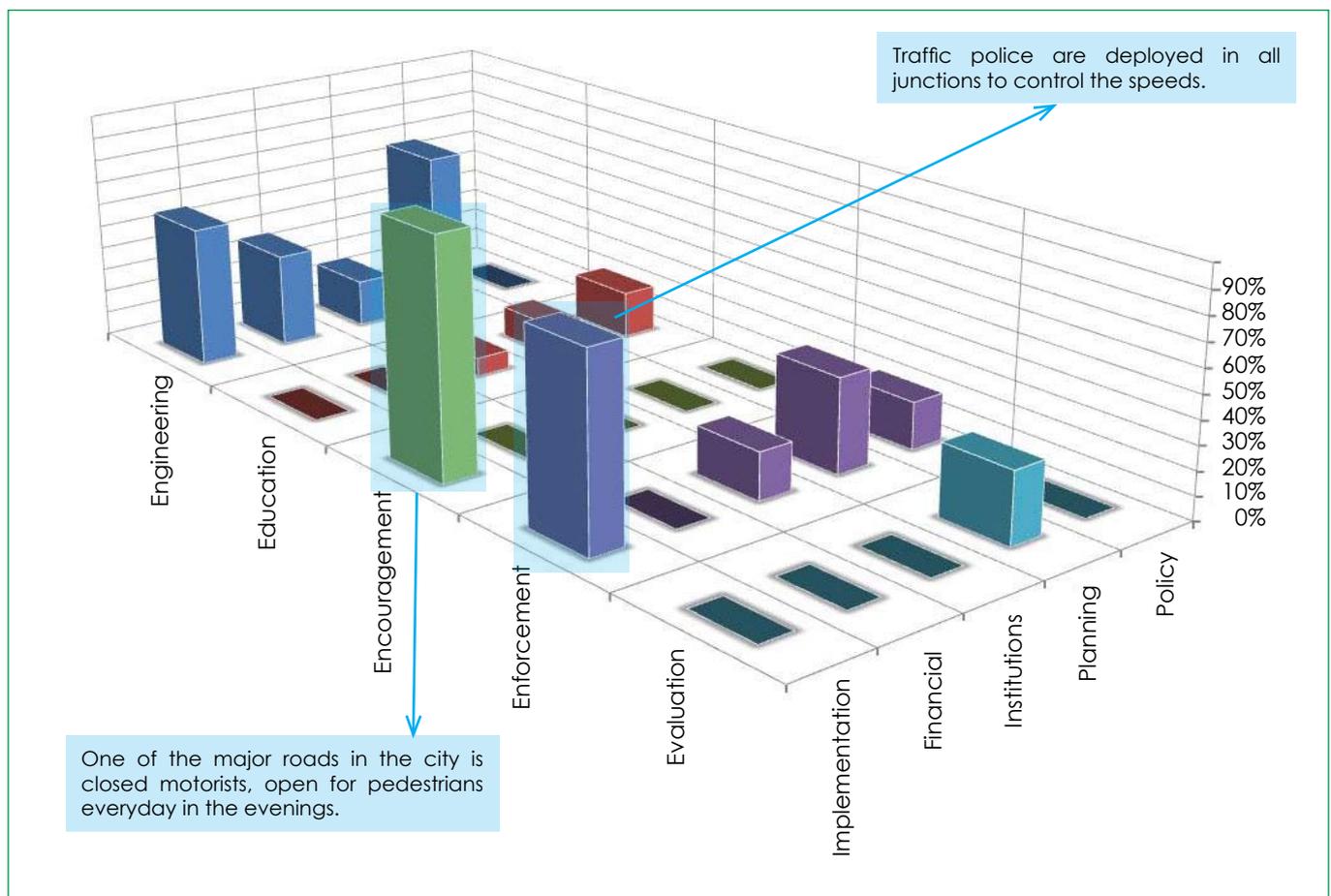Lake Development Auhority, Nainital

TYPE OF INITIATIVE
Implementation

The other pedestrian walk only area in the town (also called Thandi sadak) is along the lake on the opposite side of the Mall (connecting Tallital and Mallital). A cobbled path has been laid for walking. No cyclists/ vehicles are allowed in this stretch.

"Maximum efforts have been already taken to prioritize pedestrians and cycle rickshaws in the city like car free hours everyday on the mall road and walkways around the lake. Space is a big constraint in order to provide any additional facilities in the city."

Mr Nazar Ali, Chief Executive Officer
Nainital Municipal Council

CITY READINESS ASSESSMENT PERFORMANCE

Traffic police are deployed in all junctions to control the speeds.

One of the major roads in the city is closed motorists, open for pedestrians everyday in the evenings.

City Contact

Nainital Nagar Palika
Tel: +91-5942-231741

PANAJI

Goa

POPULATION (YEAR)
114405 (Census 2011)

AREA (SQUARE KILOMETERS)
8.2 (Panaji City Development Plan, 2007)

NAME OF CITY GOVERNMENT
Corporation of the City of Panaji

DATES OF CITY ASSESSMENT
17-20 December, 2012

| IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr S T Putta Raju, Chief Town Planner, Corporation of the City of Panaji
- Mr Arun Josh, Director (Transport)
- Mr Shaik Ali Ahmed, NGPDA

Panaji is the state capital of Goa and is situated along the river Mandovi, on the island of Tiswadi. Panaji holds the distinction of being one of the most popular tourist destination centers in India, and it attracts around 2.0 Lacs national tourists and 0.35 lacs international tourists annually.

% MODE SHARE IN PANAJI
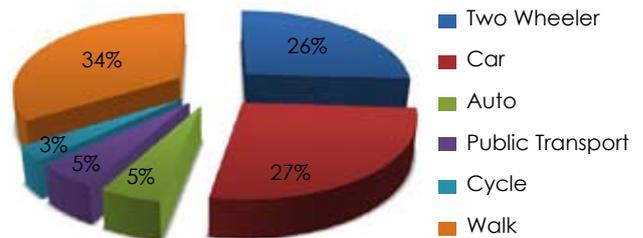
- Two Wheeler — 26%
- Car — 27%
- Auto — 5%
- Public Transport — 5%
- Cycle — 3%
- Walk — 34%

Source: Traffic and Transportation strategies for Urban Areas report, 2008

EXISTING GOOD PRACTICES AND INITIATIVES

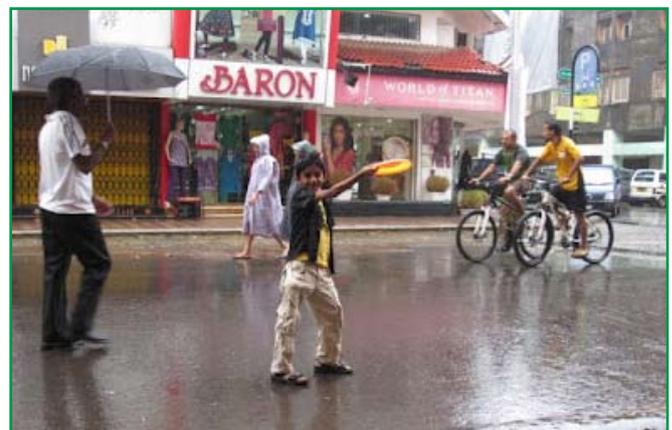**Non Motorized Zone in Panaji**

UNDERTAKEN/IMPLEMENTED BY
Community driven initiative
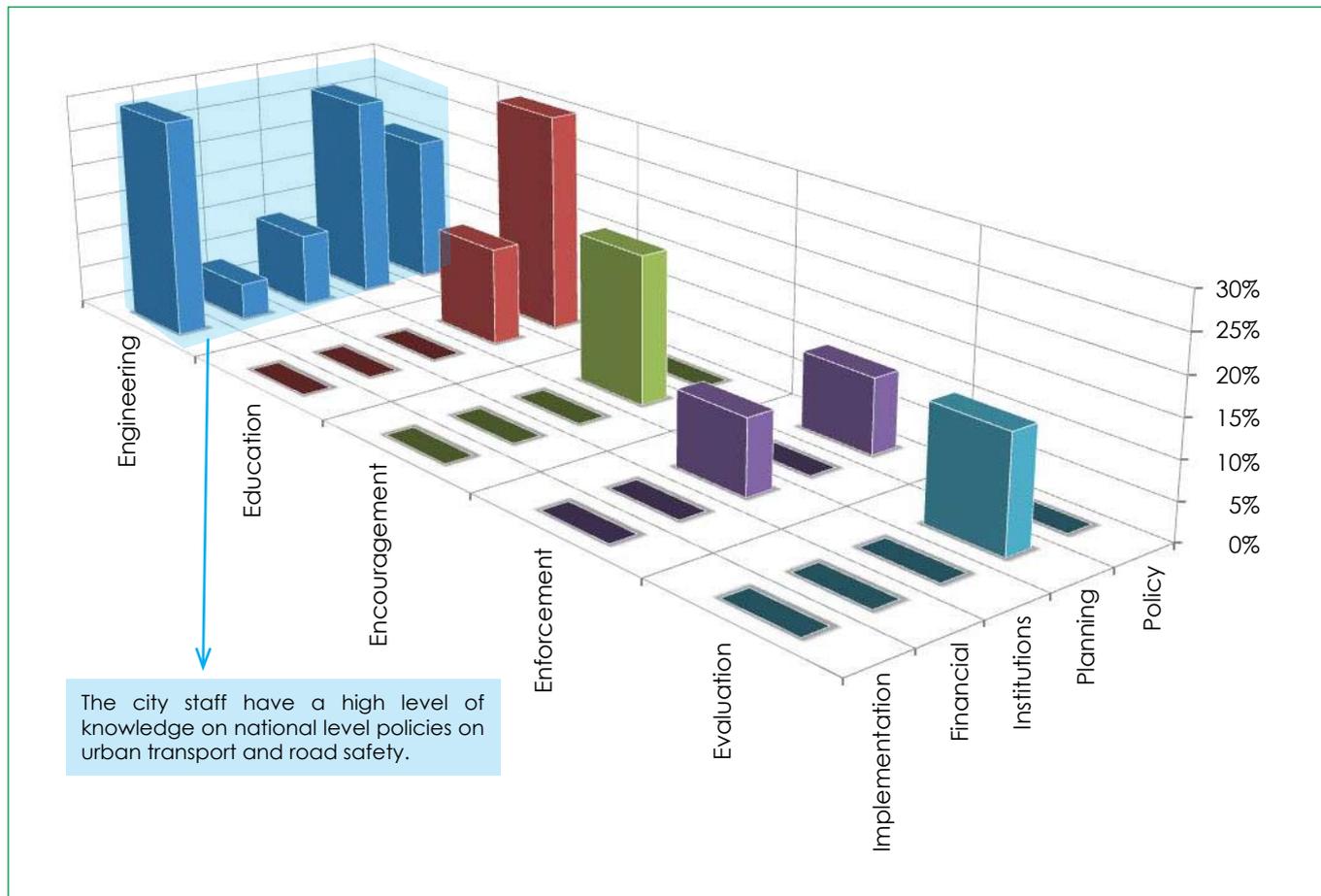
TYPE OF INITIATIVE
Implementation

DESCRIPTION
Non Motorised Zone (NoMoZo) is a community driven initiative organised in colloaboration with various civic community groups where a specific corridor is selected to convert it as NMT zone for whole day where people often found cycling, walking, skating, jogging and playing various indoor games.

Source: http://goankrazy.blogspot.in/

CITY READINESS ASSESSMENT PERFORMANCE

The city staff have a high level of knowledge on national level policies on urban transport and road safety.

City Contact

Corporation of the City of Panaji
Tel: +91-832-2223339-2422736
Web: www.ccpgoa.com Email: commissioner@ccpgoa.com

PIMPRI CHINCHWAD

Maharashtra

POPULATION (YEAR)
1729359 (Census, 2011)

AREA (SQUARE KILOMETERS)
170.51 (Pimpri Chinchwad City Mobility Plan, 2009)

NAME OF CITY GOVERNMENT
Pimpri Chinchwad Municipal Corporation (PCMC)
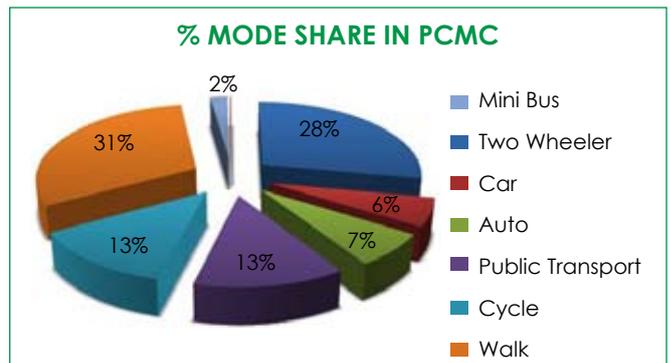
DATES OF CITY ASSESSMENT
04-05 March 2013

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr Babu Gaikwad, Junior Engineer (Urban Transport), PCMC
- Mr Sanjay Nayak Patil, Traffic Inspector, Pimpri Chinchwad Police

Pimpri-Chinchwad has developed as a major industrial centre and is home to large industrial conglomerates like the Tatas and Bajajs as well as other large Indian and multinational companies. The city provides employment to industrial workers and of late has emerged as an affordable urban destination for low-level residential purposes.

% MODE SHARE IN PCMC

- Mini Bus — 2%
- Two Wheeler — 28%
- Car — 6%
- Auto — 7%
- Public Transport — 13%
- Cycle — 13%
- Walk — 31%

Source: http://pcmcindia.gov.in/jnnurm_info/CMP.pdf

EXISTING GOOD PRACTICES AND INITIATIVES

Cycle tracks along the city roads

UNDERTAKEN/IMPLEMENTED BY
Municipal Corporation

TYPE OF INITIATIVE
Engineering Implementation

As an emerging industrial hub, Pimpri Chinchwad has a large number of NMT users. The city corporation has initiated implementing strategies to provide effective public transport and facilities for NMT: cycle tracks have been constructed along the major arterial where the BRT exists but the smooth movement of cycles on this track is obstructed by hawkers and encroachers.

Unless until we provide safe infrastructure people will not use NMT as mode of transport for daily trips.

Mr Bapu Sheb Gaikwad
Engineer (Urban Transport), PCMC

CITY READINESS ASSESSMENT PERFORMANCE

Priority to pedestrians and cyclists is a clear policy of the traffic police. All traffic police officers are aware of strict penalties framed for encroachment of sidewalks.

Implemetaion of engineering drawings done with NMV lane included and 50% of the city roads are covered with footpaths and more than 25% of roads are with cycle tracks.

90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

Engineering
Education
Encouragement
Enforcement
Evaluation
Implementation
Financial
Institutions
Planning
Policy

City Contact

Pimpri Chinchwad Municipal Corporation
Tel: +91-20-67331101
Web: www.pcmcindia.gov.in Email: pcmc@vsnl.com

PONDICHERRY

Union Territory of Puducherry

POPULATION (YEAR)
654,392 (Census, 2011)

AREA (SQUARE KILOMETERS)
19.46

NAME OF CITY GOVERNMENT
Pondicherry Municipality

| IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Assistant Project Manager, Tourism Department, Pondicherry
- Co-Convenor, INTACH
- Superintend of Police(Retd), Pondicherry

Pondicherry is a city, an urban agglomeration and a municipality in Pondicherry district in the Indian union territory of Puducherry. It is affectionately known as Pondy, and has been officially known by the alternative name Puducherry since 2006.

% MODE SHARE IN PONDICHERRY
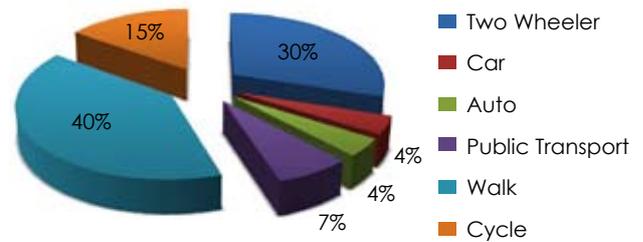
- Two Wheeler — 30%
- Car — 4%
- Auto — 4%
- Public Transport — 7%
- Walk — 40%
- Cycle — 15%

Source: Traffic and Transportation strategies for Urban Areas report, 2008

EXISTING GOOD PRACTICES AND INITIATIVES

Pedestrian zone at Goubert Avenue and Bharathi Park

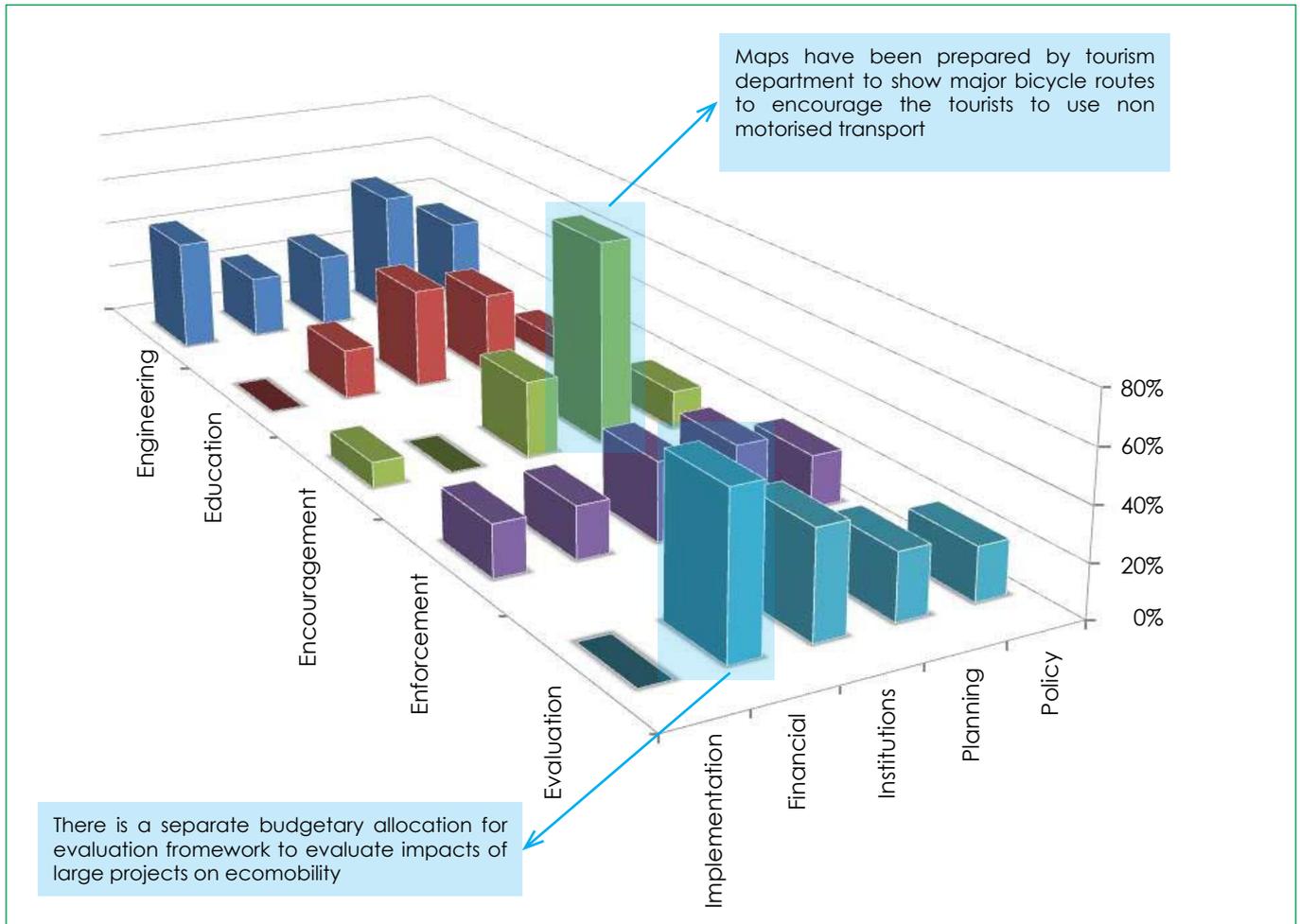**UNDERTAKEN/IMPLEMENTED BY**
Pondicherry Municipality

TYPE OF INITIATIVE
Implementation

Goubert Avenue and Bharathi park are the important attraction for the city and major draw for visitors has been intervened to provide better facilties for pedestrians and create them as ecomobility zones in the city.

Maps have been prepared by tourism department to show major bicycle routes to encourage the tourists to use non motorised transport

There is a separate budgetary allocation for evaluation framework to evaluate impacts of large projects on ecomobility

City Contact

Pondicherry Municipality

RAJAHMUNDRY

Andhra Pradesh

POPULATION
3,43,903 (2011 Census) (Expression of Interest Submitted by city)

AREA (SQUARE KILOMETERS)
44.50 (Expression of Interest submitted by city)

NAME OF CITY GOVERNMENT
Rajamundry Municipal Corporation

DATES OF CITY ASSESSMENT
07-08 November 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Ms Santha Kumari, Executive Engineer (EE), Rajamundry Municipal Corporation
- Mr K.Anil Kumar, Deputy Superintend of Police (Traffic)
- City Planner, Rajamundry Municipal Corporation

Rajamundry is located on the riverbanks of Godavari with rich agriculture in surrounding villages while city acts as major trade center attracts population from different areas. The cities major traffic includes the floating population.

EXISTING GOOD PRACTICES AND INITIATIVES

EXISTING GOOD PRACTICES AND INITIATIVES
Pedestrianized zone

UNDERTAKEN/IMPLEMENTED BY
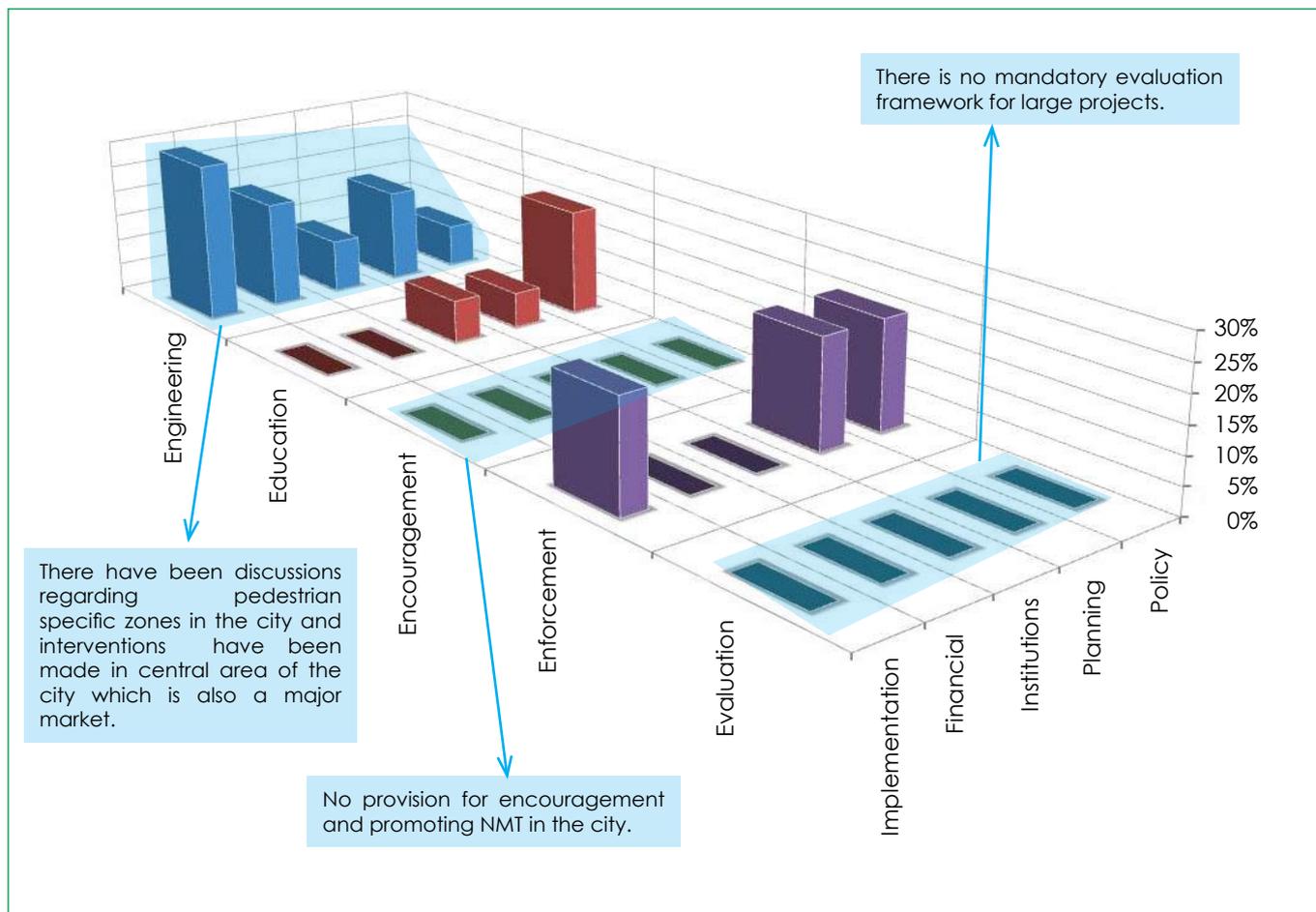Traffic police

TYPE OF INITIATIVE
Partial implementation

Kota Gummam area in Rajahmundry is major commercial center for the city in which a 500 meter stretch has been pedestrianized in order to prevent conflict between pedestrians and motorists. The traffic police has cordoned the area with barricades to prevent motor vehicles entering the area.

"Cycling and walking was the primary mode of transportation few decades ago but due to changes in the economic conditions of people, two wheelers and cars are now increasingly used. But with better facilities and safe environment we can promote them again in the city and integrate them with better public transport."

Sri M Jitendra, Municipal Commissioner
Rajamundry Municipal Corporation

CITY READINESS ASSESSMENT PERFORMANCE

There is no mandatory evaluation framework for large projects.

There have been discussions regarding pedestrian specific zones in the city and interventions have been made in central area of the city which is also a major market.

No provision for encouragement and promoting NMT in the city.

City Contact

Rajamundry Municipal Corporation
Tel: +91-883-2449990
Web: www.rajahmundrycorporation.org Email: comm_mcr@yahoo.co.in, comm_mcr@yahoo.com

RAJKOT

Gujarat

POPULATION
12,86,995 (2011)

AREA (SQUARE KILOMETERS)
104.68

NAME OF CITY GOVERNMENT
Rajkot Municipal Corporation
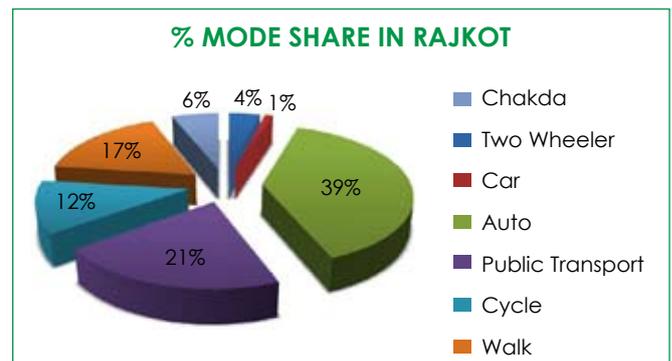
DATES OF CITY ASSESSMENT
04-05 March 2013

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr B K Rupani, Town Planning Officer, Rajkot Municipal Corporation
- Ms Alpana Mitra, Executive Engineer, Rajkot Municipal Corporation
- Mr Ajay Bhadoo, IAS, Municipal Commissioner, Rajkot Municipal Corporation
- Mr B K Jadeja, Head (Traffic), Rajkot Police
- Mr Chirag Pandya (Executive Engineer)

Rajkot has a strong manufacturing economic base, with a market that extends not only beyond the state of Gujarat, but even the national boundaries. In its early history, Rajkot was organized around the establishment of cloth mills. Most of the city roads have intense ribbon developments of commercial activities. This attracts major vehicular and pedestrian movements.

% MODE SHARE IN RAJKOT

- Chakda
- Two Wheeler 6%
- Car 4%
- Auto 1%
- Public Transport 39%
- Cycle 17%
- Walk 12%
- 21%

Source: Rajkot City Mobility Plan, 2009

EXISTING GOOD PRACTICES AND INITIATIVES

Cycle tracks along BRT

UNDERTAKEN/IMPLEMENTED BY
Rajkot Municipal Corporation

TYPE OF INITIATIVE
Implementation

Cycle tracks in Rajkot have been constructed along the line of the BRT corridor in the city. However, since the BRT corridor exists on the outer part of the city the tracks are not used heavily, and are often encroached for parking of motor vehicles and by adjacent businesses.
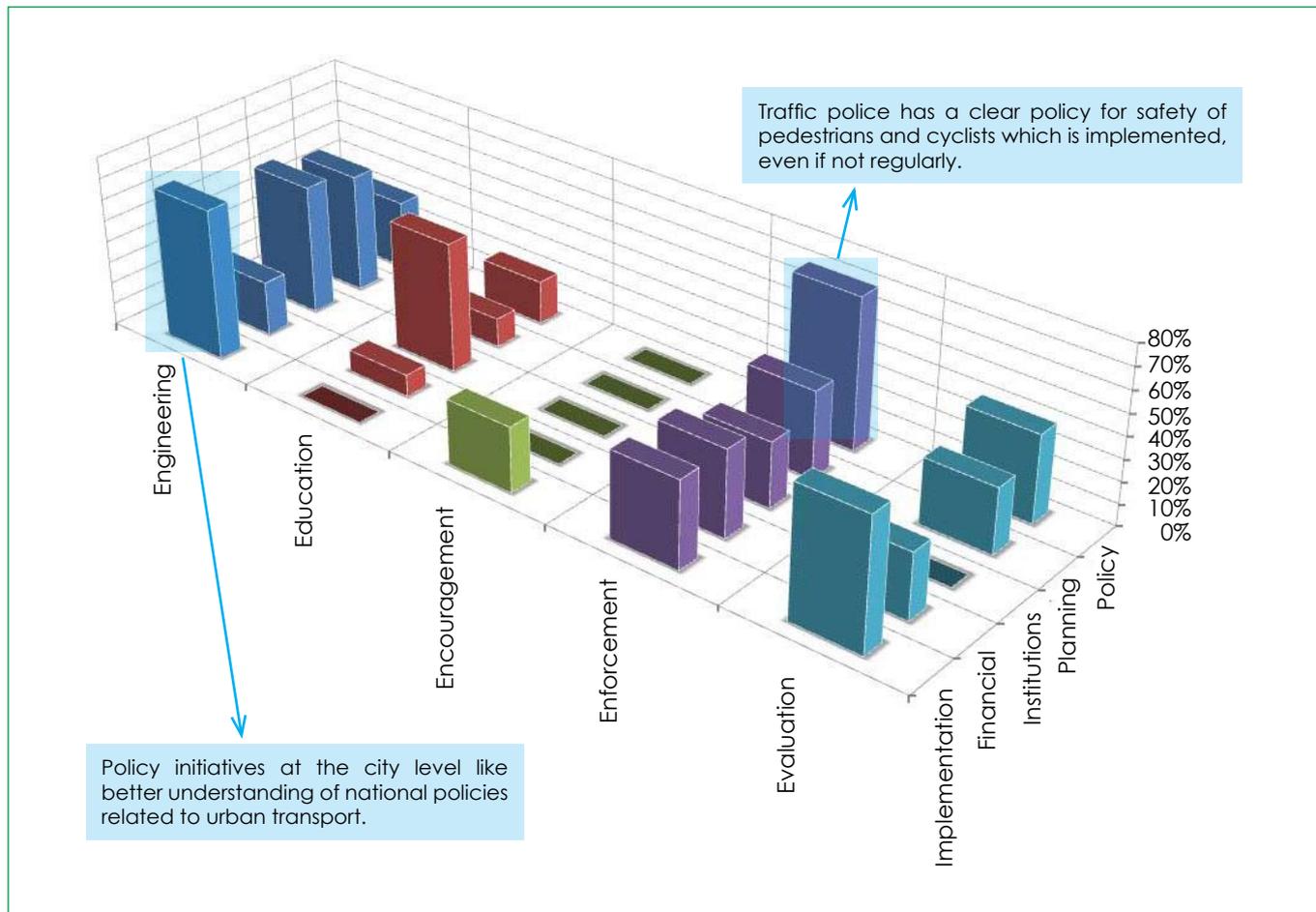
"NMT is of a key importance in the city requiring immediate interventions.

However, there are other similar issues which also need to be kept in mind."

Mr Ajay Bhadoo, IAS
Municipal Commissioner
Rajkot Municipal Corporation

CITY READINESS ASSESSMENT PERFORMANCE

Traffic police has a clear policy for safety of pedestrians and cyclists which is implemented, even if not regularly.

Policy initiatives at the city level like better understanding of national policies related to urban transport.

City Contact

Rajkot Municipal Corporation
Tel: +91-281-2224133
Web: www.rmc.gov.in Email: mc_rmc@yahoo.co.in

SRINAGAR

Jammu and Kashmir

POPULATION
2,28,280 (2001) (Expression of Interest Submitted by City)

AREA (SQUARE KILOMETERS)
129 (Expression of Interest submitted by city)

NAME OF CITY GOVERNMENT
Srinagar Municipal Corporation

DATES OF CITY ASSESSMENT
17-19 October 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Mr Saleem Beg, INTACH Srinagar
- Mr Jb. Mehraj Ah. Kakroo IAS, Transport Commissioner, Jammu and Kashmir Motor Vehicles Department
- Assistant Engineer, Irrigation Flood Control Department, Kashmir
- Dr G N Qasba, Municipal commissioner, Srinagar Municipal Corporation
- Mr Iftiqar Hakim, Chief Town Planner, TCPO, Jammu and Kashmir

Srinagar is a major tourist destination and the summer capital of the state of Jammu and Kashmir. The city has a relatively flat terrain quite suitable for walking and cycling. With its systems of lakes and the river Jhelum, the city has good potential for water ways through the main dense areas of the city.

EXISTING GOOD PRACTICES AND INITIATIVES

Initiative 1: Non-motorized inland waterways

UNDERTAKEN/IMPLEMENTED BY
Informal

TYPE OF INITIATIVE
Implementation, community-driven initiatives

Srinagar has a traditional water way system where people are ferried across the river on small row boats called 'shikaras', while road travel for the same purpose would take much longer. To strengthen the inland water ways system the irrigation department has initiated a motorboat concept. The shikaras however, are expected to remain as a tourist draw.

Initiative 2: Wider walkways along the Dal lake

UNDERTAKEN/IMPLEMENTED BY
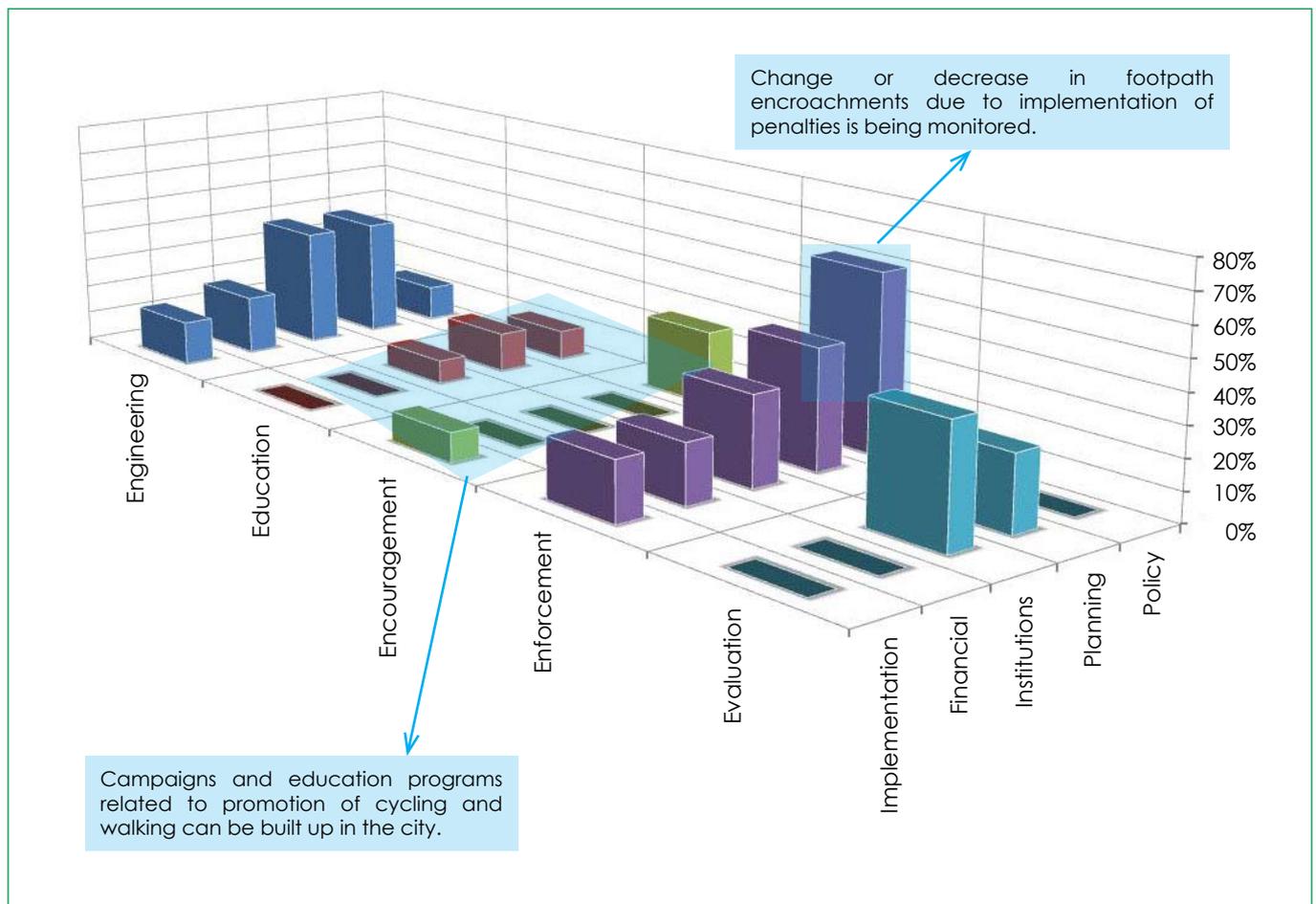Srinagar Municipal Corporation

TYPE OF INITIATIVE
Partial Implementation

The city corporation has been taking the initiative to provide wider footpaths for pedestrian safety, especially along the popular and scenic Dal lake area. There are also numerous pedestrian bridges which are actively used.

"Cycling can be encouraged in the city as most of the city falls under a flat terrain and also the climatic conditions are suited to cycling."

Dr G N Qasba
Municipal Commissioner
Srinagar Municipal Corporation

CITY READINESS ASSESSMENT PERFORMANCE

Change or decrease in footpath encroachments due to implementation of penalties is being monitored.

Campaigns and education programs related to promotion of cycling and walking can be built up in the city.

City Contact

Srinagar Municipal Corporation
Tel: +01-194-2470466
Web: www.smcsite.org

TENALI

Andhra Pradesh

POPULATION
1,54,750 (2001) (VGTMUDA Master Plan)

AREA
15.11 (2001) (VGTMUDA Master Plan)

NAME OF CITY GOVERNMENT
Tenali Municipality

DATES OF CITY ASSESSMENT
05 November 2012

IS THE CITY A JNNURM CITY?	No
DOES THE CITY HAVE A CDP?	No
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT

- Mr Balaswamy, Municipal Commissioner, Tenali Municipality
- Mr Tulasi Ram Prasad, Deputy Superintendent of Police, Tenali Police
- Mr Srinivasa Murthy, Revenue Development Officer, Tenali
- Mr Uday Singh Gautam, Environmental Engineer, Tenali Municipality

Tenali is located close to Vijayawada in the state of Andhra Pradesh, and is a prominent agriculture trade center for surrounding villages. The city is of great historical importance. Tenali is an important railway junction. Intermediate public transport and NMT play an important role in transporting people as the size of the city is small and travel distances are relatively short.

% MODE SHARE IN TENALI

- Auto — 52%
- Two Wheeler — 12%
- Car — 8%
- Bus — 13%
- Walk — 15%
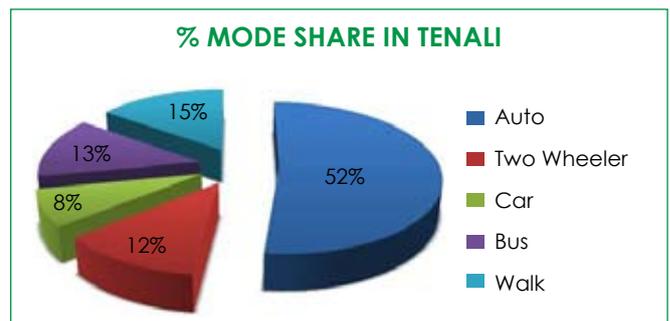
Source: VGTMUDA Master Plan

EXISTING GOOD PRACTICES AND INITIATIVES

Pedestrian only zone

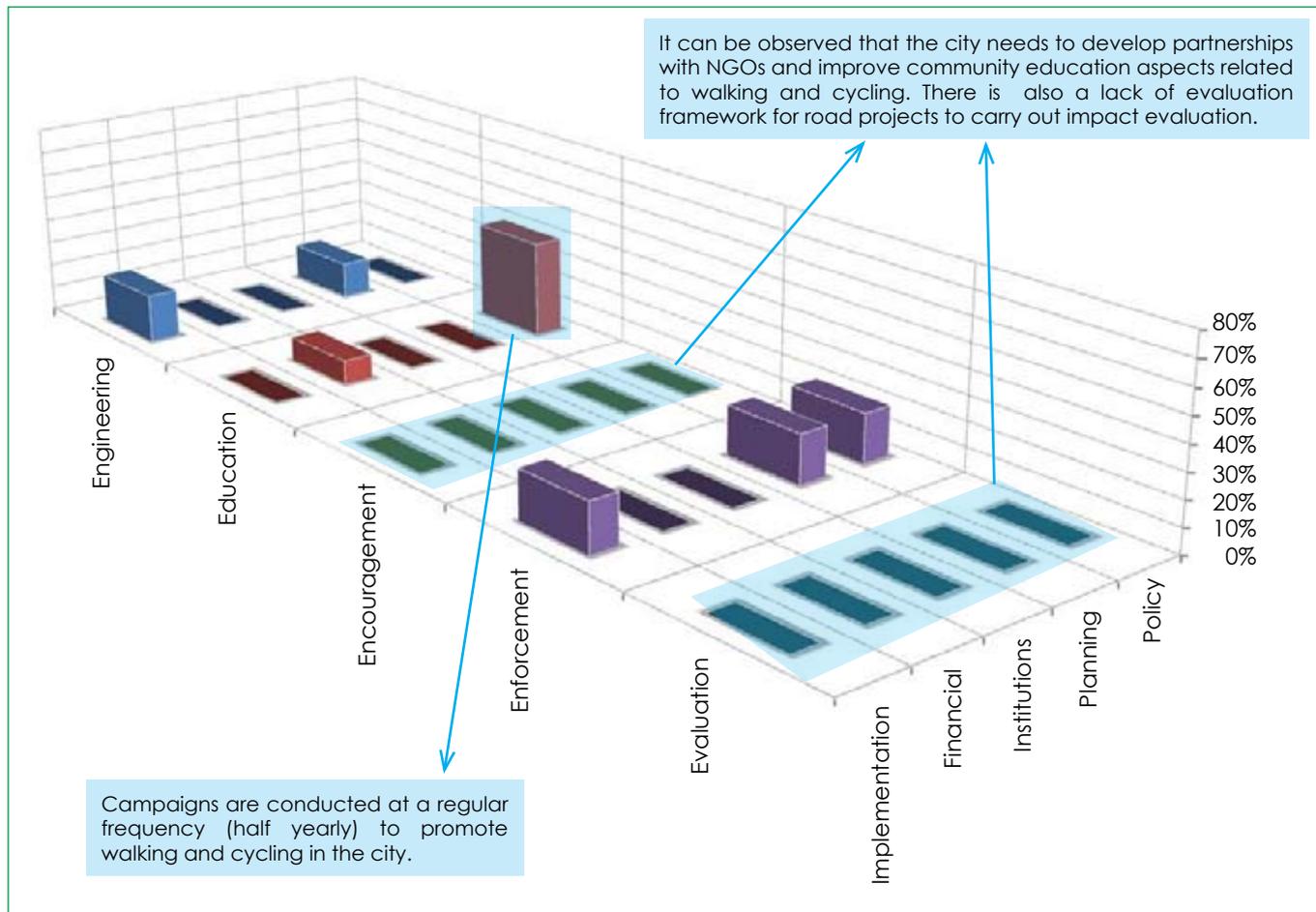**UNDERTAKEN/IMPLEMENTED BY**
Traffic police

TYPE OF INITIATIVE
Partial implementation

A small city in Andhra Pradesh with an interest in promoting low carbon transport strategies, Tenali has initiated pedestrian and cycle only zones in the busy market street with the help of local traffic police, understanding the importance of ease of pedestrian movement. The city is exploring different options available for small cities to encourage people to use public transport and also working towards developing safe public places.

"Any city in India should prioritize NMT as the raising concerns of climate change is growing and emissions due to vehicular usage we must start providing better facilities for NMT. As tenali is still small city we should act upon providing facilities while the city expands it is not possible to acquire the space."

Mr Balaswamy
Municipal Commissioner
Tenali Municipality

CITY READINESS ASSESSMENT PERFORMANCE

It can be observed that the city needs to develop partnerships with NGOs and improve community education aspects related to walking and cycling. There is also a lack of evaluation framework for road projects to carry out impact evaluation.

Campaigns are conducted at a regular frequency (half yearly) to promote walking and cycling in the city.

City Contact

Tenali Municipal Corporation
Tel: +91-8644-228748
Web: www.andhraparis.org Email: mc.tenali@gmail.com

TIRUCHIRAPALLI

Tamil Nadu

POPULATION
7,46,137 (2001) (Tiruchirapalli City Development Plan)

AREA
146.90(2001) (Tiruchirapalli City Development Plan)

NAME OF CITY GOVERNMENT
Tiruchirapalli City Municipal Corporation

DATES OF CITY ASSESSMENT
29-30 November 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Mr Thandapani, Municipal Commissioner, Tiruchirapalli Municipal Corporation
- Mr Chandran, Executive Engineer, Tiruchirapalli Municipal Corporation
- Mr Ponmalai, ACP(Traffic), Tiruchirapalli Police

Tiruchirapalli is an important regional centre in Tamil Nadu for commercial activities. The major commercial activities are concentrated in the inner city area i.e., around the Main Guard Gate Area and Gandhi Market Area.

EXISTING GOOD PRACTICES AND INITIATIVES

Pedestrian zone in market area during festival times

UNDERTAKEN/IMPLEMENTED BY
Traffic police

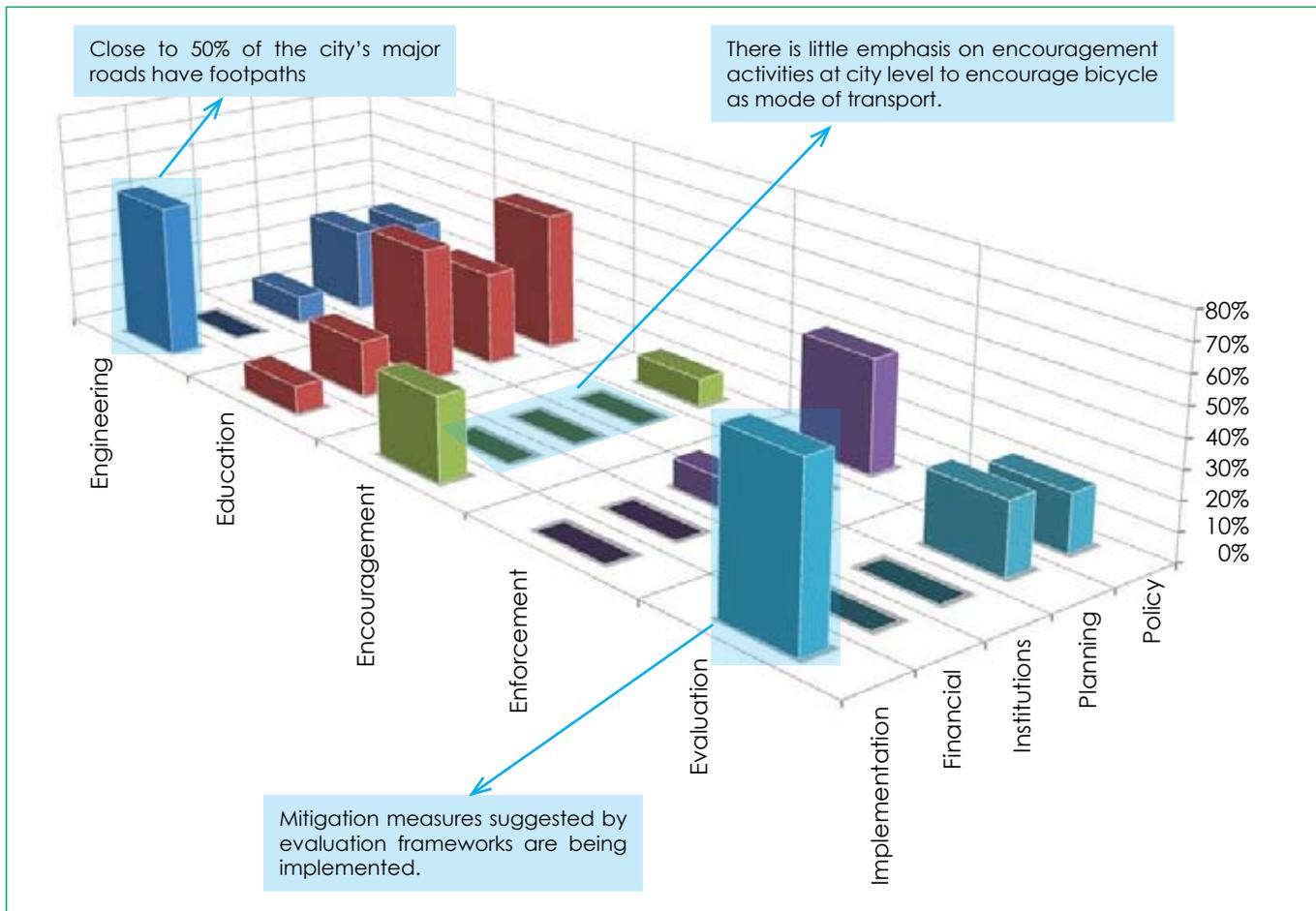**TYPE OF INITIATIVE**
Partial implementation

At the centre of the city is the 'Rockfort' - a hill top complex of a fort, a Shiva temple and a Ganesha temple. A sprawling marketplace surrounds the foot of the hill. Every year during the festival period of Dussera and Diwali, this marketplace is closed to motorized traffic, to provide some relief and ease of movement to the throngs of shoppers and festival revellers.

"The city must have facilities to enable cities to avoid personal vehicles: either through NMT, or public transport, or both."

Mr Dhandapani, Municipal Commissioner Tiruchirapalli City Municipal Corporation

CITY READINESS ASSESSMENT PERFORMANCE

Close to 50% of the city's major roads have footpaths

There is little emphasis on encouragement activities at city level to encourage bicycle as mode of transport.

Mitigation measures suggested by evaluation frameworks are being implemented.

City Contact

Tiruchirapalli city Municipal Corporation
Tel: +91-431-2412860
Web: www.trichycorporation.gov.in Email: commr.try@tn.gov.in

TIRUPATI

Andhra Pradesh

POPULATION
2,96,156 (2001) (Expression of Interest Submitted by City)

AREA (SQUARE KILOMETERS)
16.59 (Expression of Interest Submitted by city)

NAME OF CITY GOVERNMENT
Tirupati Municipal Corporation

DATES OF CITY ASSESSMENT
29-30 November 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	No

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Mr Anand Rao, Superintending Engineer (Tirupati Municipal Corporation)
- Mr Raghu Kumar (Deputy Executive Engineer), Tirupati Municipal Corporation
- Mr Raghu Rami Reddy- Assistant City Planner (Tirupati Municipal Corporation)

Tirupati is a well-known pilgrimage center attracts large numbers of floating population but is lacking behind in the provision of adequate infrastructure. The city road network comprises of narrow streets and encroached arterials.
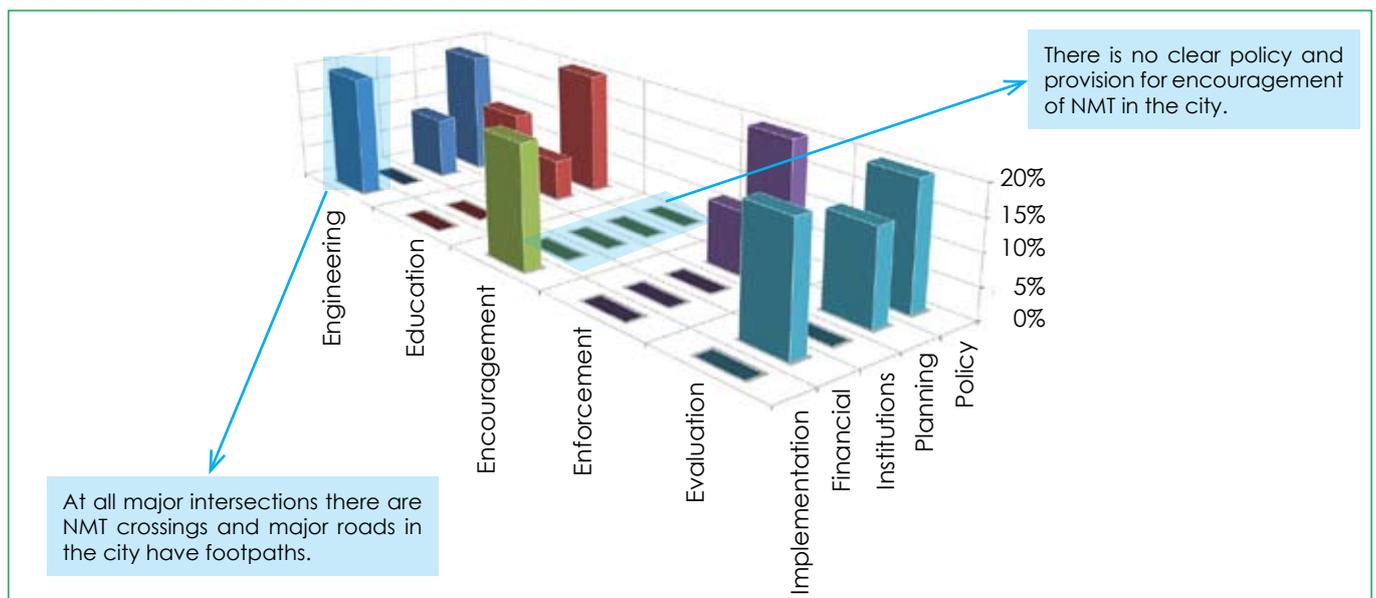

CITY READINESS ASSESSMENT PERFORMANCE

There is no clear policy and provision for encouragement of NMT in the city.

At all major intersections there are NMT crossings and major roads in the city have footpaths.

(Categories: Engineering, Education, Encouragement, Enforcement, Evaluation, Implementation, Financial, Institutions, Planning, Policy; scale 0%, 5%, 10%, 15%, 20%)

City Contact

Tirupathi Municipal Corporation
Tel: +91-877-2220233, Web: www.tirupathicorporation.org.in Email: commissioner.mct@gmail.com

VIJAYAWADA

Andhra Pradesh

POPULATION
10,48,000 (2001) (Comprehensive Traffic and Transportation Study, 2007)

AREA (SQUARE KILOMETERS)
58 (Comprehensive Traffic and Transportation Study, 2007)

NAME OF CITY GOVERNMENT
Vijayawada Municipal Corporation
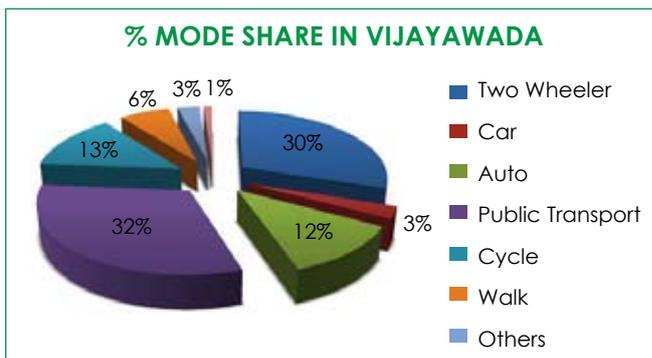
DATES OF CITY ASSESSMENT
02-03 November 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR ASSESSMENT
- Sri K. Bhasker, IAS, Municipal Commissioner (I/C), Vijayawada Municipal Corporation
- Sri Kondala Rao, Chief Engineer, Vijayawada Municipal Corporation
- Sri Chakrapani, City Planner, Vijayawada Municipal Corporation
- Sri Moses Kumar, Superintending Engineer, Vijayawada Municipal Corporation
- Sri Swami Naidu, Executive Engineer, Vijayawada Municipal Corporation

Vijayawada thrives with various economic activities, as it is located on the banks of river Krishna. It is also a regional pilgrimage destination. The city is the major commercial hub for the surrounding cities and towns. Vijayawada has a huge network of arterials with virtual cycle tracks marked and has successfully finished a trial run of for a BRT system.

% MODE SHARE IN VIJAYAWADA

- Two Wheeler — 30%
- Car — 3%
- Auto — 12%
- Public Transport — 32%
- Cycle — 13%
- Walk — 6%
- Others — 3% 1%

Source: Comprehensive Traffic and Transportation Study, 2007

EXISTING GOOD PRACTICES AND INITIATIVES

Marked cycle lanes

UNDERTAKEN/IMPLEMENTED BY
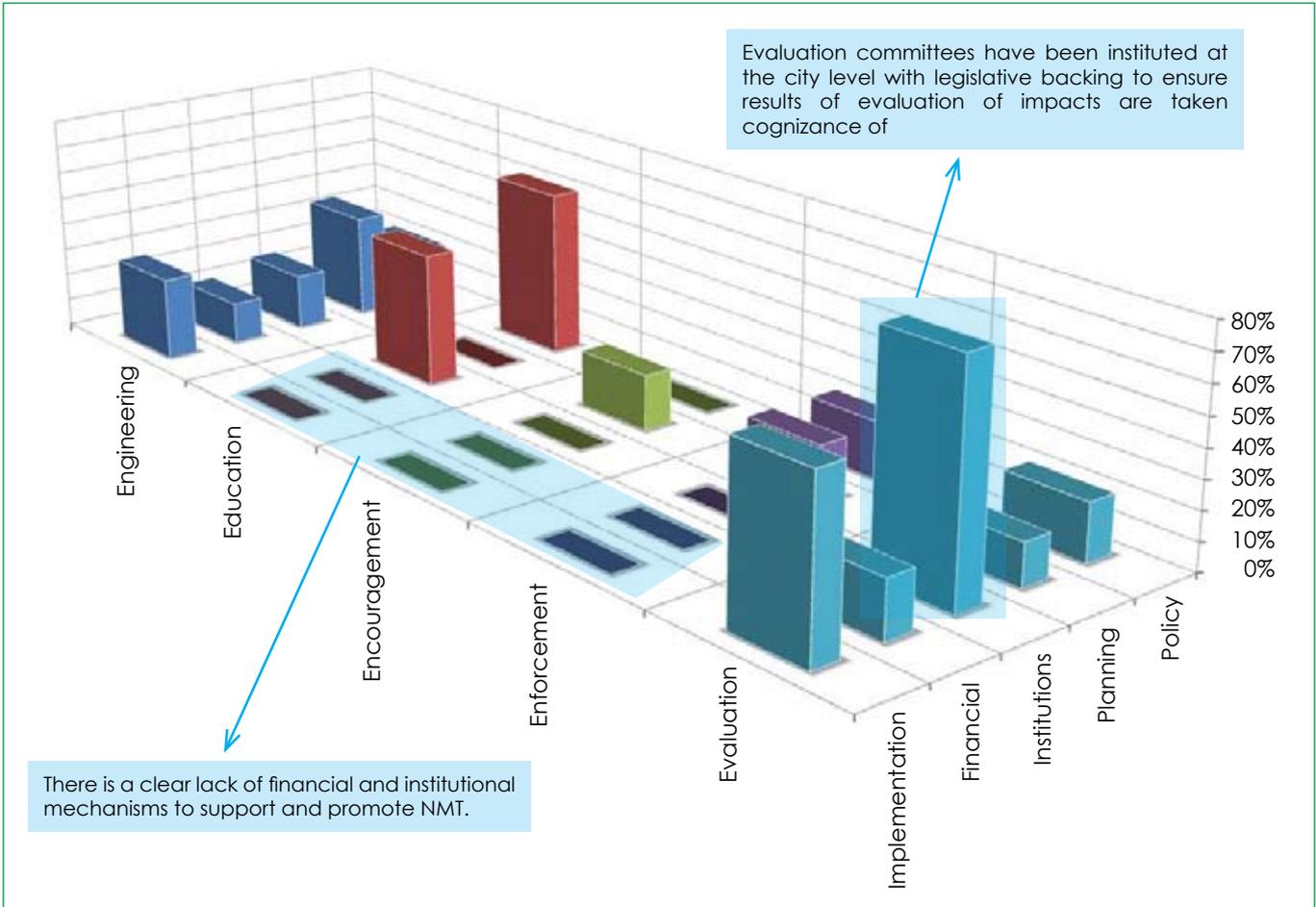Vijayawada Municipal Corporation

TYPE OF INITIATIVE
Implementation

Although cycle tracks are not physically segregated from main traffic flow, lanes are clearly demarcated along the most important corridors of the city which at least separate the NMT users from motor vehicles. These tracks are however often encroached upon by motor vehicles for parking, compelling cyclists to mix with motor vehicles.

"Cities definitely need to focus on providing better facilities for pedestrians and cyclists. But in order to provide additional lanes for cycles we have to compromise space for motorists which creates the problem of congestion, there should be scientific approach."

Mr Abdul Azeem, IAS
Municipal Commissioner (ex)
Vijayawada Municipal Corporation

CITY READINESS ASSESSMENT PERFORMANCE

Evaluation committees have been instituted at the city level with legislative backing to ensure results of evaluation of impacts are taken cognizance of

There is a clear lack of financial and institutional mechanisms to support and promote NMT.

City Contact

Vijayawada Municipal Corporation
Tel: +91-866-2421058/2422400
Web: www.ourvmc.org Email: ourvmc@ap.gov.in

VISAKHAPATNAM

Andhra Pradesh

POPULATION
17,00,000 (2001) (Expression of Interest Submitted
by City)

AREA (SQUARE KILOMETERS)
550 (Expression Of Interest Submitted by City)

NAME OF CITY GOVERNMENT
Greater Visakhapatnam Municipal Corporation

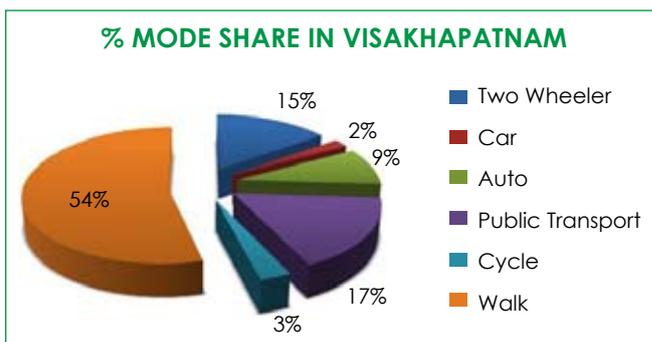**DATES OF CITY ASSESSMENT**
15-16 November 2012

IS THE CITY A JNNURM CITY?	Yes
DOES THE CITY HAVE A CDP?	Yes
DOES THE CITY HAVE A CMP?	Yes

**KEY PLAYERS IN MOBILITY SPHERE INTERVIEWED FOR
ASSESSMENT**
- Mr KVN Ravi, Executive Engineer (BRTS)(Greater Visakhapatnam Municipal Corporation)
- Mr S. Bala Krishna, Chief City Planner (GVMC)
- Ms K. Rama Prabha, Dhan Foundation, Vishakhapatnam
- Mr. Suresh Babu, Additional Commissioner of Police (Traffic), Visakhapatnam

Visakhapatnam is a port city in the state of Andha Pradesh and of significant regional importance. The city doubled its population from 1990-2000 owing to a large migrant population from surrounding areas and other parts of the country coming to the city to work in heavy industries. The city is under transformation of its transport character by introducing BRT to resolve the burden of personalized vehicles.

% MODE SHARE IN VISAKHAPATNAM

- Two Wheeler — 15%
- Car — 2%
- Auto — 9%
- Public Transport — 17%
- Cycle — 3%
- Walk — 54%

Source: Low Carbon Mobility Plan(UNEP,2013)
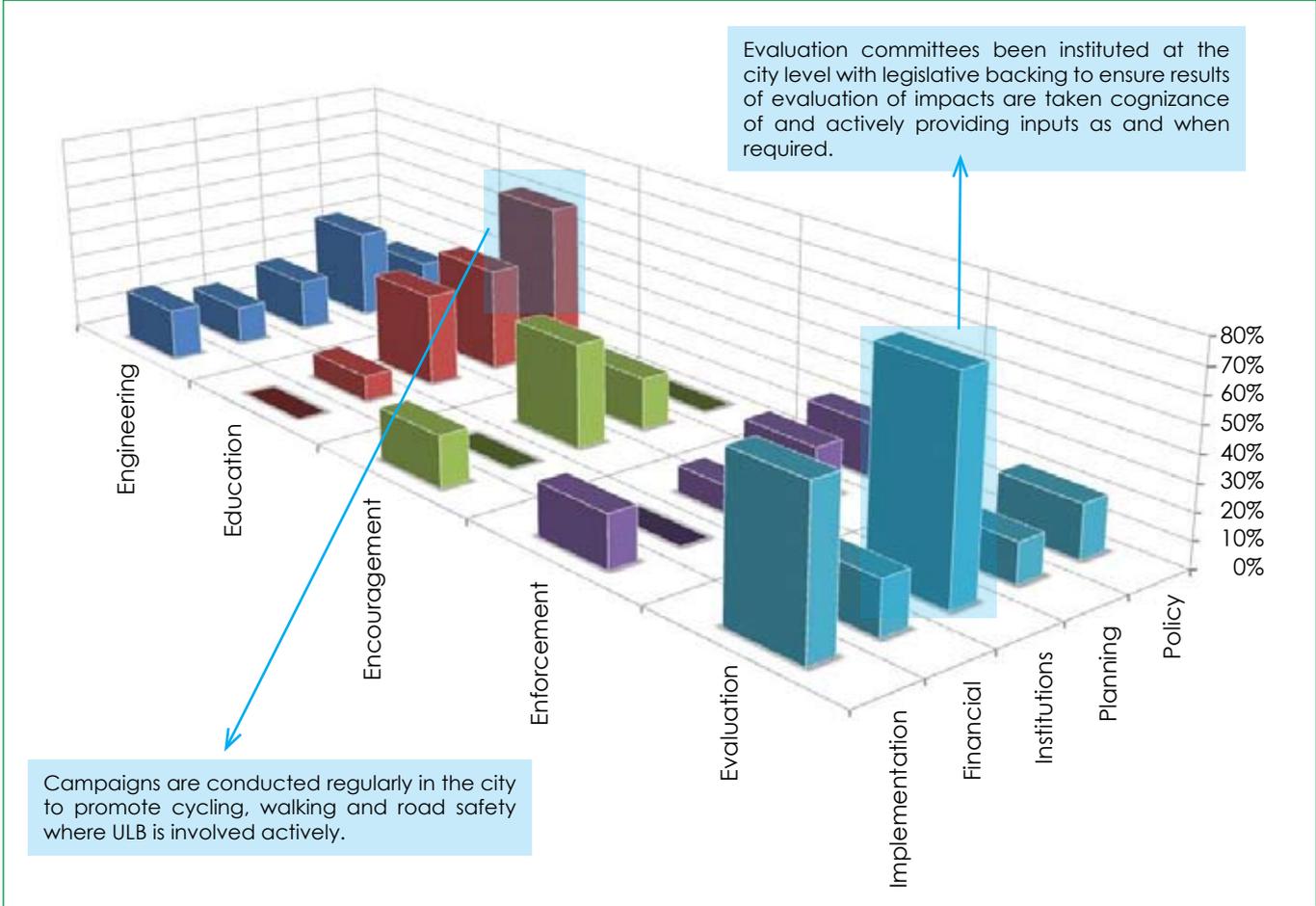
EXISTING GOOD PRACTICES AND INITIATIVES

Car-free mornings along beach road strech

The scenic RK beach road in Visakhapatnam is a major draw for tourists and visitors alike. In a recent move, the city has begun closing the road to motor vehicles every morning to enable the morning walkers and bicyclists to walk and ride in peace by the sea. Events like cyclothons are increasingly common in the city, and even the city corporation staff have committed to use NMT at least one day each week to set an example to citizens. Due to Visakhapatnam being an industrial city, there are large numbers of regular NMT users.
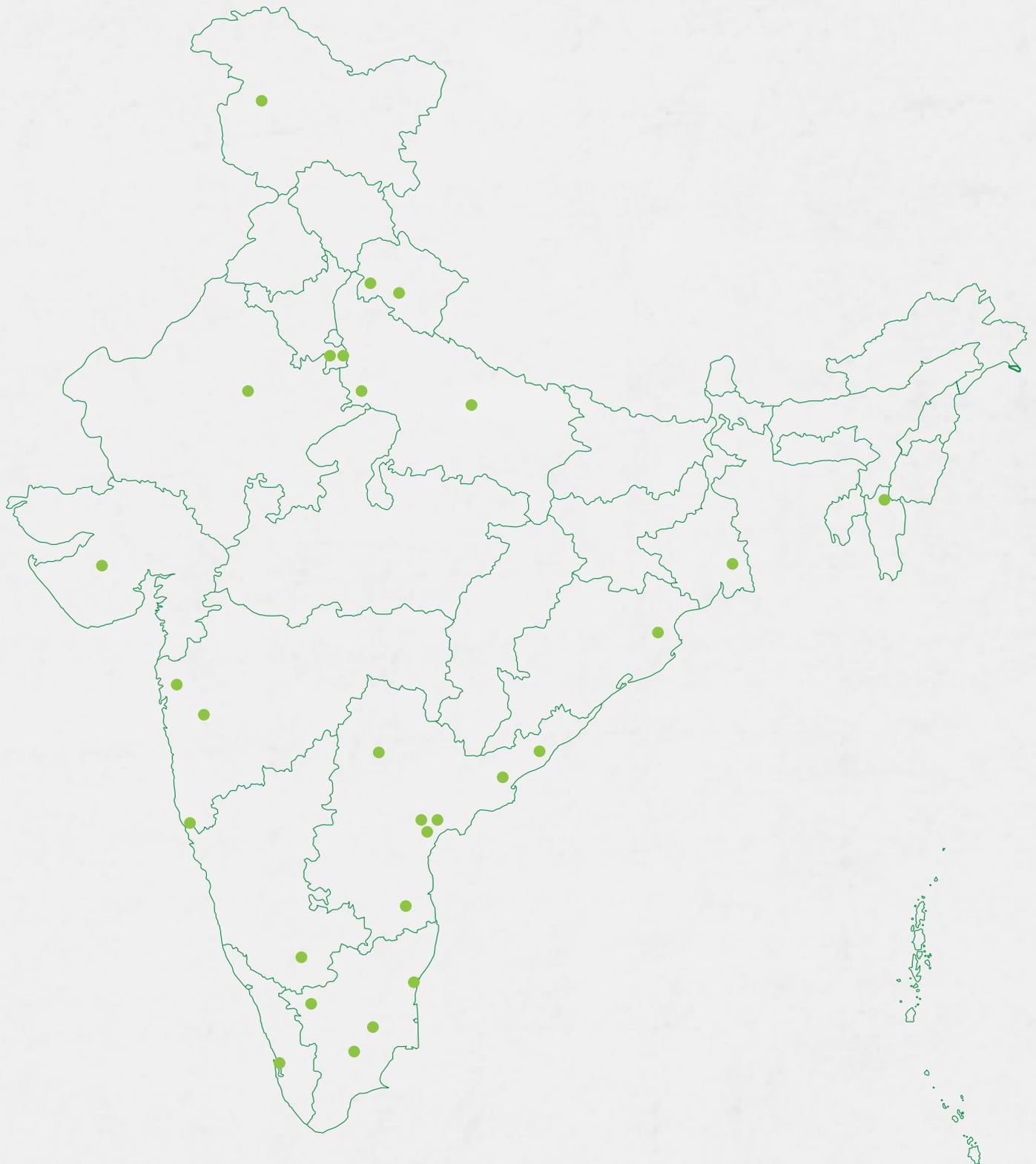
"We have to provide better facilities for pedestrians and cyclists. The BRT corridor has special provisions for separate cycle tracks and walking facilities and also a low carbon mobility plan is under progress to prioritize NMT in the city."

*KVN Ravi, Executive Engineer (BRTS)
Greater Visakhapatnam Municipal
Corporation*

CITY READINESS ASSESSMENT PERFORMANCE

Evaluation committees been instituted at the city level with legislative backing to ensure results of evaluation of impacts are taken cognizance of and actively providing inputs as and when required.

Campaigns are conducted regularly in the city to promote cycling, walking and road safety where ULB is involved actively.

City Contact

Greater Vishakhapatnam Municipal Corporation
Tel: + 91-891-2746300
Web: www.gvmc.gov.in Email: commissioner_gvmc@yahoo.co.in

Agra	Gurgaon	Madurai	Rajkot
Aizawl	Haridwar	Mysore	Srinagar
Ajmer	Howrah	Nainital	Tenali
Bhubaneswar	Hyderabad	Panaji	Tiruchirapalli
Coimbatore	Kalyan Dombivli	Pimpri Chinchwad	Tirupati
Faridabad	Kochi	Puducherry	Vijayawada
Guntur	Lucknow	Rajahmundry	Visakhapatnam