



## Preparatory assessment and Identification of a roadmap for the “Mobilise Your City” programme

in Nagpur, India

# Planning workshop Report



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## Foreword

The French Government has agreed with the Government of India and the City of Nagpur to **support Nagpur in promoting sustainable urban mobility**. For this the Agence Française de Développement (AFD) is implementing the “**Mobilise Your City (MYC)**” initiative with the financial support of the European Union Delegation to India.

The **workshop “Promoting sustainable mobility in Nagpur”** took place on August 28<sup>th</sup> and 29<sup>th</sup> in Nagpur. This event was co-organised by Nagpur Smart and Sustainable City Development Corporation Limited (NSSCDCL) and AFD. The objectives of the day were to gather all relevant local stakeholders in the urban mobility sector and to:

- **Achieve a joint understanding** of the objective, scope and potential activities of the MYC programme
- **Create a space for all stakeholders** to contribute and achieve an understanding of the main mobility issues and potentials for Nagpur
- **Learn about on-going initiatives** for urban mobility in Nagpur and formulate a joint vision
- **Take stock of lessons learned** through implementation of these initiatives to date
- **Identify main actions and milestones** for achieving the joint vision
- **Prepare a roadmap** for coordinated actions

The Concept note and agenda of the workshop are attached.



*Participants of the workshop “Promoting sustainable mobility in Nagpur”, August 28<sup>th</sup>, 2018*

## I. “Mobilise Your City” support for sustainable mobility in Nagpur

The Inaugural Session of the Workshop provided an opportunity for high-level positions to be expressed.

A short introduction was made by Dr Ramnath Sonawane, CEO of the Nagpur Smart and Sustainable City Development Corporation Ltd (NSSCDCL).

Mr Virendra Singh, IAS, Municipal Commissioner for the Nagpur Municipal Corporation (NMC), outlined the main opportunities and challenges facing Nagpur in the field of mobility and urban development: i) Nagpur Metro will provide a new leap in public transport to counter the increase in private vehicle traffic and its negative impacts. Expected results are traffic decongestion and a contribution to a sustainable public transport system, allowing to curtail environmental damage; ii) One significant challenge lies in the walkability of Nagpur, where quality footpaths are rare. EU and AFD support is expected to provide both knowledge and technical solutions; iii) Beyond investment and technology, the transformation of the system requires a change in mindset to move beyond the current reliance on individual mobility. Increased public awareness on the benefits of a more sustainable mobility system will be critical; iv). It will also be important to address the financial sustainability of the system. Mr Singh committed to carry forward the NMC’s contributions to this transition and hopes to be able to project Nagpur’s achievements as an example to cities in India and beyond.

The Mayor of Nagpur, Ms. Nanda Jichkar, extended her thanks to the NSSCDCL and noted that both the State Minister and the national Transport Minister are originally from Nagpur, enhancing the city’s political visibility. Sustainability is indeed the key word of municipal action, which can be summarized by the vision of “Sustainability Everywhere”, from road widening to the purchase of e-buses. She welcomed the support provided by the EU and AFD, and expressed the hope that the full team would be operational in Nagpur as soon as possible.

AFD reminded that it has been providing financial support to the Nagpur metro project since 2016 and continues to support the broader urban agenda (support to the Smart City programme, and Nag river project).

Now AFD is launching a new cooperation programme called Mobilise Your City (MYC), an international initiative which is supported by the French and the German Governments with EU funding which was launched at UNFCCC’s 21st Conference of Parties (COP21) in December 2015, in Paris. It seeks to support governments at **both local and national levels** in their involvement in transformational actions for a more sustainable urban mobility, and more specifically to mitigate GHG emissions.

As reminded by the EU delegation representative Ms. Smita Singh and the AFD representative Mr. Arnaud Dauphin, the three selected Indian pilot cities (namely, Nagpur, Kochi, and Ahmedabad) as well as the Ministry of Housing and Urban Affairs (MOHUA) will benefit from Technical Assistance (“TA”) activities under this programme. These activities will accompany urban mobility investments, foster better planning to reach GHG emissions reduction targets and help generate new mobility projects. At the national level, a National Urban Mobility Policy/ Programme (NUMP) will be established and at the local levels (city level), Sustainable Urban Mobility Plans (SUMPs) targeting over 50% of CO2 reduction and some pilot projects will be implemented.



## To reach sustainable low carbon mobility



### EASI

- **ENABLE:** local governance, national framework
- **AVOID** trips: integration of transport and land-use planning
- **SHIFT** to low carbon modes: attractive public transport, restriction to car use (parking, fuel taxes, etc.)
- **IMPROVE** vehicle and fuel efficiency: **EURO** norms, electric mobility, etc.

*The Mobilise Your City initiative*

## II. Nagpur, ongoing initiatives and aspirations for the future

1. After a brief introduction and a presentation of the “Mobilize Your City” (MYC) programme by Mr. Dauphin (AFD), Dr. Sonawane (NSSCDCL) and a representative of Urban Mass Transit Company limited (UMTC), mandated by MahaMetro, summarised the ongoing initiatives undertaken to coordinate the different investments into the mobility system alongside the operations of the new metro infrastructure.
  - i) NSSCDCL is implementing a programme with several areas of relevance to the mobility system.
    - a. **The status of intelligent transportation system (ITS)/passenger information system (PIS) pilot projects is particularly promising**, both for the bus network and for the general traffic management system. This effort is embodied in the City Control Centre, physically located within NMC premises.
    - b. On the other hand, the area-based development concept is a programme aiming to develop various projects across the city. The first concerns the urban infrastructure needed for densification of outlying unplanned settlements. This so-called “retrofit” concept involves the provision of basic roads.
    - c. Public transport accessibility and Non-Motorised Transport (NMT) networks are understood to be part of the picture. The first area planned for this type of renewal is Pardi, starting just beyond the Prajapati Nagar terminal station on the Eastern reach of the current metro rail project. A one-station extension is considered under the project.
  - ii) The **Comprehensive Mobility Plan (CMP)** is a good tool to understand the present situation of Nagpur in terms of mobility. The document analyses precisely all the elements of urban transport and proposes a long-term vision statement of the direction in which Urban Transport in the city should grow. A **complete set of measures** are proposed to achieve the strategic vision for a system that is ‘*safe, efficient, economical and sustainable, which aims to support economic development while improving liveability*’. The CMP was prepared in 2013 and is currently undergoing a “quick update” to support the Detailed Project Report (DPR) of further extensions of the metro. A full revision of the CMP is planned to be undertaken thereafter, in 2019.

- iii) UMTC also explained the current progress on an array of initiatives under the heading of Multi-Modal Integration. These include feeder bus planning, measures to facilitate cycling and walking, parking policy and multi-modal exchange facilities at metro stations. In addition, an overview of the approach to Transit-Oriented Development was offered.
2. A first range of questions was asked to the audience to **understand what is the vision for Nagpur** in the future, both as a city and in terms of its mobility system.



*Collection of the answers from the room*

Most of the answers described a vision of a **green and decarbonised city**, mainly **with efficient and safe mobility** based on technologies such as electric vehicles complemented by walking and parking. It is interesting to note the contrast with the current situation, which is characterized by low public transport usage, high 2-wheeler usage and difficult conditions for walking and, to a certain extent, cycling. In a city undergoing rapid transformation, the vision is a transition to a more quiet and peaceful mobility experience, with footpaths and efficient vehicles in a green environment.



What will the city look like in 2030?



How will we move around in Nagpur in 2030?

*Word clouds showing the results from the questions asked to the audience.*

3. Another exercise was then proposed to the participants, who were asked to position themselves in the room according to their means of transport one or two decades ago compared to now. It appeared unsurprisingly that cycling and walking were the most used means of transport for people to reach their secondary schools in the past. Nowadays, most of the people use their private vehicle to get to work. In fact, **streets are now more adapted to cars than to pedestrians.**

### III. Organising the steps towards a green, efficient and pedestrian-friendly city

The city's main stakeholders are engaged in strategic thinking and actions to solve urban and mobility-related problems. But there are still some topics that need to be considered to achieve the vision proposed for the future Nagpur. One of the objectives of the workshop was to **identify the main actions for achieving this vision, and how MYC support could best accompany those efforts.**

A participative session was set up to organise the reflections around three major themes, reflecting different dimensions of the integration required to put the entire system into motion:

- Managing streets and roads to achieve the mobility vision;
- Public transport and e-mobility;
- Planning methods and links with urban development.

Three groups were formed, to tackle each of these themes more in depth. Each group presented the results of its discussions to the entire audience.



*Brainstorming session and result of the actions identified for a sustainable mobility in Nagpur*

The exercise was summarized by identifying the main areas for action that would contribute to achieve the common vision of Nagpur (see Part IV below).

The day ended with a well-attended press conference during which NSSCDCL and AFD answered journalists' questions.

## IV. Three pillars to structure the action plan for the transformation of Nagpur

Thanks to the **contribution of a diversified representation of stakeholders** during the first day, the main orientations emerging from the participative sessions were analysed and discussed by the AFD team during the morning of the second day. They were then summarized to develop the final themes of the proposed roadmap for the MYC initiative.

In order to achieve this, a brainstorming session with a reduced number of stakeholders, representing the core operational group that will be involved in the management of the MYC programme in Nagpur, permitted to finalise the roadmap structure. The structure which was finally seen as best summarizing the intentions of the stakeholders was summarized as follows:

### **Pillar #1 –Managing Streets and Roads to Achieve the desired Mobility Vision**

#### **Problems**

- Design of streets and roads
- Maintenance of streets and roads
- Operations during construction on streets and roads
- Special needs (schools, hospitals, ...)
- Enforcement (traffic, encroachment, parking...)
- Civic discipline/awareness
- Consistency of signaling

#### **Proposed Solutions**

- Public awareness (see section V. below): *(potential for MYC support: develop campaign)*
- Coordination between institutions
- Knowledge sharing (see section V. below) *(potential for MYC support)*
- Pilot/demonstration activities *(potential for MYC support on selected locations)*

### **Pillar #2 – Public Transport and E-Mobility → Collective Transport and Eco-Mobility**

#### **Problems**

- Inadequate level of service (capacity, frequency, timeliness, cleanliness...)
- Last-mile connectivity and coverage
- Pollution, safety and noise
- Mental blockage given low current usage of public transport
- Unclear priority for bus transport at policy level
- Out-of-pocket expenditure for auto-rickshaw perceived as expensive

#### **Proposed Solutions**

- Clean vehicles and strong emissions monitoring (potential for MYC support)
- Higher level of service and improved coverage for public transport
- Improved passenger information (potential for MYC support)

- Intermodality and seamless connectivity (potential for MYC support)
- Public awareness (potential for MYC support)
- Proactive policy and financial incentives to e-mobility
- Charging systems deployment

### **Pillar #3 – Planning Methods and Links with Urban Development**

#### **Problems**

- Lack of awareness/participatory approach
- Data sharing from various operational and planning processes/leveraging the data
- Implementation gap
- Limited technical capacity in institutions responsible for planning
- Lack of institutional coordination
- Limitations on legal status of land
- Enforcement of urban development regulations

#### **Proposed Solutions**

- Activation of public spaces, i.e. developing recreational, social and symbolic usage of public space as well as managing their contribution to the mobility system
- Capacity development
- TOD (potential for MYC support: CDP revision)
- Pilot/demonstration activities (see section V. below) (potential for MYC support on selected locations)
- Single window clearance mechanism
- Roadmap for UMTA (potential for MYC support: Knowledge sharing)

## V. Conclusion/ Next steps

The main focus of MYC activities was then summarized for each of the 3 pillars as shown in Annex 3 which reproduces the presentation that was made on Day 2 of the workshop.

**Next steps to refine the roadmap include identifying milestones in order to move towards an operational resource planning document.**

As a general method, it was noted that the focus should be to seize opportunities for quick implementation and learn by doing before rolling out based on the experience gained. This pragmatic approach is based on the early identification of pilot areas, e.g. the Pardi Area-Based Development which is entering implementation phase in the short term.

It was very striking that the 3 working groups had highlighted the importance of enhancing public awareness. The need for actions at various levels needs to be considered, for example general or more targeted communications campaigns, training for certain key target groups like school children, bus drivers, rickshaw drivers, car drivers...). This effort should go hand in hand with progressive tightening of enforcement of traffic and parking regulations.

Tentative time lines were discussed. The Project Implementation Unit (PIU) of MYC programme should be in place in November. The Local stakeholders shall finalise the composition of the Steering Committees, that should be in place before the PIU consultant begins work, ideally in October. The first National Mobilise Days, grouping the 3 pilot cities of MYC programme in India (Nagpur, Kochi and Ahmedabad) as well as the national beneficiary (Ministry of Housing and Urban Affairs) will be held in Delhi early 2019.

## Annex 1 - Concept note

PROMOTING SUSTAINABLE URBAN MOBILITY IN NAGPUR

**WHAT IS THE 'MOBILISE YOUR CITY' PROGRAMME?**

- The MobiliseYourCity Programme is a multi-donor global climate partnership for integrated urban mobility planning in emerging, developing, and EU neighborhood countries, and an international transport alliance under the UN Marrakesh Partnership for Global Climate Action.
- The programme emphasises developing low-carbon pathways for urban mobility through technical assistance provided to the partner cities worldwide.
- The Governments of France and India have agreed, along with the engagement of local governments and partner cities, to support Nagpur, Kochi and Ahmedabad in promoting sustainable urban mobility. This programme in India is funded by the European Union.
- In Nagpur, Agence Française de Développement (AFD), in partnership with Nagpur Smart and Sustainable City Development Corporation Limited (NSSCDCL), and in collaboration with major transport stakeholders, is implementing the "Mobilise Your City (MYC)" initiative to improve the planning and implementation of sustainable urban transport solutions in the city.

SUPPORTED BY:



IMPLEMENTED BY:



**PROMOTING SUSTAINABLE URBAN MOBILITY IN NAGPUR**

28-29 August 2018 | Nagpur Municipal Corporation, Nagpur

**NAGPUR VISION FOR URBAN MOBILITY**

**AN EMERGING CONSENSUS**

- Nagpur: a natural logistical hub for India owing to the 'Multi-Modal International Passenger and Cargo Hub Airport at Nagpur' project (MIHAN)
- Nagpur Metro Rail project: a qualitative leap in the public transport system.
- Multiple public and private initiatives to foster a sustainable mobility system: new bus fleet, dedicated bicycle lanes, improved sidewalks, e-rickshaws, etc.
- Longing for improved quality of life : cleaner air, quieter and safer streets, fluid traffic conditions, etc.

**TWO COMPATIBLE VISIONS**

**Comprehensive Mobility Plan (2013)**

*To ensure that Nagpur has a systematically planned urban transport system for the mobility of people and goods that is safe, efficient, economical and sustainable, which aims to support economic development while improving liveability*

**City Development Plan (2015)**

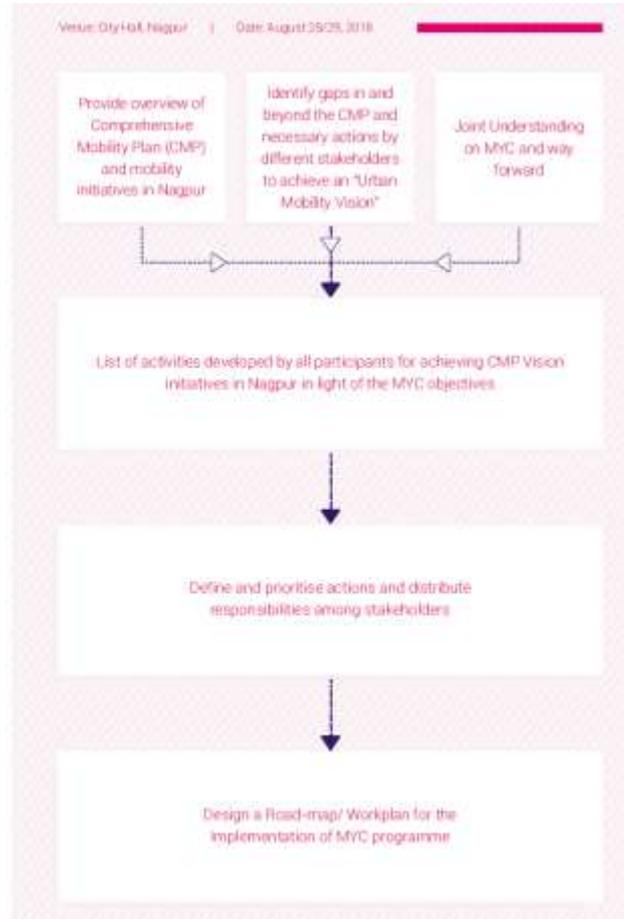
- Growth nucleus of Central India;
- An eco-city that provides adequate, equitable, sustainable access to urban services for all citizens;
- A city that is safe, liveable and promotes growth of its citizens.

PROMOTING SUSTAINABLE URBAN MOBILITY IN NAGPUR

**KEY ISSUES FOR NAGPUR MOBILITY**

- Organize smooth transition toward an integrated public transport system supported by metro backbone
- Translate studies and policies into coordinated implementation of measures on all components of the mobility system
- Optimize collaboration of public and private stakeholders

- Achieve a joint understanding of the objective, scope and potential activities of the MYC programme
- Create a space for all stakeholders to contribute and achieve an understanding of the main mobility issues and potentials for Nagpur
- Learn about on-going initiatives for urban mobility in Nagpur and formulate a joint vision
- Take stock of lessons learned through implementation of these initiatives to date
- Identify main actions and milestones for achieving the joint vision
- Prepare a roadmap for coordinated actions



## Annex 2 : Agenda of the workshop



### Plenary Session: 28 August 2018

**Venue:** Commissioner's Conference Hall, Maharaj Administrative Building, Nagpur Municipal Corporation

<b>10:00 – 11:00</b>	<b>Inaugural Session</b>
10h05	Welcome speech by Mr Arnaud Dauphin, <i>Lead Transport Specialist, Agence France de Développement</i>
10h10	Welcome speech by Ms. Smita Singh <i>Senior Project Manager, European Union Delegation to India</i>
10h15	Special speech by Dr Ramnath Sonawane <i>CEO, Nagpur Smart and Sustainable City Development Corporation</i>
10h25	Keynote speech by Maha Metro Representative <i>Maharashtra Metro Rail Corporation Ltd</i>
10h35	Inaugural address by Ms. Nanda Jichkar <i>Mayor of Nagpur</i>
10h45	Group photo session
<b>11:00 – 11:45</b>	<b>Introduction session</b>
	<ul style="list-style-type: none"> <li>• Why this workshop?</li> <li>• Mobilise Your City Programme : an introduction</li> <li>• Developing a shared vision: What is your vision for Nagpur?</li> <li>• Ice-breaking game</li> </ul>
<b>11:45 – 12:00</b>	<b>Tea Break</b>
<b>12:00 – 13:00</b>	<b>Nagpur mobility initiatives - What have we learned?</b>
	<ul style="list-style-type: none"> <li>• Presentation on <i>Smart City Initiatives</i> in Nagpur by NSSCDCL.</li> <li>• Presentation on <i>Comprehensive Mobility Plan &amp; Intermodality and Connectivity with Metro lines</i> by UMTC Team &amp; Mr. Mahesh Gupta, JGM-Multimodal integration.</li> <li>• Q &amp; A</li> </ul>
<b>13:00 – 14:00</b>	<b>Lunch Break</b>
<b>14:00 – 15:30</b>	<b>Participative Sessions:</b> Common vision of sustainable mobility in Nagpur
	<ul style="list-style-type: none"> <li>• Managing streets and roads to achieve mobility vision</li> <li>• Public transport and e-mobility</li> <li>• Planning methods and links with urban development</li> </ul>
<b>15:30 – 15:45</b>	<b>Tea Break</b>
<b>15:45 – 17:15</b>	<b>Toward an Overall Roadmap for MYC activities in Nagpur</b>
	Summary of activities across the thematic groups.

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**17:15 – 17:45**

**Closing Session**

- Conclusions of the findings of the day
  - Closing words by Dr Ramnath Sonawane
- 

**Restricted Task Force Committee: 29 August, 2018**

**14:00- 15:00**

**Brainstorming Session 1: Adaptation of the conclusions of the workshop to the Vision**

Particular attention that the first outputs of the Planning Workshop take into account Climate change mitigation actions.

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**15:00 –  
16:00**

**Brainstorming Session 2: Identification and validation of work packages**

Classification of the actions regarding their feasibility, their timeline (discussed during day 1) under “work packages” for AFD technical assistance.

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**16:30 –  
17:00**

**Closing Session**

- Conclusions of the findings of the day
  - Closing words by Ms Mayor, Dr Sonawane, Mr. Dixit, AFD
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## Annex 3 - Conclusion presentation on 29/08/2018

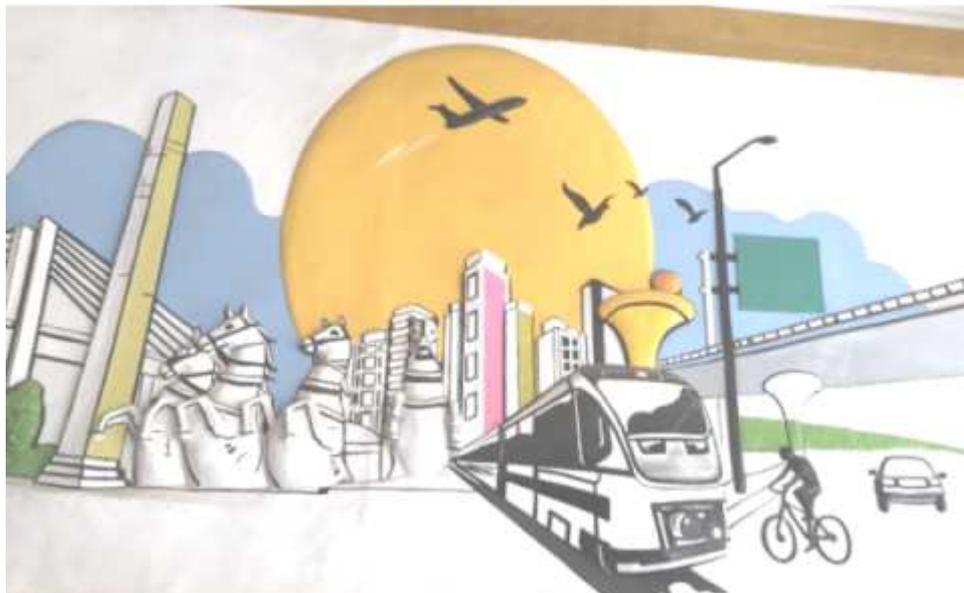


### *Planning Workshop for the 'Mobilize Your City' Programme*



Wednesday, August 29th 2018

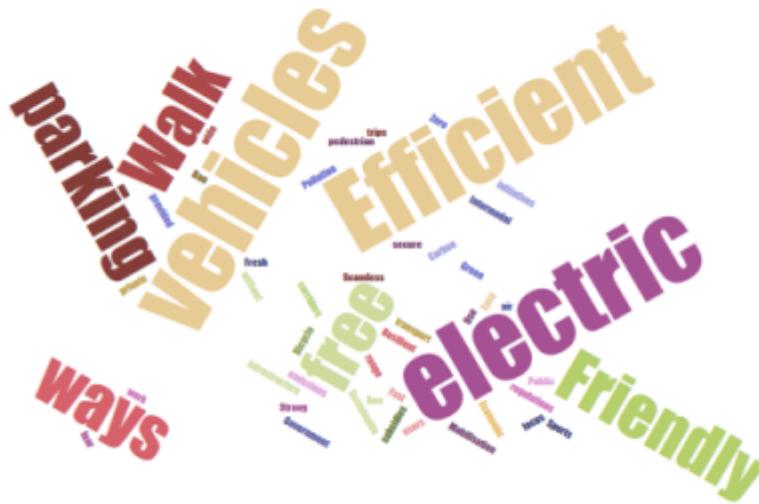
## Nagpur 2030



- What will be Nagpur's defining image?



- How will we move around in Nagpur in 2030?





## Mobility initiatives for Nagpur



## Mobility Elements of the Smart City Initiative



# Nagpur Comprehensive Mobility Plan (CMP)



## A glimpse at other ongoing initiatives



## Nagpur 2030

Maharashtra, India  
Over 2.5 million inhabitants

- Thanks to a very efficient UMTA and a highly integrated transport system...
- ...Nagpur has become a world class reference for urban mobility
- A peaceful yet vibrant high-tech powerhouse at the heart of India's economy and identity



## Let's organize Nagpur's mobility transition to 2030...







### Managing Streets and Roads to Achieve the Mobility Vision

#### Problems

- Design
- Maintenance
- Operations during construction
- Special needs (schools, hospitals, ...)
- Enforcement (traffic, encroachment, parking...)
- Civic discipline/awareness
- Consistency of signalling

#### Proposed Solutions

- Public awareness (*potential for MYC support: develop campaign*)
- Coordination between institutions
- Knowledge sharing (*potential for MYC support*)
- Pilot/demonstration activities (*potential for MYC support on selected locations*)

### **Public Transport and E-Mobility → Collective Transport and Eco-Mobility**

#### Problems

- Inadequate level of service (capacity, frequency, timeliness, cleanliness...)
- Last-mile connectivity and coverage
- Pollution, safety and noise
- Mental blockage
- Unclear priority for bus transport at policy level
- Out-of-pocket expenditure for auto-rickshaw

#### Proposed Solutions

- Clean vehicles and strong emissions monitoring (**potential for MYC support**)
- Higher level of service and improved coverage
- Improved passenger information (**potential for MYC support**)
- Intermodality and seamless connectivity (**potential for MYC support**)
- Public awareness (**potential for MYC support**)
- Proactive policy and financial incentives to e-mobility
- Charging systems deployment

### **Planning Methods and Links with Urban Development**

#### Problems

- Lack of awareness/participatory approach
- Data sharing/leveraging the data
- Implementation gap
- Limited capacity
- Lack of institutional coordination
- Limitations on legal status of land
- Enforcement

#### Proposed Solutions

- Activation of public spaces
- Capacity development
- TOD (**potential for MYC support: CDP revision**)
- Pilot/demonstration activities (**potential for MYC support on selected locations**)
- Single window clearance mechanism
- Roadmap for UMTA (**potential for MYC support: Knowledge sharing**)

### **3 priority areas for MYC activities**

- **Planning**
- **Promoting a culture of eco-mobility**
- **Implementing the vision at street level**

#### **Planning**

- **Contribute to CMP revision with GHG emissions module**
  - **Initial assessment**
  - **Measurement, report and verification system (MRV)**
- **Overall contribution to CMP process**
- **Ensure consistency with Nagpur CDP process**
- **Knowledge sharing (MYC, India, worldwide)**

## Promoting a culture of eco-mobility

- **Public awareness campaign on e-mobility**  
*... focus on positive impacts of e-mobility,*
- **Support to bus operations**  
*... especially during ramp-up of eco-bus fleet*
- **Develop « Nagpur Mobility App »**  
*...providing point-to-point user information*
- **Develop strategy on use of mobility data**

### Implementing the vision at street level

- **Define pilot area**  
*... eg Pardi Area-Based Development*
- **Ensure consistency throughout execution of works**
  - **During construction phase**  
*...Impact mitigation and mobility management*
  - **Smart design carried through all the way to execution**  
*...eg integrate NMT, parking, recreational use...*
  - **Cater to special needs at micro-level**  
*...eg schools, hospitals...*
- **Showcase world-class solutions once executed**
- **Roll out implementation strategies / lessons learned**

