



# Nagpur and Karlsruhe work together to develop Public Bike Sharing (PBS)



## Introduction

Karlsruhe is working with Nagpur to integrate PBS as a mobility solution in the Indian city, in order to strengthen public transport and provide more transport options to citizens.

## Executive Summary

Nagpur is the third largest city and winter capital of the Indian state of Maharashtra. The population of Nagpur is around 3 million (2019 estimate) and the city spreads across 228 km<sup>2</sup>. The city is also known as the Orange City for being a major trade center for oranges cultivated in large parts of the region.

Karlsruhe is the second-largest city of the German federal state of Baden-Württemberg, after its capital of Stuttgart, and its 316,000 (2019) inhabitants make it the 21<sup>st</sup> largest city in Germany. It covers an area of 174 km<sup>2</sup>. Karlsruhe is an important economic hub with good connections to other European regions.

As part of the IUC programme, Nagpur Municipal Corporation is working with the City of Karlsruhe to conceptualise and implement a pilot project on PBS. The key challenge in Nagpur is the absence of PBS infrastructure as well as of favourable financing models to integrate PBS in city-wide transportation. Significant progress has already been made in this regard, as a result of mutual visits since 2018 as well as sharing key information regarding the baseline scenario, major challenges and available solutions. In February 2020, a workshop on PBS was conducted jointly by the two cities and IUC-India in Nagpur, while a Detailed Project Proposal is under development. The cities are ready to kick-start the first pilot project and monitor progress to better implement the activities in a phased manner.

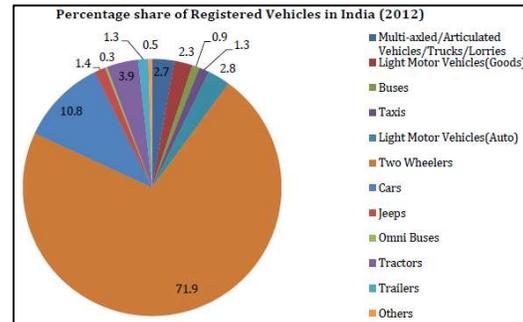
The mayor of Nagpur, Mr. Sandip Divakarrao Joshi mentioned: *“Efficient transportation is crucial to the economic development of any city. We along with our active team are devoted to explore various innovative means to integrate in city mobility services to present an efficient and exemplary public transport service model to our citizens”*

The mayor of Karlsruhe, Mr. Frank Mentrup during his recent visit to Nagpur mentioned, *“Nagpur is a progressive city and is open to form new partnerships and alliances. Both cities are working closely to share experiences and best practices as well as to learn from each other within their respective urban conditions”*



## Key Challenges and Potential Solutions

The present transport system in Nagpur is a mix of public and private transport and does not provide an all-inclusive transport solution for the city. Citizens find the existing public transportation inadequate and not very comfortable to commute/travel. Therefore, a lot of people prefer private vehicles instead of public transport. Private transport mostly consists of two-wheeler motor bikes, cars and other private vehicles, which create traffic congestion in the city. In addition, this also adds to the deteriorating air quality in the city and to greenhouse gas emissions. The list below summarises the key transport challenges in Nagpur:



- Inadequate public transport
- Preference of private vehicles over public transport
- Traffic congestion
- Increasing greenhouse gas and other emissions
- Increasing level of pollution in the city

Considering all these challenges, Nagpur expressed an interest to participate in the International Urban Cooperation programme and was paired with the German city of Karlsruhe to work on urban mobility. In July 2018, the Nagpur Municipal Corporation delegation made the first exchange visit to Karlsruhe focusing on public transport and reviewing the practical aspects of PBS. The exchange visit by Karlsruhe delegates to Nagpur took place in November 2018. The experts from Karlsruhe reviewed the planned pilot PBS project and provided their observations on technical, legal, financial aspects of the project. A mobility expert from Nagpur also visited Karlsruhe in July 2019 in order to better understand their PBS programme.

A workshop was also held in Nagpur in February 2020, where the concerned stakeholders from Nagpur, Karlsruhe, IUC-India, Grant Thornton, a PBS provider, etc. deliberated upon the suitable PBS model for Nagpur, as well as various techno-economic aspects of the project. The report prepared by Grant Thornton on the topic set the framework for the discussions.

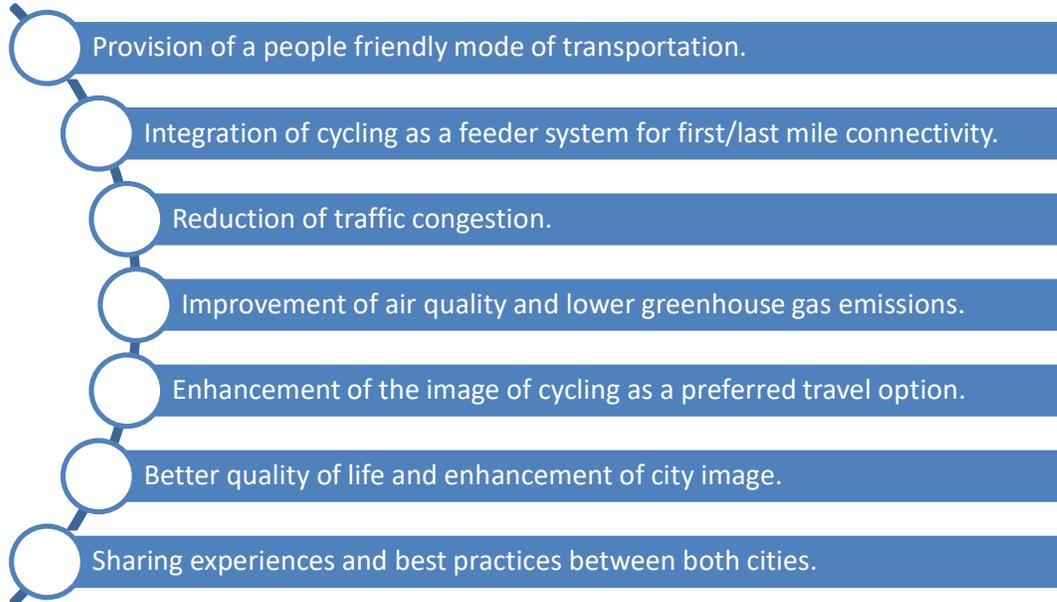
The PBS project is expected to be further supported with the preparation of a Detailed Project Proposal with contributions from Karlsruhe, IUC-India and other key stakeholders. The proposal can set the basis for the identification of a suitable PBS service provider for Nagpur, financing options, and eventually implementation of PBS on a wider city-wide scale. Karlsruhe will continue to play a key role as an advisor for enabling favourable policies in Nagpur for a people-friendly transportation solution in the Nagpur.

All these activities are brought together in a Local Action Plan (LAP) where both the cities have provided their respective inputs with regards to the current challenges, opportunities, lessons learned, available solutions and ways forward.



## Results and Impact

The following results are expected from the cooperation between Nagpur and Karlsruhe:



The action could support the Nationally Determined Contributions (NDC) of India and directly address the following United Nations Sustainable Development Goals (SDGs):



In addition, the action directly relates to the priority themes of urban mobility, air quality and climate adaptation prescribed by the European Union under its various urban agenda themes. The Urban Mobility partnership is supported by the city of Karlsruhe as Coordinator.

In terms of synergies, both cities have expressed their interest in participating in the “Global Municipal Experts” programme introduced by GIZ to deploy an expert in Nagpur to carry out the PBS and other related initiatives.

In conclusion, the IUC programme has provided a beneficial platform to both the cities to initiate scoping activities with regards to selecting a topic of cooperation, identifying suitable experts and preparing a very good Local Action Plan, which will form the basis of a continuing partnership. Going forward, both cities are expected to work on the implementation of the first phase of PBS program in Nagpur.

Overall, the cities of Nagpur and Karlsruhe have demonstrated a high level of commitment and have expressed their willingness to continue their collaboration beyond the termination of the IUC project.



## Lessons Learnt

- Public Private Partnerships – These partnerships represent key instruments for the implementation of sustainable urban development programs in cities. Concerned authorities should make use of this tool in the most efficient manner so that this can be widely utilised and benefits could be maximised.
- Convergence amongst different departments – Transportation is a state subject therefore involves the participation of many institutes and relevant departments. Though all of these stakeholders have a specific role to play in the overall transport regime, one should be able to understand and find out possible concurrence in the objectives, targets and activities of these institutes/departments so that coordinated efforts could take place both for policy formulation as well as implementation of innovative projects.
- Innovative Financing Tools - Finance is essential for the implementation of any urban development project. It is even more challenging when the cities explore new areas of sustainable urban development. Therefore, it is useful to explore and devise new and innovative means of financing.
- Adaptation of solutions as per the local needs – City pairings can provide beneficial ideas and best practices to Indian and European cities. At the same time cities should adapt the global best practices according to the local historical, administration, geographical, etc. contexts and requirements.

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## About IUC

The International Urban Cooperation (IUC) programme enables cities in different global regions to link up and share solutions to common problems. It part of a long-term strategy by the European Union to foster sustainable urban development in cooperation with the public and private sectors, as well as representatives of research and innovation, community groups and citizens. Through engaging in the IUC, cities will have the



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chance to share and exchange knowledge with their international counterparts, building a greener, more prosperous future. The IUC programme is an opportunity for local governments to learn from each other, set ambitious targets, forge lasting partnerships, test new solutions, and boost their city's international profile. Its activities will support the achievement of policy objectives as well as major international agreements on urban development and climate change, such as the EU Urban Agenda, the UN Sustainable Development Goals, and the Paris Agreement.



