

# From the Narrow Lanes of Agra to the BRT Lanes of Pune: 20 Years of the ITDP India Program

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In 1998, a cycle-rickshaw journey in the bylanes of Agra launched the ITDP India Program's work to improve sustainable urban mobility in India. Twenty years later, the India Program offers tangible transportation solutions to about 100 Indian cities at the state and national level, impacting the lives of over 150 million people.

## HUMBLE BEGINNINGS: MODEST CYCLE-RICKSHAWS

Back in 1998, the ITDP India Program's vision to develop a modern cycle rickshaw—to counter the growing threats of motor vehicular pollution—gave way to the India Cycle Rickshaw Improvement Project. This simple yet transformative project created rickshaw prototypes that were lighter, sturdier, and more comfortable for passengers and drivers. North Indian cities quickly adopted these models. Today, around half a million modern cycle-rickshaws serve 4 to 5 million trips daily and offer both a comfortable, zero-carbon transport option and a dignified livelihood to more than a million people.

## BUS RAPID TRANSIT: AFFORDABLE, FLEXIBLE, AND EFFICIENT MOBILITY FOR ALL

In 2005, the city of Ahmedabad invited the ITDP India Program to work on improving its bus transit. By 2009, the city launched Janmarg, the first bus rapid transit (BRT) system in the country. The 87 km high-capacity bus network became the model for other Indian cities, including Surat, Rajkot, and Indore.

Influenced by Janmarg's success, Pune and Pimpri-Chinchwad (twin cities in Maharashtra) created the Rainbow BRT to address their growing transportation needs. The Rainbow system effectively uses Pune's bus fleet and network, while also improving Pimpri-Chinchwad's connection to its twin city. Today, Rainbow operates along a 43 km network of bus-only lanes and a 50 km expansion is planned.

## COMPLETE STREETS: INDIAN CITIES WALK THE TALK

With the rapid growth in the number of cars on India's roads—210 million as of 2015—pedestrians and cyclists have been struggling for space and fearing for their lives. In a bid to tackle this inequity, the ITDP India Program introduced a Complete Streets program and worked with Chennai and other cities to improve cycling and walking conditions. The program redesigned streets with quality footpaths, separate cycle paths, safe pedestrian crossings, and on-street parking management.



A newly-constructed protected footpath in Chennai, India, a result of ITDP's advocacy.  
Photo: ITDP India

The Rainbow BRT in Pune & Pimpri-Chinchwad, India.  
Photo: ITDP India



Chennai also adopted India's first non-motorised transport policy, requiring that at least 60% of the transport budget is used to create and maintain walking and cycling infrastructure. Inspired by Chennai, Coimbatore adopted the Coimbatore Street Design and Management Policy—which will connect its major lakes and provide a 30 km network for walking and cycling.

The crown jewel, however, is Pune's ambitious Complete Street program. Modeled on the city's Urban Street Design Guidelines, with technical support from the ITDP India Program, the program proposes 100 km of street networks that prioritize pedestrians and cyclists. The first phase—on JM Road and DP Road—has been lauded nationwide, winning the Housing and Urban Development Corporation Award and the Volvo Sustainable Mobility Award in 2017.

### **PEDALING THE CONNECTIVITY BRIDGE**

To complement its Complete Streets program, Chennai added a Public Bicycle Sharing (PBS) system to bridge the gap between public transport and a commuter's final destination. The system is designed to promote cycling citywide.

Upping the ante, Pune planned a 400 km cycling network. In 2017, the city piloted a dockless public bicycle sharing system which will have 8,000 bicycles by 2019. Following Pune's example, Pimpri-Chinchwad launched phase-I of its cycle sharing with 600 bicycles and 35 bicycle stations.

Ranchi also adopted the PBS system. With 1,200 cycles, 120 docking stations, and an initial coverage area of 11.5 sq km, the city is working to increase the number of daily trips completed on bicycles—which stands now at 8%.

### **THE VALUE OF A PARKING SPACE**

When people are used to parking on the street for free, it can be difficult to implement a system that requires them to pay. Yet free on-street parking has led to a massive loss of revenue



The modernized cycle rickshaw in action, the first major project of ITDP India Program. More than 500,000 are still on the streets 20 years later.  
Photo: ITDP India

*continued on p. 39*

## Transport Access for Women

*continued from p. 15*

the most vulnerable road users.

ITDP and partners are working to ensure that this is a BRT system that takes into account the needs of women, children, the elderly, and people with disabilities. For society to grow and thrive, women in Cairo and beyond must have convenient, affordable, and safe options to access their cities' resources and opportunities.

## Mexico City's Buses

*continued from p. 25*

by traffic conditions. ITDP will consider including driver input and loading levels in future studies. A key part of this process will be translating the data into useful indicators for the people in charge of the day-to-day management and operation of the routes.

Through this experiment, ITDP learned that even a simple monitoring device can have a huge impact on the safety and efficiency of public transport systems. Ride-hailing companies already take advantage of this technology. These companies have been very successful in efficiently matching users and drivers, but they prioritize single vehicle trips, which could have adverse effects in terms of pollution and congestion. It is clear technology can play a key role in improving performance and reducing emissions. Can cities and public transport providers use these tools to improve the long-term sustainability and equity of our urban transport systems? It depends on whether collective modes of transport can become a viable and competitive option to traveling alone. These results prove that successful integration of technology will be key to improving transit service for millions of urban residents.

## Jakarta's Urban Villages

*continued from p. 29*

strategies for safer streets and better mobility, such as improved lighting, street safety designs, improving public transport service, and creating walking tours. These all have a much greater chance of success with local support, especially women who know their community so well. Women's groups are critical, as they are also advocates for vulnerable community members. In Jakarta, women are transforming former motorcycle routes into walkable streets to gather, work, and play. The Kampung project underscores how powerful women are in the planning of new urban mobility systems. ITDP Indonesia looks forward to our next step: training government officials to replicate our tools and methods for more neighborhoods in Jakarta.

## India Program

*continued from p. 37*

for municipal corporations across the country. The Chennai Corporation, for instance, stands to gain 550 million rupees per year if it charges for about 12,000 ECS (equivalent car spaces) of parking—a whopping 110 times increase.

The ITDP India Program raised this issue with several municipal corporations. In response, the Pune administration implemented a paid parking system. Ranchi's pilot parking management project, on the city's arterial MG Road stretch, led to a 12-fold monthly increase in parking revenue. Spurred by the revenue spike, the state of Jharkhand (of which Ranchi is the capital) passed parking regulations statewide.

### **END GOAL: BETTER STREETS, BETTER CITIES, AND BETTER LIVES**

After 20 years of working with local and state governments, the ITDP India Program has achieved widespread reform, including urban mobility policies in states like Maharashtra and Jharkhand; a transit-oriented development policy in Jharkhand; and the Sustainable Cities Through Transport initiative and the Smart Cities through Smart Streets program in Tamil Nadu.

Today, Indian cities find themselves at a crossroads. One path leads to a future where infrastructure fails to deliver and people are constantly trapped in traffic and battle pollution daily. The ITDP India Program looks toward a sustainable future where generations can walk, cycle, and zip around cities on public transit. It is committed to better streets, better cities, and better lives.