



Nagpur Urban Streets Analysis: New report highlights what's working for Nagpur streets and what's not

Date: July 07, 2025

Nagpur:

Can better street design actually make cities feel safer and easier to walk and cycle? In Nagpur, the answer is yes, but only on some streets.

These findings were revealed in the Nagpur Urban Streets Assessment Report, prepared Nagpur Municipal Corporation (NMC) in collaboration with ITDP India, released on July 07. This report presents a first-of-its-kind effort to understand how safe and accessible Nagpur's streets really are — from the perspective of the people who walk and cycle on them every day. The study covers seven streets: four that have been redesigned (Wardha Road A, Wardha Road B, Orange City Street, and Amravati Road) and three that haven't (Central Bazaar, Shankarnagar, Ring Road). The results?

Wardha Road A (Ajni Square to Rahate Colony) came out on top, with citizens (80% of the users) giving it high marks for walkability, cycling comfort, and safety. This clearly shows that hiring quality consultants and getting the design right makes all the difference. On the other hand, Orange City Street and Amravati Road, despite being redesigned, didn't fare as well (57% and 41% on user satisfaction), pointing to gaps in either design quality or implementation. The non-redesigned streets performed the poorest, with widespread concerns around broken or absent footpaths, unsafe crossings, poor lighting, and no space for cycling.

"This report is more than just numbers; it gives us a clear direction. For example, over 80% of people on Wardha Road said the street became safer and better after the redesign. That shows what's possible when we design streets for people, not just vehicles. At ITDP India, we're supporting Nagpur in using these findings to create safer, more accessible streets across the city," said Pranjal Kulkarni, Programme Manager, ITDP India. The assessment reinforces Nagpur's commitment to making streets safer for all, particularly vulnerable users like children, the elderly, and persons with disabilities.

These findings from the four revamped streets

(Wardha Road A, Wardha Road B, Orange City Road, Amravati Road) form the first section of the report (Impact Assessment), which focuses on assessing the impact of redesigned streets.

The second section presents a situational analysis of seven major streets. This was done on both redesigned and non-designed (Central Bazaar, Shankarnagar, Ring Road), using a triangulated methodology comprising design audits, observation studies, and on-ground perception surveys with 330 citizens. These findings have been summarised by assigning a score out of 30 to each of the seven streets.

The results show that the city streets are mixed bag with some streets like Wardha Road from Ajni to Rahate Colony scoring the highest securing a score of 24.7 on 30, and other streets like Ring Road scoring as low as 6.5 on 30, indicating urgent need for city-wide measures!

“The findings serve as a reminder that there is still work to be done. On some streets, such as the Ring Road, 100% of people were forced to walk on the road because the footpaths were not walkable. Even on redesigned roads, more than half of the people still felt unsafe while crossing. We believe, Nagpur can fix these gaps through better street design, policy reforms, better planning practices, and on-ground execution,” said Siddhartha Godbole, Senior Associate, ITDP India

Comparative Analysis

The summary provides cumulative scoring based on all surveys for the selected streets. The intention of the table is to help us understand the severity of the need for intervention on the streets. The scoring of streets can be improved by intervening accordingly.

Rank	Street Name	Design Score (Out of 10)	Observation Score (Out of 10)	Perception Score (Out of 10)	Total (Out of 30)
1	Wardha Road A	8 Good	8 Good	8.75 Good	24.75
2	Wardha Road B	6.25 Unsatisfactory	6.25 Unsatisfactory	6.25 Unsatisfactory	18.75
3	Shankarnagar Road	4.25 Unsatisfactory	2 Poor	8.25 Good	14.5
4	Amravati Road	3 Poor	3.75 Unsatisfactory	5.5 Unsatisfactory	12.25
5	Orange City Road	4.75 Unsatisfactory	2.5 Poor	5.75 Unsatisfactory	13
6	Central Bazaar Road	1.75 Poor	0.5 Poor	4.5 Unsatisfactory	6.75
7	Ring Road	1.5 Poor	1.25 Poor	3.75 Unsatisfactory	6.5

Wardha road (Ajni Sq. to Rahate Colony Sq.) has performed well on all aspects. Wardha Road (Vivekanand Sq. To Jaiprakashnagar Sq.) and Shankarnagar Road have decent footpaths but require interventions to further enhance their usability. Streets like Central Bazaar (currently being undertaken through the Healthy Streets Programme) and Ring Road have fared poorly and require immediate attention.

Key Findings from report

1. Best-Rated Street among four redesigned streets – Wardha Road (Ajni Square to Rahate Colony Square):

This 1.3km stretch received the highest score across all evaluation criteria—design, observation, and perception. Over 80% of users reported improvements in walkability, cyclability, and safety. The presence of shaded, segregated non-motorised transport (NMT) zones and placemaking elements such as seating areas, and safe junctions played a critical role in the positive feedback. During observation studies, 100% of the pedestrians observed were walking on the footpath itself. The street, however, did face issues around vehicles being parked on the footpath, and lack of cycling infrastructure on some stretches.

2 Non-designed streets needing immediate improvement - Central Bazaar Road (Lokmat Square to Bajaj Nagar Square) and Ring Road

These streets scored the lowest due to the absence of continuous footpaths, encroachments, and poor construction quality. In Central Bazaar 100% of pedestrians observed were seen walking on the carriageway alongside the vehicle. In Ring Road, over 90% of pedestrians were forced to walk on the carriageway due to unusable or absent footpaths. Cyclists on both streets had no cycle tracks! Infact, on Ring Road there were 160 cyclists seen per hour, highest among all streets surveyed, making cycle track crucial part of the street! It is critical to note, NMC has already begun revamping Central Bazaar Road, and stretch from VNIT gate to Kachipura chowk is under transformation.

3. Over-Speeding Across the City:

Speed surveys conducted using speed guns revealed peak vehicular speeds of over 60 km/h on most roads, with some stretches (Orange City Road and Amravati Road) recording up to 75 km/h for two-wheelers. These speeds exceed national and international safe street design guidelines, drastically increasing the risk of fatalities. The ideal speed limit within cities should be around 30-40 kmph.

All speeds in kmph

#	Street Name	Peak Vehicular Speed Car	Most Recurring Speed Car	Peak Vehicular Speed 2-Wheeler	Most Recurring Speed 2-Wheeler
1	Amravati Road	54	51	75	48
2	Central Bazaar Road	62	47	57	47
3	Orange city Road	56	52	70	53
4	Shankarnagar Road	47	44	65	46
5	Ring Road	60	47	61	49.5
6	Wardha Road	63	58	61	58

A summary of vehicular speed data collected for surveyed streets in non-peak hours.

For cars, all streets recorded peak speeds above **45kmph**; Wardha Road, Ring Road, and Central Bazaar Road recorded the highest peak speeds of **60+kmph**.

2-wheelers speeds were observed to be even higher. Peak speeds at almost all streets was above **60kmph**; Amravati Road and Orange City Road had recorded peak speeds around **70kmph**.

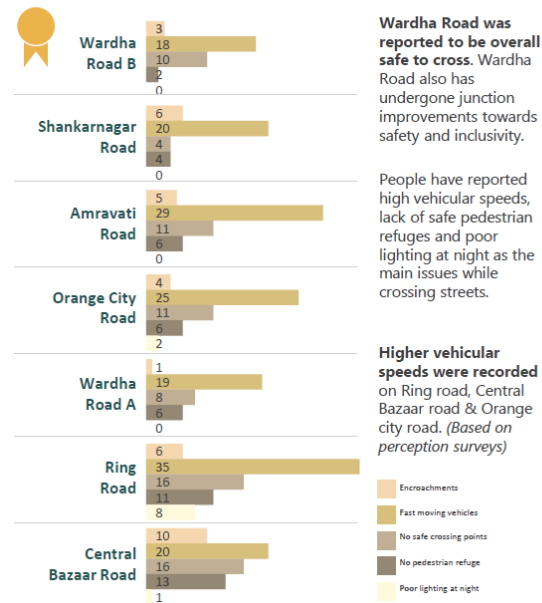
4. Junction and Crossing Issues:

At junctions, the fear of fast-moving vehicles, emerged as the biggest challenge for surveyed users. Of the 330 surveyed, 166 considered this as the biggest issue, followed by no safe crossing points. Poor junction design, lack of pedestrian refuges, and inadequate signal phasing make crossings hazardous, especially for elderly citizens and children.

Safety while Crossing

Safety is ensured by well-demarcated crossings with appropriate signages, pedestrian signal phasing with sufficient crossing time, and adequate visibility.

(Based on perception surveys)



5. Poor Lighting – A Gendered Safety Concern:

Inadequate lighting for pedestrians and cyclists was a recurrent concern, particularly on Amravati Road, Ring Road, and Central Bazaar Road. Poor lighting not only leads to low visibility but also increases the fear of crime and incidents of eve-teasing, as mentioned by women and elderly citizens.

6. Safety for Kids:

Only Wardha Road and Shankarnagar Road were found to be relatively safe for children to use. The former was perceived safe as it had segregated walking and cycling infrastructure, whereas the latter had only two lanes, making it narrower which in turn acted as a traffic calming measure. Most of the other streets lacked traffic calming measures and safe crossings, making them unsafe for school-goers and young pedestrians. More than 65% of respondents expressed safety concerns for children on city streets. This underscores the urgent need for Safe School Zones, as the majority of surveyed citizens did not feel streets were safe for school-going children.

To achieve city-wide street transformation, the report proposes:

1. Adoption of a dedicated Non Motorised (NMT) Policy: Leading cities in Maharashtra like Pimpri Chinchwad, Pune have NMT policies, making it critical for Nagpur to create one, in line with local goals to promote walkability, cycling, and road safety. This work has already commenced at NMC.

2. Development of a City-wide NMT Network Plan: This plan can look into creating interconnected networks that are safe to walk and cycle, so end-to-end commute is possible. This plan is already under preparation by NMC.

3. Need for Traffic Calming Policy: Every city has different streets like arterial roads/ local roads which need different approaches to reduce speed. A city-wide policy can help define road speeds on these various categories of road and also spell out the interventions needed to keep speeds under control.

4. Create Urban Street Design Guidelines: There are multiple agencies involved in road development in Nagpur like PwD, NMC, and Nagpur Improvement Trust. This common guideline will help create a uniform template for materials, design, and execution of projects which all agencies can abide by.

5. Implementation of Safe School Zones: The report through perception studies found that the majority of streets are perceived to be unsafe for kids. To improve safety, accessibility, and reduce traffic congestion around schools, Safe School Zone is a start.

About ITDP India:

ITDP India provides a wide range of technical and strategic support to national, state, and city governments—helping them design and implement people-centric transport systems. Our expertise spans across technical advisory, data-driven research, knowledge publications, and capacity-building programmes. We focus on enabling cities to develop efficient, high-quality public transport systems—including electric mobility solutions—while also prioritising safe and accessible infrastructure for walking and cycling. Our work supports traffic reduction mechanisms, low emission zones, and the development of integrated mobility plans that promote cleaner air, reduced congestion, and improved quality of life.

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Download the full report here: <https://bit.ly/NagpurStreets>