

Goal: Implementation of a holistic Safe Systems Approach for up to 50 % reduction in road crashes by leveraging Artificial Intelligence

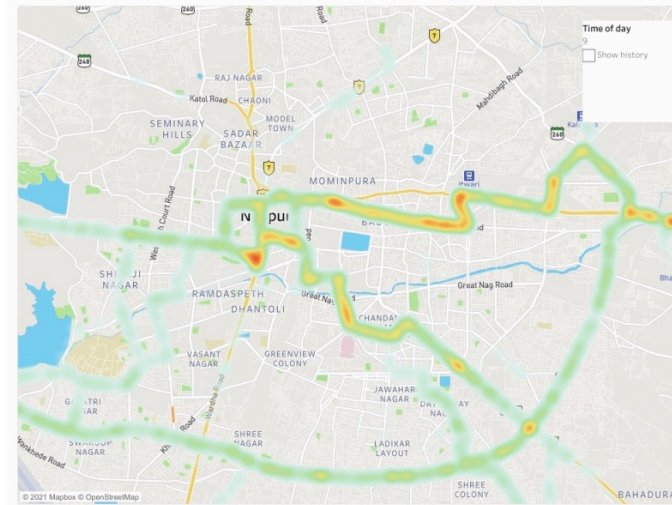
Vehicle Safety
ADAS + Driver Trainings

Camera focused on road

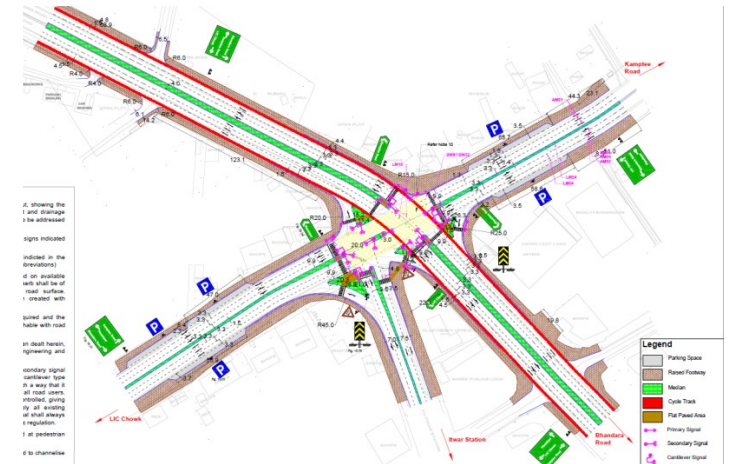
Display unit
(audio + visual alerts)



Mobility Analysis
GreySpot Map



Infrastructure Safety
Blackspots fixes



Executive Summary: iRASTE Nagpur & Telangana

Vehicle safety & Driver skilling

- In ADAS-enabled buses of NMC (150 vehicles), 60% drivers have shown sustained improvement in safe driving behavior.
- 20% lower accidents observed in the lead operator (Hansa Travels)
- 710 drivers trained in Defensive driving & ADAS. Eye camp & spectacle distribution conducted for 600 NMC drivers
- iRASTE is now India's largest study of ADAS for commercial vehicles (~450 Buses covering State Transport Bus & School Bus)

Infrastructure safety

- Remedial measure DPRs for all the existing 38 Black spots in Nagpur are delivered by CSIR-CRRI to the Road Owning Agencies (NMC, PWD, NHAI).
 - Estimates show that 66% reduction in road crashes & 40% reduction in fatalities can be achieved
 - Completed Pilot awareness programs at Greyspot and Blackspot. Initiated City wide programs with NGO, RoadMarc – Mr Raju Wagh

Mobility Analysis

- A new AI model to predict potential blackspots (ie; Greyspots) has been developed by the iRASTE team and is being validated by DCP Traffic.
- A iRASTE Model Corridor to showcase the multi-modal approach (Greyspot Prediction+ Remedial measures + Severity Index).
- We are also pioneering a ADAS + DMS approach on the Highways in Telangana to give insights on “near miss accidents” to the fleet managers for remedial action.