

Traffic Calming Strategies to Improve Pedestrian Safety in India

Summary of Project Activities

1. Brief description of the Project

The project aims at identifying six accident prone sites each in four areas of Jaipur (in all 24), studying the shortcomings and causes that make these sites accident-prone and then developing and testing holistic traffic calming strategies on a “large enough scale” for Indian city. The project intends to test and modify measures developed and found efficient from the safety point of view in Sweden and other highly motorised and developing countries. The aim is to find out whether these measures will have a desirable local impact on the behaviour of different kinds of Indian road users – primarily pedestrians and car drivers. Those measures that are found to be effective in Indian conditions will then be summarised in a manual for the Indian police personnel, transport personnel, planners and engineers suggesting remedial road designs that would help in calming traffic. No such manual exists till date in India.

II. Activities

- 1) Formation of Indian team and one Swedish team.
- 2) Designing of the ‘Evaluation and Training module’.
- 3) Training of the Indian team: The Indian team will be trained to select the six accident-prone zones each in four different areas of Jaipur from the data collected from police/authorities. The Indian team will then be trained by the Swedish and the Delhi I.I.T experts to study the shortcomings in the selected areas by using the training module developed by the experts.
- 4) Research: The Swedish team in collaboration with the Indian team will then study the defects of the selected areas. From the analyses of the results and findings, different remedial measures will be proposed for testing in only one accident prone zone in each of the four areas, i.e, total four zones. The first set of traffic calming measures effective for Jaipur would be formulated. Simple measures that do not require time/high costs and can be installed/removed would be recommended and tested. The Swedish team in collaboration with the Indian team will once again study the effects of the changes implemented by making ‘after’ studies, some time after the implementation of the measures.
- 5) Expert Assessment
- 6) Outreach Workshops: One workshop is proposed to be organised in Delhi, Kolkata, Mumbai, Bangalore and Jaipur, in which the findings of the ‘after’ studies or/and the results of the “expert assessment” will be presented. Local authorities, experts, policy/decision makers of that region will attend the workshops.
- 7) Traffic Calming designs: Based on the findings, discussions and feedback from the workshops, the first proposed set of efficient designs would be revised and circulated to get final views on the feasibility of the proposed design and content of the manual.
- 8) Documentation & Distribution of the Manual.

Work Programme and Methodology

1. Coverage: The Jaipur, which has been selected for implementing the project has the CUTS' head-office located, where all the staff persons and a fully developed infrastructure with well equipped office is available. This would facilitate cooperation of local policy/decision makers, which is an important requirement of the project. Four sites in Jaipur representing typical safety problems for pedestrians and cyclists would be finally scrutinized out of the total twenty-four selected initially on the basis of data collected from the police departments.
2. Teams: An Indian team would be dedicated to the city and the team would comprise two civil engineers, one or two police personnel, a state transport representative, a psychologist and a local area representative, which makes six different local area representatives for the city, besides CUTS representative. The Swedish team will comprise a team leader, Prof. Christer Hyden or a replacer, two members of the field analysis team and two trained civil engineers.
3. Training: The CUTS' in-house team will first be trained by the I.I.T professors on how to select the accident-prone areas from the data collected from police. The Indian team will then be trained by the Swedish and the Delhi I.I.T experts to study the shortcomings in the selected areas by the training module developed by the two teams. The study module will include behavioural studies, speed measurements and conflict studies.
4. Research: The Swedish team and the I.I.T Delhi team will first design the Evaluation and Training module which will be used to study the defects of the selected sites. The Swedish team in collaboration with the Indian team will then study the defects of these areas. Parts of these sessions will be video recorded.
5. From the analyses of the results and findings, different remedial measures will be proposed for testing. The first set of traffic calming measures effective for Indian cities would be formulated. Simple measures that do not require time/high costs and could be installed/removed would be tested.
6. The Swedish team in collaboration with the Indian team will study the effects of the changes implemented by making 'after' studies some months after the implementation of the measures. These observations will be identical to the earlier study. Even these sessions will partly be video recorded.
7. Expert Assessment: It is realised upfront that implementing changes could, in some cases, be constrained by budgetary and/or other factors. In such cases, it is proposed to organise 'expert assessments.' Expert assessments are proposed to be organised through questionnaires (which will be based on the findings of the site-analyses) to experts worldwide. The questionnaire to experts worldwide will include estimations of possible safety effects of different kinds of proposed measures that are specific to India.
8. Outreach Workshops: One workshop each is proposed to be organised in five selected cities in which the findings of the 'after' studies or/and the results of the "expert assessment" will be presented. Local authorities, experts, policy/decision makers of that region will attend the workshops. The presentations in the workshops will involve animations built on video recorded events from locations that have been studied. The main idea behind the use of animations will be to facilitate a discussion that is built on facts rather than "general ideas".
9. Based on the findings, discussions and feedback from the workshops, the first proposed set of efficient Traffic Calming Designs would be revised and circulated once again to the people who attended the workshops in the five cities, to find out their final views on the feasibility of the proposed design and content of the proposed manual.

10. The Manual: The final manual will be documented taking in all the feedback and harmonising the measures. The final version will once again be presented to the Advisory Board before distribution to the concerned departments such as transport, traffic etc. and to the Municipal Corporations in all the five cities in India.