VOICE SITES

ITALY

IMPROVING VRUs SAFETY AT INTERSECTION MARCHE - TARAMELLI, MILAN

The study was conducted by Stefano Cara, civil engineer student at the Politecnico di Milano in conjunction with his course professor.

Introduction

The safety of vulnerable road users in this intersection is compromised by a number of factors, including:

-Shared space with cars, pedestrians (including most vulnerable ones such as children and elderly people), trams, buses, scooters, motorbikes, and a few cyclists (Pic.1; 2; 3)
-Parked vehicles obstructing visibility at the intersection; and illegal parking causing pedestrians to walk on the road. (Pic. 4)
-Many lanes to cross for pedestrians. (Pic.5)
-Tram stops hardly visible for car drivers. (Pic.6)
-Unpredictable drivers' behaviour.
-Poor traffic light phasing for pedestrians.



Picture 1



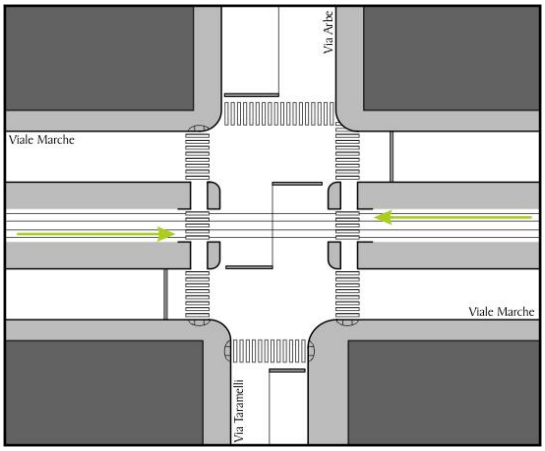
Picture 2



Picture 3



Picture 4



Picture 5



Picture 6

There is a high volume of car and other motorised vehicles' traffic and tram traffic at this site.

Suggested improvements

Pedestrians:

Pedestrian crossings should be rendered highly visible and they should be placed according to existing pedestrian courses to encourage pedestrians not to cross outside provided crossings. It is important to ensure that pedestrian crossings are also placed close to public transport stops to avoid pedestrians to cross outside of crossings to 'catch' their bus or tram.

Pedestrian islands should also have sufficient space for pedestrians to wait and should be designed for use by disabled people (for example with guide strips on the ground for visually impaired people).

Two-wheelers:
In this location no provisions have been taken for cyclists because there are no bicycle paths in the neighbourhood. At the intersection itself there are no advance stopping lanes for cyclists and no separate traffic signal for cyclists. For the safety of motorcyclists, the road layout itself must not contain dangerous elements.

General safety:
It is important to ensure that all vehicle maneuvers allowed in this intersection near vulnerable users (pederstrians, two wheelers, etc.) are visible and understood by all users.