

## RTD Fact Sheet Template

SCHOOL MOBILITY IN BOLOGNA CITY RTD FACT SHEET	
Reference Measure	BOL 5.2 Safer Road to School
Date of Submission	31/1/2011
Date of Approval	01/09/2011 (by ISIS)
Author(s)	Giorgia De Chiara – TeMA
Editor(s)	Loredana Marmora (by ISIS)

### Context and Purpose

The “Safer Road to School” project is one of the provisions of the National Urban Traffic Safety Plan and it is strictly related to the enhancement of pedestrian mobility. The “home to school” safe trips and the mobility management policies foreseen in the safety plan and addressed to young people, will contribute to increase their moves’ safety and also they will contribute to give to the future generations a bigger knowledge of the criticality connected to the traffic and to make them aware of the alternative possibilities to the car and the motorcycle. The measure BOL 5.2 wants to promote more sustainable behaviours for future generations by creating a synergy between parents’ (workers) and children’s (student’s) daily movements, by completing a project of safer road to school already started and by demonstrating innovative activity aimed to raise pupils safety in the scenario of Bologna.

The measure comprehends two main activities: pedibus and road education addressed to young people. The RTD activity consisted in a preliminary research aimed at investigate the school mobility in Bologna (by involving directly all kind of schools: nurseries, kindergartens, elementary and high schools) and to choose a group of schools to involve more directly in the Mimosa project.

### Description of RTD Activity

The research realized by Camina Association (Association that promotes a use and conception of the city near to children and teenagers) involved nurseries, kindergartens and elementary schools of the entire Bologna territory, while considering the city subdivision in homologous areas it has been possible to involve a more narrow sample of secondary schools representing the physical, social, environmental reality of the city.

In the survey addressed to kindergartens and nurseries (15 kindergartens and 17 nurseries) the questionnaires were submitted to parents (sample 770 families); in the survey addressed to the 16 elementary schools the questionnaires were submitted also to pupils (sample= 352 children, 335 parents) in order to investigate not only the mobility habits and behaviours, but also the gaps between parents expectations and children imagination upon mobility topics. The junior high schools’ survey (4 schools; sample = 126 children) was addressed only to children.

The survey investigated the mode of transport chosen to go to school, the choice motivations, the barriers to use public transports or alternative “sweet” mobility modes (e.g. bike or walk) and the conditioning factors: hurry, weather conditions, distance covered. In addition mobility expectations were investigate (which mode of transport will be used, in years to come, to go to the next schools, as junior high schools and high schools).

Another important topic to be investigate in order to promote sustainable mobility (by walk, by bus, by bike rather than by car or school bus) is the children’s level of *autonomy*: the person who take the student to school or with who him/her go to school, the possible difficulties encountered during the round trip (heavy schoolbags, possibility to meet unknown persons, possibility to go the wrong way, weather conditions, no bus stops), the level of difficulty perceived of going alone.

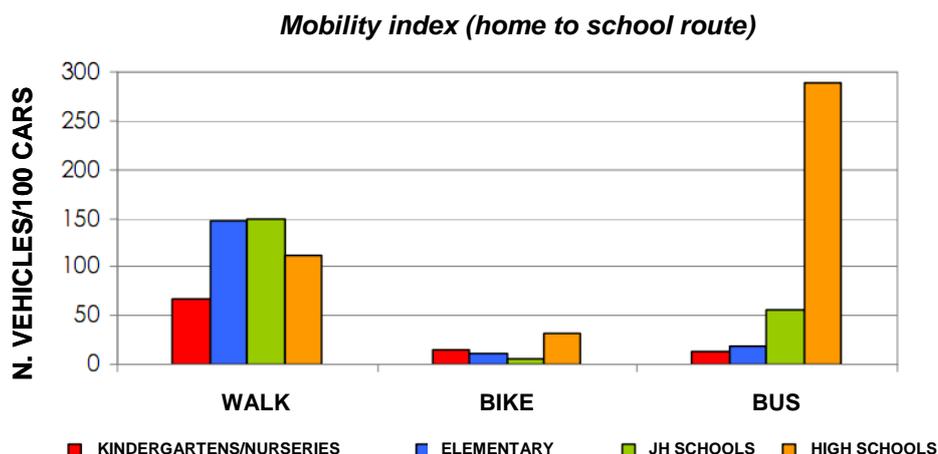
The second part of the research was addressed to 5 schools to choose and to involve directly on the Mimosa project, where realize the project of safer road to school also considering the accidents data next to the schools and the indications obtained directly from Bologna Municipality.

For each school it was investigate: the road conditions, the pedestrian and cycle accessibility, the

road markings, the traffic signs, the infrastructures and technologies, the bus lines in proximities and the distance, the parent's risk perception (places contiguous to the school more dangerous from the pedestrian and cycle accessibility point of view) and the number of accidents happened near the school.

## Outputs and Results

Car is the most utilized way of transport (49,84%) to take children to nurseries and kindergartens, 34,75% to take children to Elementary schools, 31% to take him/her to junior high schools. For elementary and junior high schools the most common mode of transport is walk (51,03% and 46%). The calculated index *number of means of transport/100 cars* representing the mobility behaviours related to the cars use, is adopted in order to evaluate the success of the interventions and politics foreseen in order to promote PT use and cycle/pedestrian mobility.



The comparison between the number of children bikers and the number of children car passengers demonstrates the total disinterest to the bicycle. In fact, every 100 children car passenger, 15 use the bicycle in order to reach the nursery, 12 the elementary schools and 5 the junior high schools. This index concurs to confront and to monitor during the years the analyzed behaviours. In order to strengthen imaginary and the use of the bicycle, it is necessary to intervene not after the 11-12 years, that is when the number of children who wish the bicycle is equal to that one that wish the moped.

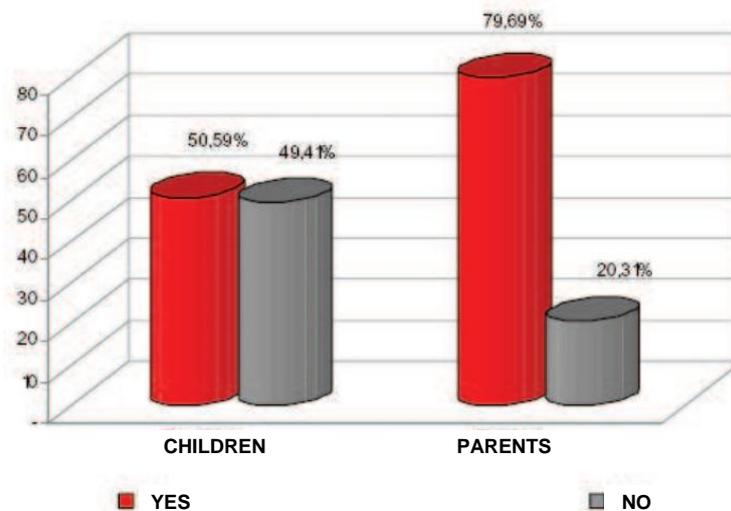
Data show a worrying reality: 94,57% of children (elementary schools) are taken to school by the parents. The majority of the schools hand children only to parents or to adults with parents' delegation.

Considering that often parents consider traffic dangerousness as one of the obstacles to the children autonomy and since this aspect is connected (although not exclusively) to the physical conformation of the city spaces, it has been decided to evaluate accessibility to schools. The obtained results, from "good or bad accessibility", connected to the families behaviours, show how the infrastructure, and the services dedicated to the sweet mobility, even if thought indispensable, are not necessary and sufficient conditions. The children autonomy related to home to school movements is impeded above all by *lifestyles and people fears*.

There is a cultural resistance and difficulty to change the common way of life of citizens: it is very difficult to persuade parents and schools to allow children to go to school and come back alone. Also school regulations state that children must leave the school with an identified/known adult.

On the contrary, children fell to be up to go to school alone or with friends (only 15% of children don't fell capable of going alone). This percentage increases were the car use is bigger (the car use seems to be cause and effect of children inexperience and sense of inadequacy). Parents perceive more the difficulties than their children do.

***It is difficult to go to school alone? (do you think it is difficult for your child to go to school alone?)***



## Resulting Decision-making

The RTD analysis represented the necessary recognising phase of the measure in order to have a complete view of the school mobility state of the art and to investigate the major barriers to handle and the drivers to use in order to implement the measure. The selection of the school to involve in the Mimosa project favoured opportune contexts:

- the schools Silvani and Marsile (Navile quartier) even if characterized by a huge car utilization are located in a minimal traffic area (important requirement in order to improve children autonomy);
- the school Romagnoli and Tempesta reported a good pedestrian school mobility and autonomy rates (this data and the urban space structure is a favourable condition for increase the use of the bicycle);
- the Gualandi school is located in a complex urban contest where PT use could be the mode of transport to improve in order to reduce the car utilisation.

## Lessons Learnt

The study evidenced that infrastructural interventions for sustainable mobility, for private traffic moderation, for public transport strengthening and development, should be necessary joined by interventions to contrast the cities' *cultural* and *physical* subjection to the car.

The success of the measure can be obtained only by a synergy between different subjects (public administrations, schools, mobility agencies, local health authorities, associations, families) in order to handle the cultural barrier and the life style patterns that hampers the process.

The promotion of a more sustainable mobility has social, environmental and economical effects and is an essential condition to improve children and teenagers quality of life.

## Cost-effectiveness

The RTD activity, realized by involving an external company skilled and focused on pedestrian mobility (the Italian National association Camina) produced the intended results also by providing important information considering social, physiological and cultural aspects proper of the Italian life stile patterns. This reading position was essential to make 5.2 measure's informed decisions.

## Dissemination and Exploitation

The RTD was a complete study of the school mobility involving a significant sample of schools. Even if the research had a specific key to the reading of the data obtained, providing an exhaustive state of the art it could be considered as an important landmark for all initiatives referred to schools mobility and children mobility in Bologna.