

# Barcelona, a safe and sustainable mobility

Barcelona City Council is committed to delivering safe and sustainable mobility by implementing a new set of policies to reduce road accidents, including:

- establishing Green zones for parking.
- promoting cycling (through the 'Bicing' public bikes),
- developping the nighttime public transport network (metro and 'Nit Bús'),
- creating guiet traffic zones (with a maximum 30km/h speed limit),
- · awareness-raising, monitoring and enforcement,
- traffic management,
- · immediate diagnosis of accidents leading to improvements in infrastructure to enhance road safety.

To achieve a safe and sustainable mobility, a global vision and strategy for mobility management and road safety are needed. To this end, the City of Barcelona has been coordinating the various bodies that operate in the area of prevention, security and mobility (Mobility experts and Guardia Urbana – the urban transport police).

Barcelona has established an Urban Mobility Plan (PMU), the PMU is a mobility planning tool that analyses the current mobility context and outlines the strategic actions to be taken. The PMU pulls together the various policy areas of mobility in order to achieve a comprehensive reflection on a new urban model for the city. Among all policy areas of mobility, road safety has a special significance that makes it a subject of particular attention.

Barcelona City Council presented its first local Road Safety Plan in 2000, which clearly spelled out the city's concern and desire to define accident reduction and road safety policies for the city. The second local Road Safety Plan (2004 - 2007) aimed at introducing a new culture of road safety. In the third local Road Safety Plan (2008 - 2012), the City Council defines the priorities and actions to address urban road accidents

It should be noted that in 2001 the Barcelona City Council signed up to the European target of reducing the number of road fatalities by 50% between 2000 and 2010.

### Accident rates in Barcelona

In 2008 there were 9892 traffic accidents in Barcelona (1148 less than the previous year), Involving 8948 casualities (the lowest figure since 1989). There were also 3267 damaged vehicles less than in 2000, which represents a reduction of approximately 24%. There were 31 fatalities (23 fewer than in the year 2000), which represents a reduction of approximately 43%.

Despite this general reduction in accidents in Barcelona, the number of motorcycles involved in road accidents has increased significantly. This may be explained by the change of rules introduced in October of 2004, which allows holders of the B driving licence, with a minimum of three years experience, to ride motorcycles up to 125cc. without any prior training or other requirement. This has led to a sharp increase in the size of the motorcycle fleet.

## Early recording of accidents as first element in the chain of prevention

On 1 January 2002, after a year of cooperation between the Municipal Institute of Informatics (IMI) and the Accident Unit of the Guardia Urbana of Barcelona, a new IT application was launched for the management of traffic accidents.

This management system is a dynamic and interactive tool based on a constant exchange of information between users, who can manage the information and transform it into knowledge, help in the immediate detection of a specific problem and facilitate its early resolution. It is a database which contains the data gathered on the ground on a daily base. This is then integrated into a graphical design software.

The main feature of the management system is to allow the geocodification of the point of impact and to obtain the exact geographical coordinates of the point of collision, pointing the concentrations of accidents with a high precision. It facilitates the task of making the technical reports, reduces the administrative burden, and allows devoting more time to the citizen and to the analysis of the causes of the accident. Moreover, it delivers a diagnosis of the accident, facilitates decision-making and assesses the actions carried out.

The system increases the quality of the services provided by the administration to the citizens; facilitates IT access to the technical reports by those natural or legal persons who have the right to access it and who have previously registered on the system (eg. insurance companies and victims).

An agreement has recently been signed with the administration of Justice, which gives them the opportunity to consult the traffic accident reports through computer access. The reports will be made available soon on a restricted area on the website of the city of Barcelona where judges and prosecutors will be able to access it.

#### Areas of concentration of accidents

The collection and electronic storage of data of all accidents that have occurred in Barcelona enables a more precise analysis and dissemination of data on accidents.

The management system automatically locates the black spots. With this information, the Accident Unit prepares an information folder which is annually transferred to the Territorial Units and the Directorate for Mobility Services, to take appropriate preventive measures. Once the black spots have been identified, corrective actions are taken to improve safety at these spots.

Thus, this management system has allowed for more and improved coordination between the Directorate of Mobility Services and the Guardia Urbana of Barcelona.

# Improvement of the Urban Environment for better road safety

Having all information on traffic accidents in a single database has led to the creation of another IT tool (under development), which will automatically integrate the phases of problem identification, definition of objectives and tasks, an implementation plan, monitoring and evaluation.

# Impact of the traffic accident management system on the accident rate

It is now certain that urban road accidents should be treated differently from those which occur on extra-urban roads because their causes and effects are different. It is also true that accidents in the city of Barcelona are linked to the city's infrastructure, human density, quantity and type of journeys. In order to prevent an accident, it is necessary to identify the problem, define the objectives and actions to be carried out, execute the planned activities, monitor and finally evaluate.

The management system has created a better and immediate understanding of the specific problems of the city. Consequently, Barcelona City Council has taken measures to reduce the number of accidents in an effective and efficient way. One example of this are the improvements made in the urban environment during 2008 in various parts of the city where a specific problem had been identified. The accident rate in these areas was consequently reduced by 28% with minor financial investment.

## The traffic accident management offered by Barcelona to other municipalities

Since accident prevention is everyone's responsibility and it is important to work together and to share knowledge and analytical tools, Barcelona City Council has given the opportunity to all other Spanish municipalities to join for free the management system.

Several municipalities have shown an interest in the system some of them have already implemented it such as La Laguna (Canary Islands), A Coruña (Galicia) and Badalona (Catalonia). In addition, the government of the Canary Island has recently signed an agreement with Barcelona City Council to use the management system in all local police stations. Cities such as Murcia, Elche, Santiago de Compostela, Girona, Malaga, Alcobendas, and Palma de Mallorca are also considering using this application.

This same offer is extended to all cities that are interested in the management system.

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