

VOICE SITES

SPAIN

Better conditions to achieve lower risk for pedestrians in the intersection Plaza España – Av. Reina M^a Cristina in Barcelona

Introduction:

According to the information on the traffic accidents in 2005 in the Plaza España area, provided by the police, it was found that in and around the pedestrian crossing of Av. Reina M^a Cristina near to Plaza España, a pedestrian risk area emerged.

Risk factors analysis:

As a result of this information and the visual observations the following aspects were established:

- The carriageway is too large (4 lanes per direction) in a street with low traffic flow. The drivers are tempted to accelerate too much due to impression of long way ahead, largeness and space free of obstacles
- About 5 % of the pedestrians near the pedestrian crossing (controlled by traffic light) pass outside the crossing -towers side- due to existence of walls for the metro exit just in front of pedestrian crossing
- About 20 % of the pedestrians cross outside the signalised pass -Plaza España side- due to the location of the crossing. The itinerary for the pedestrians is not the natural for the pedestrians
- Being a fairly large carriageway, certain groups of pedestrians (elderly citizens) have difficulties to cross with time given in the green phase
- The width of the sidewalk in front of the Venetian towers is too small. It is insufficient for the high number of pedestrians using the pavement, especially during fair and spectacles in the Av. M^a Cristina. The presence of bus and taxi stops make the situation more serious. Additionally the location of the towers will intervene more in the natural itinerary of the pedestrians walking parallel to the carriageway
- While it was designed for the circulation of cars, the zone is mostly used by pedestrians, not only due to large volumes of pedestrians every day, but also due to the big number of social events organised in the area and during which car traffic is restricted.

Suggested improvements:

- Construction of a elevated pedestrian crossing just at the entrance for drivers to Av. Reina M^a Cristina, in an area where the number of crossing pedestrians is highest, obliging the drivers to reduce considerably their speed (solution used frequently in local streets in Cataluña). Stretch the carriageway; with 2 lanes per direction plus one for waiting taxi and one for bus. These measures will reduce the drivers speeds and avoid or reduce possible accidents whit crossing pedestrians.

- Channel the pedestrians in their natural itinerary's, enlarging the area for the pedestrian crossing, offering in a crossing area all the natural passes where the pedestrians can cross.
- For the groups of pedestrians with difficulties to cross during the green phase of the light signals, a median of two metres of width is disposed, so that the pedestrian can have a refuge in the case the time for crossing is finished. For the greater events and many pedestrians it is important that the number of metres of kerb is reduced, especially in the middle of the carriageway.
- The sidewalks are projected wider in accordance with the reduction of the carriageway. Passing the Towers, the width shall be doubled and the pedestrians can walk in more comfortable conditions. The bus-stop dispose of a platform with more useful space.
- With the new design and signing, the zone get better conditions for the pedestrians, without imposing too many restrictions to the drivers (except during the special events).

These simple improvements can provide enhanced protection to pedestrians and facilitate traffic mobility.

