

Road safety plan 2005-2007



servei català de

Trànsit



Generalitat de Catalunya
Departament d'Interior



Road safety plan 2005-2007

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Introduction



Every year that passes by there are more vehicles in the Catalan network and these vehicles travel more Kilometers. Therefore it is not an easy task to reduce accidents.

The main purpose of the 2005-2007 Road Safety Plan presented in the following pages is to reduce accidents by setting and defining actions to reach the road safety objectives included in each of its strategies.

We would like to deal with just one scenario of security over the entire driver route. The plan is divided into two master lines: Firstly, involving the municipalities into road safety, and secondly fighting against excessive speed.

The main objective of all the actions is to reach, in a short term, a reduction of the number of accidents, and, in a long term, a deep and permanent “cultural change” in driving, traffic and mobility. We would like to reject dangerous and aggressive driving behavior. We still have a long way to follow in prevention and changing the mentality of the population. This is reason why the measures implemented in Catalonia need to be more general and convincing than the ones implemented in the northern European countries.

This Plan is a precious tool which describes the Government wish to deal with the main problems of the country. It is also a useful indicator to reach the objective fixed by the European Commission: reduction of 50% of deaths and serious injuries between 2000 and 2010.

The different interventions such as incrementing and promoting all the actions to prevent accidents, giving alternatives to driving to guarantee traffic without congestion and a sustainable mobility, ameliorating the infrastructures, strengthen innovation and development in road safety and promoting a continuous evaluation of the Road safety plan, are going to help us reach a progressive reduction of road accidents.

If we add to all that the social debate that dealing road safety has been generated, we are in the right way to reach a safe mobility.

Present status of road safety in Catalonia

In the year 2000 5,145 deaths and serious injuries resulting from traffic accidents in Catalonia were recorded.

The previous Catalan Road Safety Plan, corresponding to the triennium 2002-2004, established as a numerical objective a 15% reduction in the number of deaths and serious injuries compared to the results of the year 2000 .

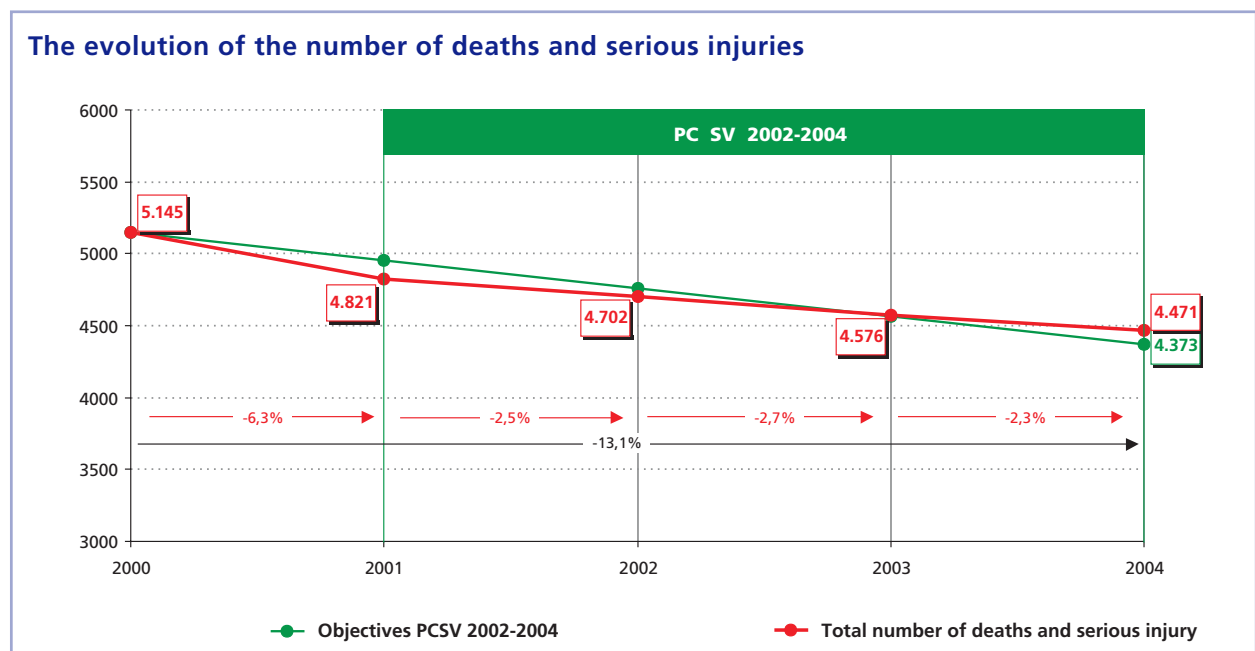
In the year 2004 4471 deaths and serious injuries were recorded.

A 13.1% reduction was achieved by the end of the duration of the Catalan Road Safety Plan 2002-2004, lower than the established objective.

If the data from different spheres are examined separately, a reduction of 26.1% in the number of deaths and serious injuries in the interurban zone was observed for the same period. The figures from the urban zone show, in a development contrary to the planned objective, an increase in the number of deaths and serious injuries by 5.9%.

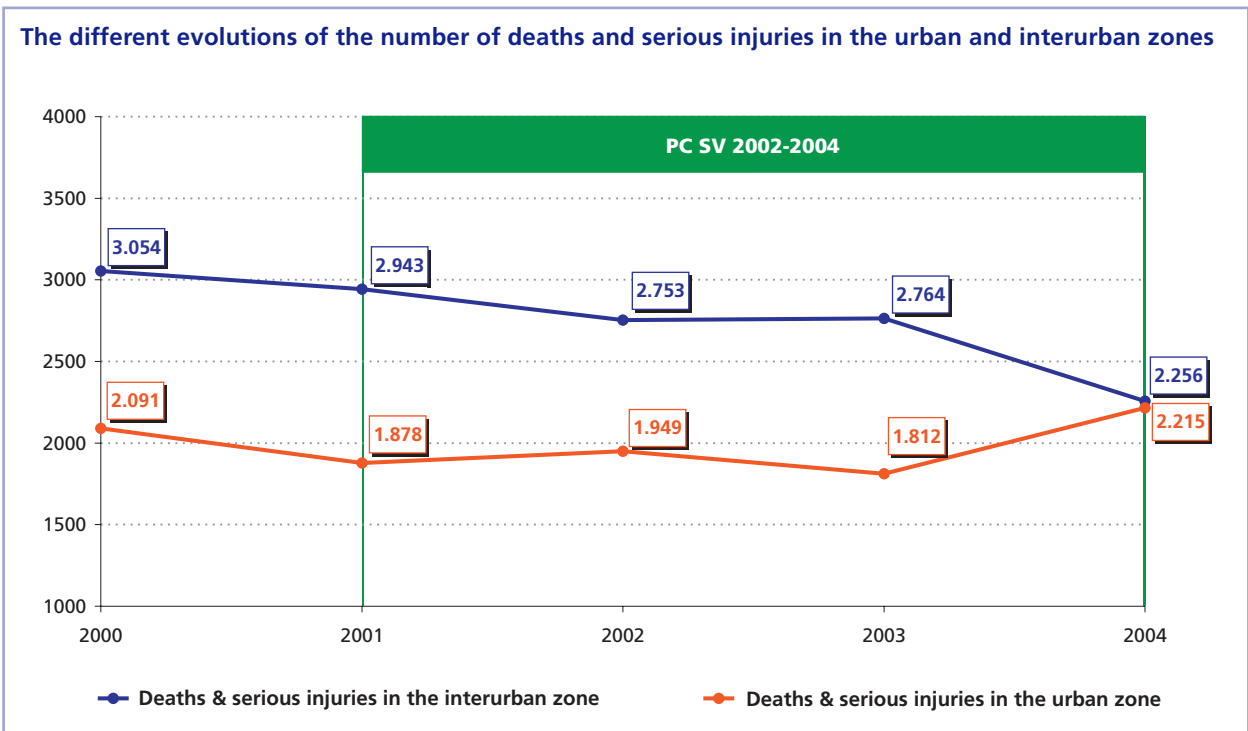
Thus, the need has arose to establish measures specifically directed at the improve-ment of road safety in the urban zone.

The following graphs display the evolution:



SOURCE: Servei Català de Trànsit (SCT- Catalan Transport Service)

The different evolutions of the number of deaths and serious injuries in the urban and interurban zones



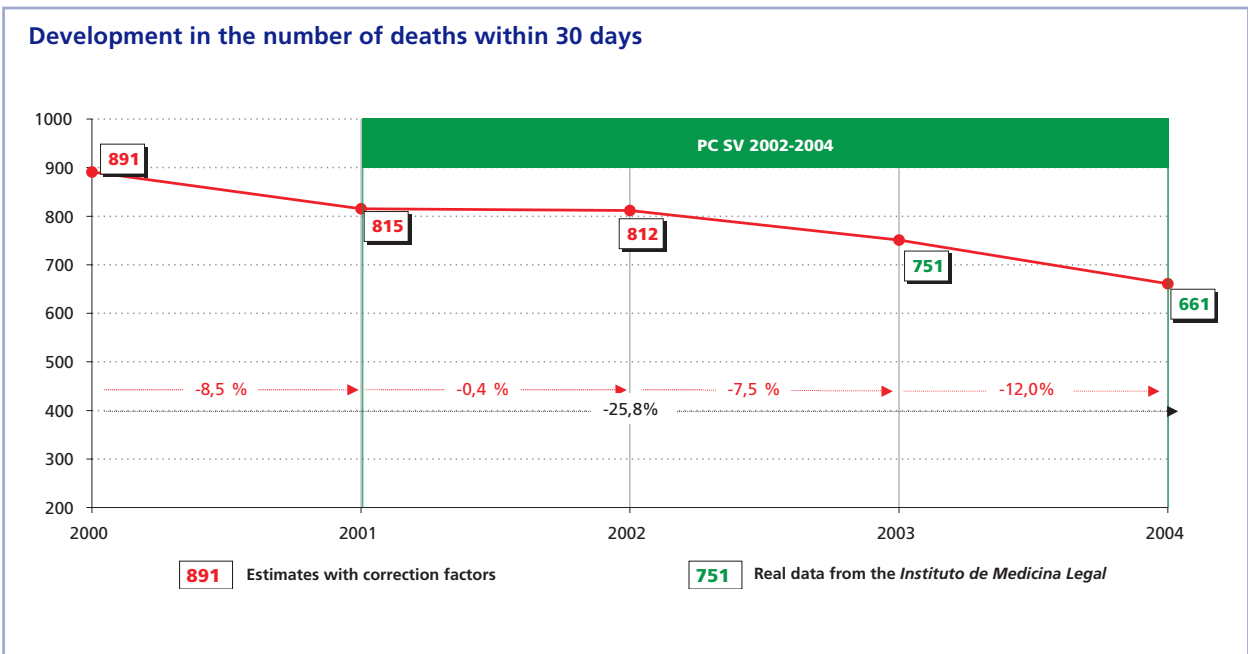
SOURCE: SCT.

As can be seen from the deaths and serious injuries data, the development in the number of deaths within 30 days followed a downward trend accentuated within the last year and reached, in the period 2000 to 2004, a reduction of 25.8%.

When the spheres are dealt with separately, again the interurban zone data is even more positive.

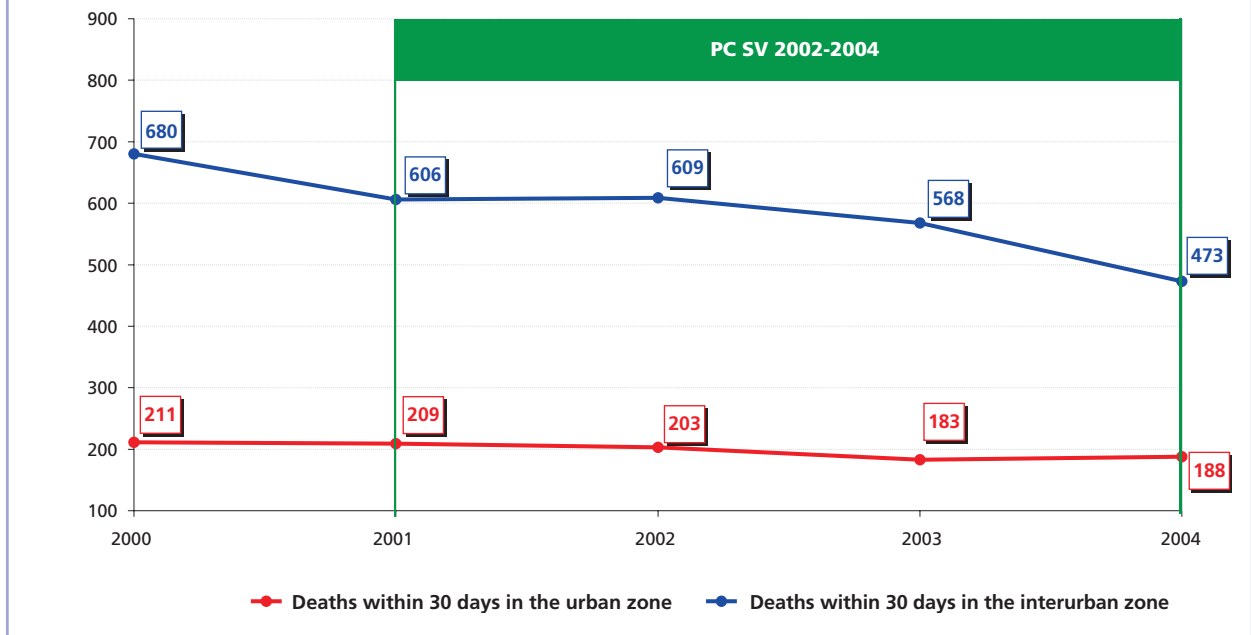
In the period mentioned, the reduction in the number of deaths within 30 days in the interurban zone reached 30.4%, while in the urban zone a reduction of only 10.9% was achieved.

Development in the number of deaths within 30 days



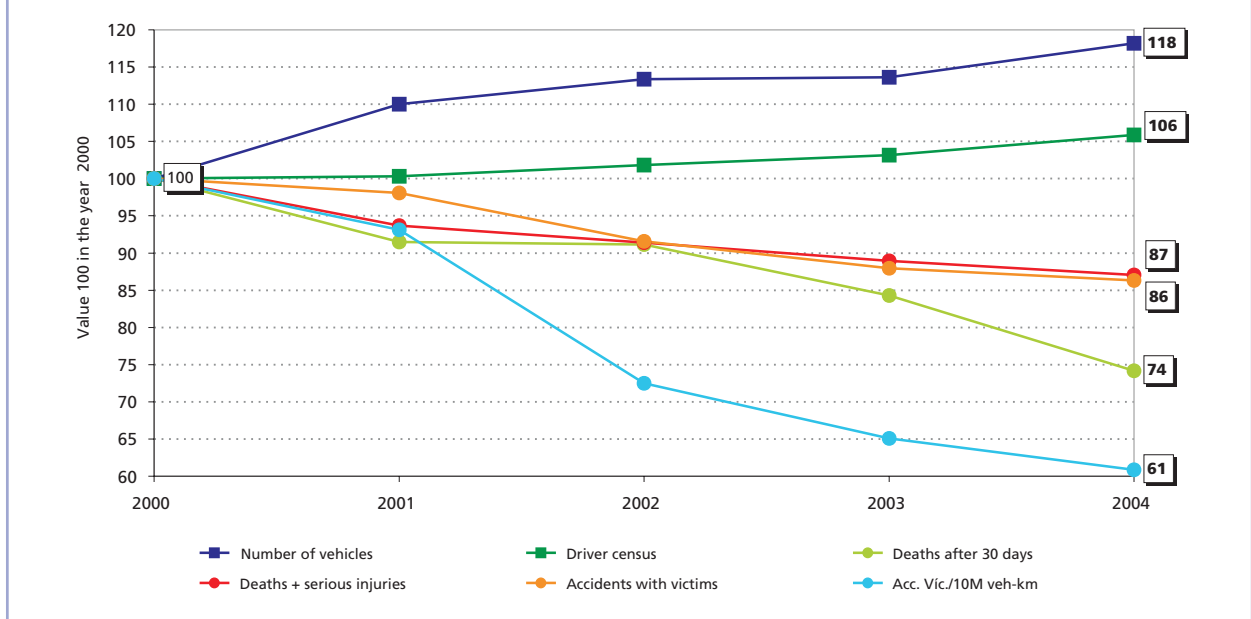
SOURCE: SCT.

Developments in the number of deaths and serious injuries within 30 days in the urban and interurban zones



SOURCE: SCT.

The accident rate in Catalonia. 2000-2004



SOURCE: SCT and the *Departament de Política Territorial* (Territorial Policy Department) and *Obres Públiques de la Generalitat de Catalunya* (The office of public works of Catalonia)

While the number of vehicles, in general, would continue growing in a stable form, the accident rate figures have diminished in the last three years.

The largest reduction occurred in the number of deaths, dropping 26 points below the 2000 value.

According to a study carried out by the , the movement on interurban routes was, in the year 2003, 35464 millions of the vehicles-Km.

Priority problems

The need for cultural change

Nowadays, there is a noticeable level of disregard for the basic rules of the road among citizens. Social disobedience as regards driving is a serious program that must be tackled.

In the period 2001 – 2002 54317 offenders were recorded with three or more offenses within the sphere regulated by the Catalan government police. For the period to 2003 to 2004 this figure rose to 57942. The increase in recurrence shows a lack of social conviction regarding driver road behaviour.

Excessive or inadequate speed

Statistics and studies carried out on the accident rate have shown that there is a direct relation between vehicle speed and the risk as well as the seriousness of accidents.

Risk rises along with an increase in speed because the relative driver reaction time to a variation in driving conditions is reduced and also because of the change in the vehicle dynamics, for example the increase in braking distances. The seriousness of the accident consequences are also amplified to the rise in the vehicle kinetic energy and that of the occupants, which, numerically speaking, is equivalent to

the square of the increase in speed. All of this energy is concentrated into the deformation of the vehicle and occupants in the event of a collision.

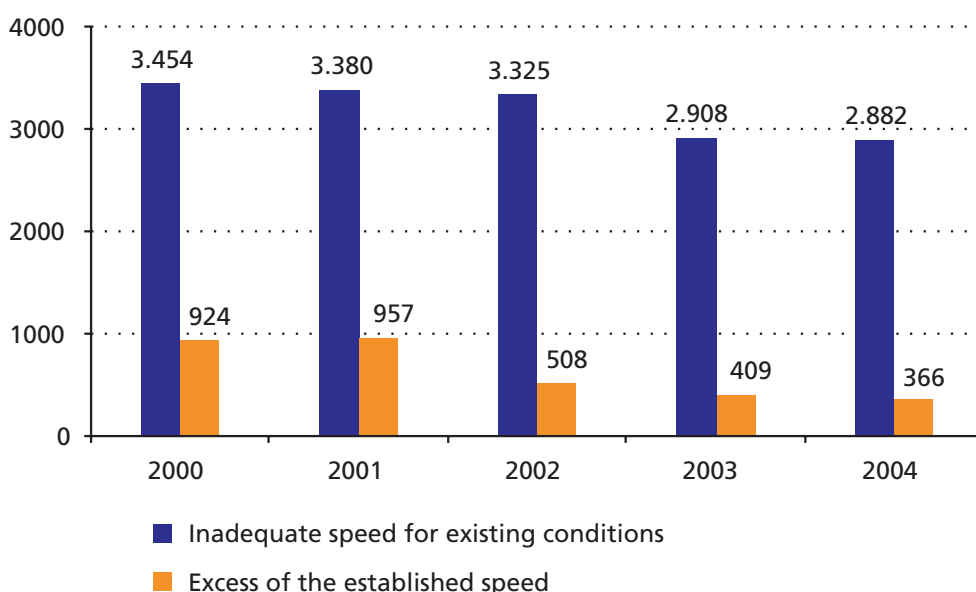
Up to the year 2000, the number of vehicles involved in accidents while committing speed offences was increasing every year.

From this moment, a reduction began. This type of offence is responsible, at least, in about 14.6% of accident occurrence, according to the statistic questionnaires of road traffic accidents with victims from the year 2004. It must be said, however, that when a police representative fills out a questionnaire, the reasons for which an accident occurred are usually not clear or unknown, that which prevents the true evaluation of the data.

The European union estimates that this type of offence occurs in 54% of road traffic accidents.

The graph shows, in absolute values, the development over the last five years in the number of vehicles known to have committed offences involved in accidents, whether it be an excess of speed or driving at an inadequate speed for the existing conditions, according to the statistic questionnaires of road traffic accidents with vehicles with victims.

The development in the number of vehicles known to have committed offences involved in accidents. 2001-2004

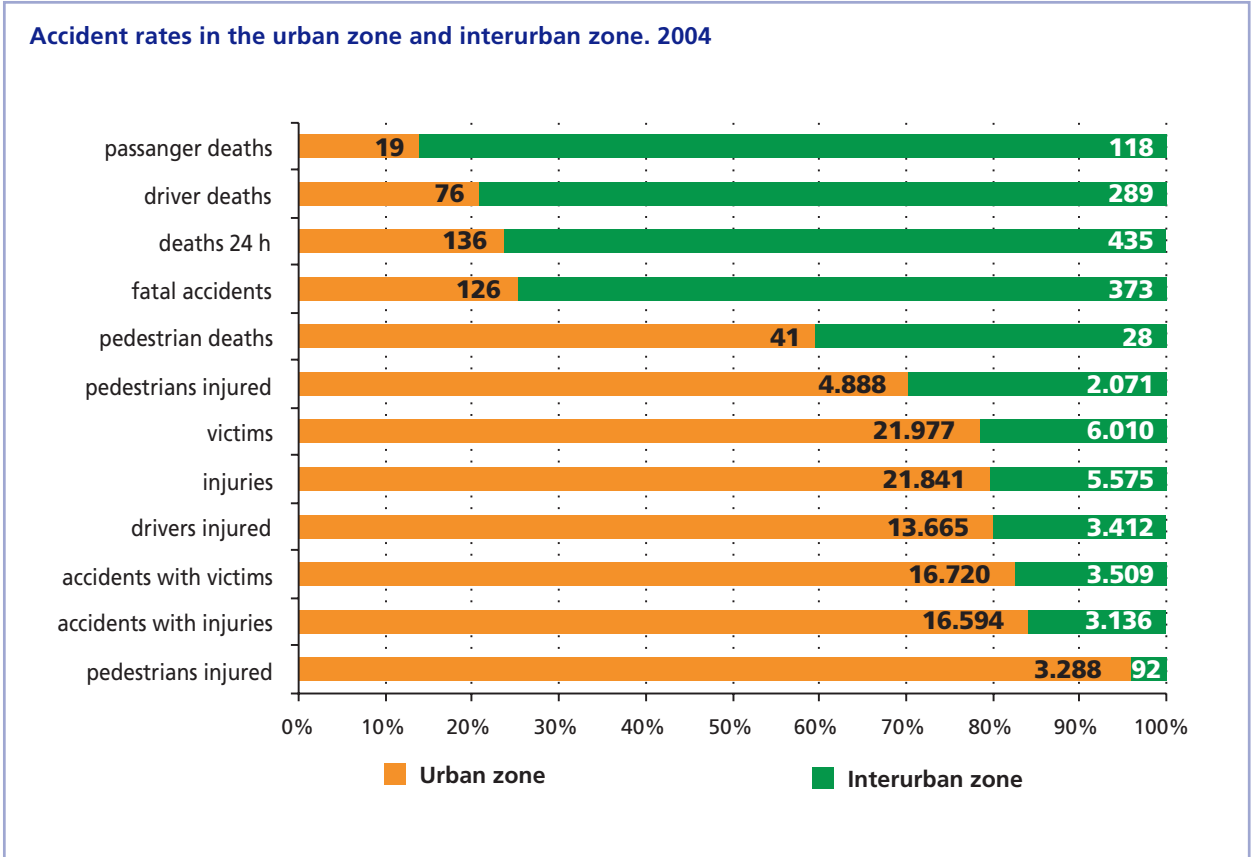


SOURCE: SCT.

The accident rate in the urban zone

The accident rates of the urban zone and of the interurban zone have very different characteristics. In the following graph the magnitude of the figures reached in the urban sphere regarding pedestrian

deaths, victims, injury and accident rates can be compared to the accident rate on the open road where accidents and mortal victims are prominent.

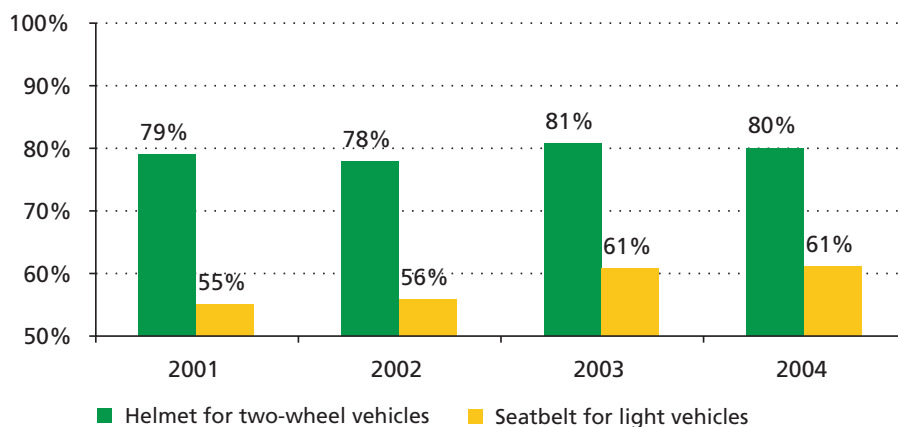


SOURCE: SCT.

Up to recently, most of the efforts regarding road safety have been concentrated on the interurban sphere, due to the elevated gravity of the accidents. However this new plan attempts to establish the tools required to also improve road safety within the municipalities, with the following objectives in sight:

- To homogenize road safety criteria over the entire driver route.
- To protect the most vulnerable road users: Passers-by, cyclists and motorcycle users.
- To improve the quality of the basic accident rate data which comes from many different sources.
- To coordinate campaigns / alcohol, speed and passive safety measures monitoring waves between the government police and local police.
- To increase the use of passive safety accessories in the urban zone, where they are most effective and yet the rates of use or the lowest.

Developments the use of safety devices in at accidents with fatal and serious injuries. 2001-2004



SOURCE: SCT.

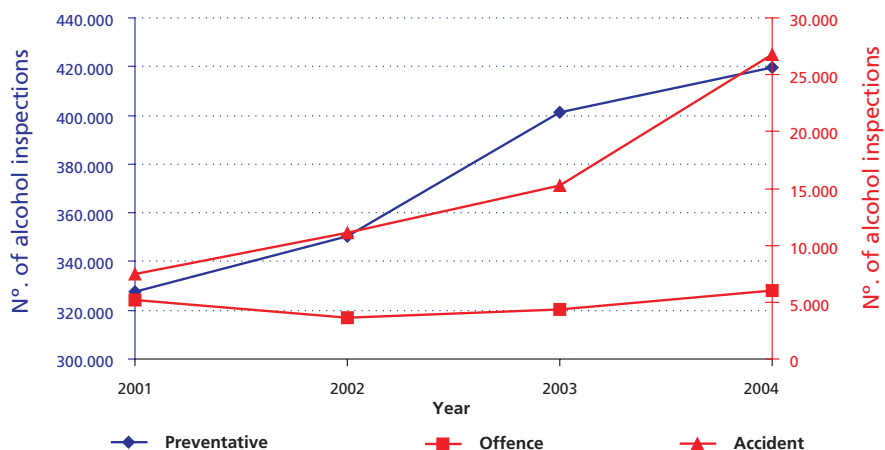
The alcohol issue

The incidence of alcohol testing has been notably increased in the last four years, especially those made because of accidents. Between the year 2001 and 2004, the number of tests made for this reason has tripled.

Development in the number of each inspection type between the year 2001 and 2004:

- 260% increase in inspections due to accident
- 28% increase in preventative inspections
- 15% increase in inspections due to offences

Development in the number of alcohol tests by type. 2001-2004s



SOURCE: SCT.

Alcohol inspections made for accident reasons showed that positive results (alcohol consumption above the established legal limits) have dropped from 17.8% in the year 2002 to 12.6% in 2003 and to 8.9% in the year 2004.

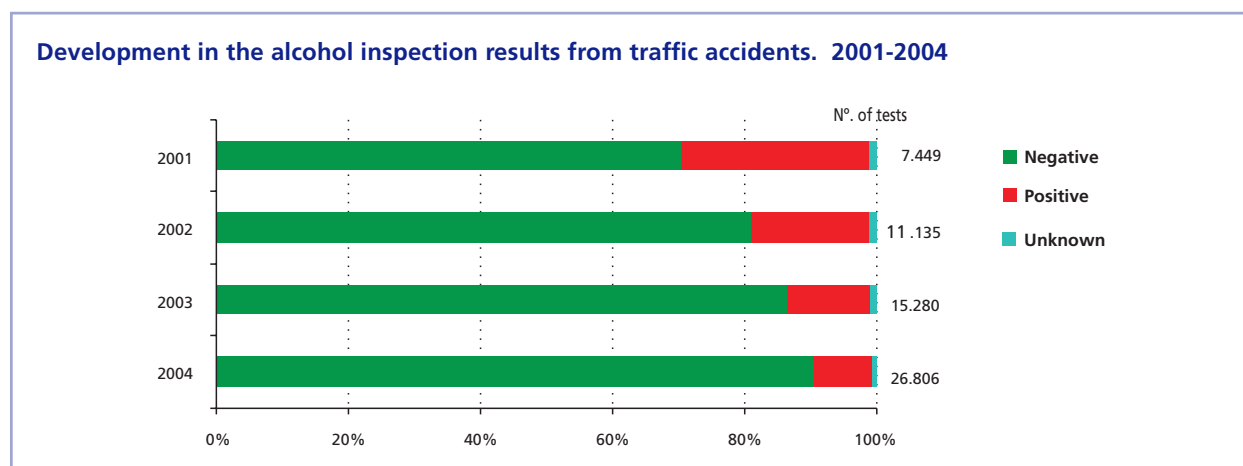
The table shows the results by type of alcohol inspection made between the years 2001 and 2004.

Alcohol testing by motive and positive results. 2001-2004

Motive for the inspection	2001		2002		2003		2004	
	% +	Total	% +	Total	% +	Total	% +	Total
Accident	28,6	7.449	17,8	11.135	12,6	15.280	8,9	26.806
Prevention	5,4	327.400	4,9	350.609	3,6	401.142	4,6	419.522
Offence	47,9	5.208	43,7	3.682	42,4	4.329	39,8	6.000
Symptoms	0,0	0	58,7	613	70,1	645	71,8	840
Total	6,6	340.057	5,8	366.039	4,4	421.396	5,4	453.168

*An alcohol inspection positive result is considered that which exceeds the maximum driver permitted legal limit.

SOURCE: SCT.



SOURCE: SCT.

This plan pressures for a qualitative increase in preventative alcohol level inspections focusing on points of concentration in order to maximize the number of Paula's positive results relative to the total. In this manner an attempt is made to reduce the exposure to risk of the male and female drivers.

All of the measures taken regarding the consumption of alcohol among drivers are biased, that is to say, type of testing typology maybe considered indicative of the program due to the lack of randomness, as much for the preventive inspections as for accident inspections as well as those taken for offences or suspicion. For this reason a new typology of preventative alcohol inspections will be introduced random controls, in space as well as in time. These types of inspections can be used to gauge the magnitude of the problem, given that actually the number of drivers who drink and drive is unknown.

Improvements in information

The lack of information could prevent evaluation of the plan and an analysis of the efforts made for the reduction of the accident rate.

Actually, the Servei Català de Trànsit has identified shortfalls in the information obtained by local police regarding the use of helmets and the safety belt as well as alcohol consumption within the municipalities.

An exhaustive involvement is therefore essential in this direction in order to improve the collection of information.

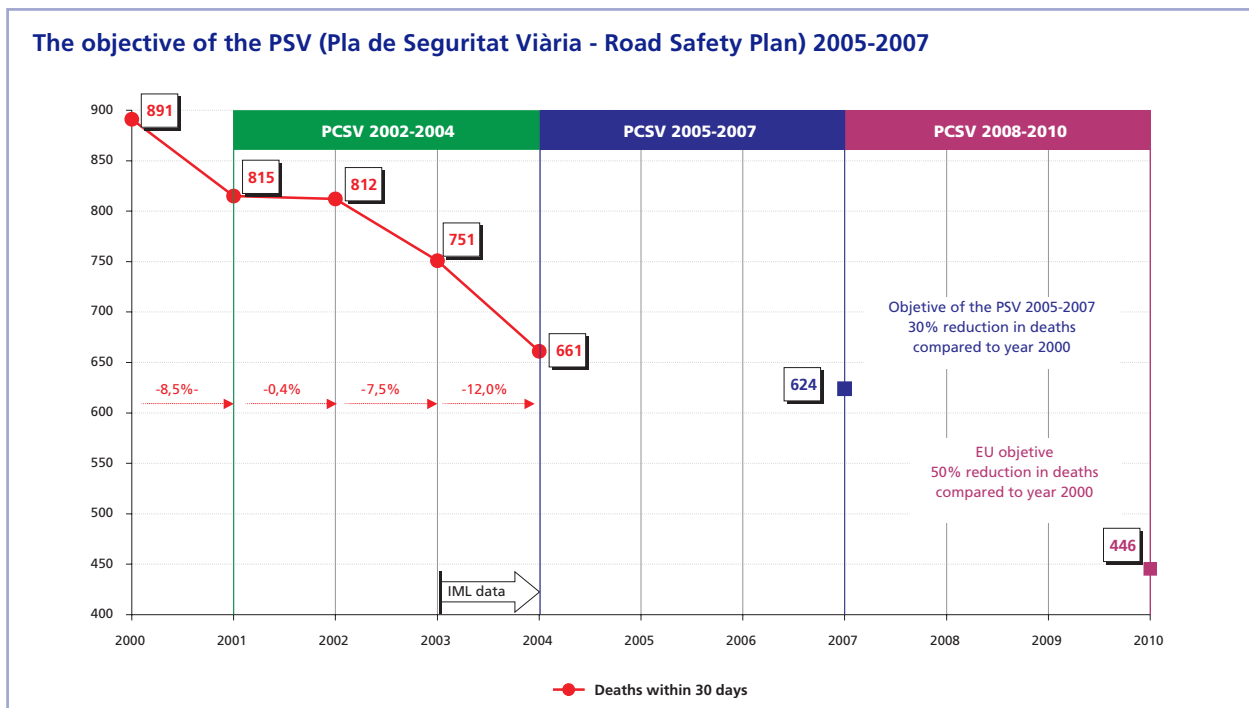
The efforts of the Servei Català de Trànsit to improve the information collected in a urban zones include the revision of the statistic questionnaire for road traffic accidents with victims, with the agreement of all the local police of the Catalan municipalities, and the installation of the data exchange system between the Servei Català de Trànsit and the local administrations. A great effort to must be made so that this information exchange is exhaustive and agile.

Plan objective

The principal objective of the Road Safety Plan for 2005 – 07 (PSV) is a reduction in the road traffic accident mortal victim rate of 30% compared to that of the year 2000.

The number of deaths within 30 days of the accident is taken as a reference, in accordance with the criteria of the European Union. The reference is concerned with the number of persons who lose their life on our road network, because we do not want to distract the attention of citizens and because we must fight to reduce the number of Catalan people that die a premature death on our streets and roads.

The reduction of fatalities resulting from the traffic accident rate is a priority of this government; it is a priority that can only be dealt with by involving all of the people.



SOURCE: SCT.



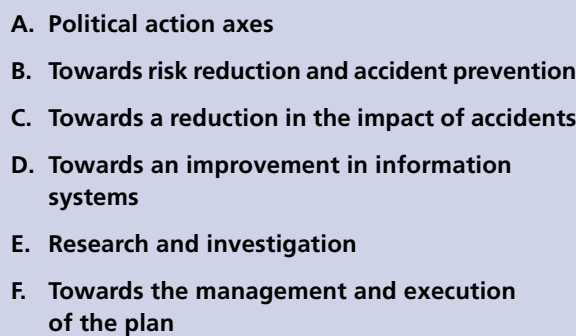
Strategies



The innovation provided by the PSV 2005-07 compared to the previous plan is, fundamentally, to achieve a singular sphere of road safety over the complete driver route. This will be done using two main strategies added to the actions of the previous plan:

- **The fight against excessive or inadequate speed**
- **Cooperation with the town halls and local authorities concerning road safety material**

El PSV 2005-07 estructura sus acciones en las 6 líneas estratégicas siguientes:

- 
- A. Political action axes
 - B. Towards risk reduction and accident prevention
 - C. Towards a reduction in the impact of accidents
 - D. Towards an improvement in information systems
 - E. Research and investigation
 - F. Towards the management and execution of the plan

Road safety Plan actions 2005-2007

A. Political action axes

Objective:

Cultural change

Actions:

1. To head a Road Safety Plan
2. A road safety agreement with local governments
3. Development of a local Road Safety Plan
4. Strengthen and support the *Comissió Catalana de Trànsit* (The Catalan traffic and road safety commission) and *la Comissió Interdepartamental* (The Interdepartmental commission) in order to improve road safety

A drive for profound, long duration and permanent cultural change in driving, traffic and mobility must be made. The actions defined below are inclined to further involve the different actors that participate in a road safety.

The design of institutional plans including objectives clearly influenced by the PSV (Road Safety Plan). An integral and universal adaption by government policies of the strategies concerning road safety, a reduction in the accident rate (deaths and serious injuries) and investment dedicated to safe mobility.

The implication of political representatives in road safety, carrying out frequent and direct demonstrations regarding the concern for the accident rate and setting a behavioural example so that society makes efforts at improving road safety.

1. To head a Road Safety Plan

The road safety plan is a first order tool concentrating the political will of the government face one of the major problems concerning this country. In order to achieve its objectives, the plan inevitably requires political leadership at a government level; this should essentially imply the active participation of all departments that may have some link to aspects of road safety. The Department of the interior will head the plan, including the yearly design of a well-thought-out political and media campaign, that will benefit from all of the major yearly traffic events; it will also direct the preventive and publicity campaigns of the Servei Català de Trànsit, using related annual events (World Alcohol-Free Day, the WHO world day, Victims remembrance day, the Automobile Show, Etc), and also the political and media circumstances present on each occasion.

Involved representatives The Department of the Interior
Programming Continuous

2. A road safety agreement with local governments

Political meetings with municipal entities with a view to achieving the adhesion of the town halls informing them of the need for their cooperation in road safety and in pacifying of traffic in our towns and cities, as an essential and fundamental step in order to achieve the objectives of socio-cultural change in the people of Catalonia. To procure that the road safety will be one of the permanent and priority elements of concern in the agenda of as much the Federació de Municipis de Catalunya (The Federation of Catalan Municipalities) as the Associació Catalana de Municipis i Comarques (The Catalan Association of Municipalities and Districts).

Involved representatives Town halls, municipality entities, Government and Public Administration Department and the Department of the Interior
Programming Continuous

3. Development of a local Road Safety Plan

The development of a local Road Safety Plan that would take into account the basic features and characteristics of each one of the Catalan municipalities. In accordance with the European Road Safety Action Program, the plan proposes that all of the Catalan town halls, including their entire municipalities, adhere to the Road Safety Plan and commit themselves to the development of a local Road Safety Plan (PLSV) for the benefit of the entire country, thus contributing to the creation of a new driving, traffic and mobility culture. In this way, both technical and budgetary assistance will be opened in the pursuit of road safety objectives, or for the completion and execution of a municipal Road Safety Plan (PMSV).

In the development of a local Road Safety Plan (PLSV) there must be excellent coordination between the corresponding participants, as well as with the Direcció General de Seguretat Ciutadana (General Administration of Citizens Safety), within the plans established by the Catalan law of public safety.

Involved representatives Town halls, municipality entities, Government and Public Administration Department, the Department of the Interior and the Servei Català de Trànsit
Programming Continuous

4. To strengthen and support the *Comissió Catalana de Trànsit i Seguretat viària* (The Catalan traffic and road safety commission) and *la Comissió Interdepartamental* (The Interdepartmental commission for road safety improvement)

The Interdepartmental Commission for Road Safety improvement will become the organ of interdepartmental coordination for the Administration of the Catalan government regarding traffic and road safety issues and will carry out a precise monitoring of the Catalan traffic system and its accident rate.

To promote the tasks and functions of the *Comissió Catalana de Trànsit i Seguretat viària* (The Catalan traffic and road safety commission) as an active organization to overcome the legal provisions that which will lend it the status of a consultative and participating organization.

Involved representatives The Department of the Interior
Programming Continuous

B. Towards risk reduction and accident prevention

Objective:

To combat the lack of road discipline regarding excessive or inadequate speed, the excess of alcohol and the non-use of passive safety accessories

Actions:

5. To objectively increase the speed stretches monitored
6. To improve the quality of the alcohol testing
7. To make exhaustive alcohol level monitoring on those drivers involved in accidents with victims
8. To make exhaustive alcohol and drug monitoring on drivers killed in road accidents

In order to drive safely is necessary to be physically and mentally alert. Alcohol, drugs and fatigue all contribute to the occurrence of road traffic accidents. The objective of the following actions is to reduce the occurrence lack of discipline that actually exists among Catalan drivers regarding alcohol consumption, excess speed the non-use of passive safety accessories: seatbelt, helmet and child retention systems. Specific stress will be applied to re-offending drivers.

5. To objectively increase the speed stretches monitored

The statistics show that there is a close relationship between the vehicle's speed and the risk and severity of accidents. In urban zones, the passers-by are the victims of excess vehicle speed, however in interurban zones the victims are the drivers themselves and the vehicle passengers. As a result, it is in the interest of all public road users to avoid the excess of the suitable speed for the conditions at any given time.

Experience showed that in the United Kingdom the installation of automatic security cameras gave rise to a reduction of 9 kmph in average speed.

Automatic speed radars must be installed at points on the road network where a high accident rate related to speeding is recorded, however at the same time, they must placed at points where, even if there are not many accidents relate to speeding, high speeds are detected (in order to homogenize vehicle speed), as well as in points where, regardless of speed, and accident could have catastrophic consequences (for example, inside a tunnel).

Speeding cameras are most effective in places where accidents relating to speeding have occurred.

The area of influence is limited to around this point. A reduction of 50% in the accident rate of these points may be achieved.

Involved representatives	The Department of the Interior (Direcció General de Seguretat Ciutadana - the General Administration of Citizen safety) and the Servei Català de Trànsit
Indicator 1	Number of monitored stretches
Value (2004)	24 stretches with a fixed automatic radar Monitoring points with dynamic radars (22 radars of the MMEE 18 of the PPLL)
Indicator 2	Monitoring points with dynamic radar
Value (2004)	22 dynamic radars from the MMEE and 18 from the PPLL
Indicator 3	Number of sanctions imposed for speeding
Indicator 4	Number of vehicles speeding compared to the total number of vehicles in radar monitoring points
Programming	Continuous

6. To improve the quality of the alcohol testing

To achieve a qualitative increase in the alcohol testing, maximizing the number of positive results compared to the total in order to reduce, as much as possible, the risk exposure created by a driving under the influence of alcohol.

Involved representatives	Catalan government police-Mossos d'Esquadra, local police and the SCT
Indicator	% of preventative alcohol testing positive results
Value (2003)	3.6%
Programming	Continuous

7. To make exhaustive alcohol level monitoring on those drivers involved in accidents with victims

Presently, the number of alcohol tests made due to an accident does not reach the number of drivers involved in accidents with victims. In the year 2003 the test was carried out on 41.6% of the total number of drivers involved in accidents with victims. Therefore, it is important to extend this test to all of the drivers involved in any traffic accident, every time, whenever it is possible to make this test on the driver.

Involved representatives	Catalan government police-Mossos d'Esquadra, local police
Indicator	% of alcohol tests made due to an accident compared to the number of drivers involved in accidents with victims
Value (2003)	41.6 %
Programming	Continuous

8. To make exhaustive alcohol and drug monitoring on drivers killed in road accidents

This action is aimed at discovering the number of drivers killed while driving under the influence of alcohol and / or drugs at the moment of the accident.

Involved representatives	Department of Justice (The Legal Medicine Institute) and the Servei Català de Trànsit
Indicator	Results of the alcohol and drug testing made on drivers dead in road traffic accidents
Value (2003)	–
Programming	Continuous

Objective:

To promote municipal cooperation on road safety

(also see actions 32, 33 and 34)

Actions:

9. To define and to introduce a local Road Safety Plan (PLSV) as a key tool in road safety management
10. To examine the possibility of implementing lines of budgetary aid for a local Road Safety Plans (PLSVs)

9. To define and to introduce a local Road Safety Plan (PLSV) as a key tool in road safety management

The city, due to the concentration of people and the large scale of movement made on a daily basis by its inhabitants, implies an elevated risk of being the scenario for some type of traffic accident.

Passers-by, cyclists, public and private transport within the city and towns share a limited space despite being regulated by the rules of the road, municipality rules and road signals. The totality of this mobility within a reduced space makes it difficult to deal with road traffic accidents, given that the nature of these accidents it is quite different to those occurring in other spaces.

For this reason, an essential step in the approach to the traffic accident problem in cities with a better guarantee of success is the understanding of their nature.

The lack of distinction between urban and interurban road safety signified that, up till now, all existing legislation concerning the accident rate on roads has been developed, in general, without regard for the particular case of cities.

As a result, the majority of studies and lines of investigation carried out by the administration do not consider the fact verified every day within the municipalities: the urban road accident rate must receive a different treatment to that of the main roads, given that the causes and effects are also different (in Chapter 2 the characteristics of the urban accident rate in Catalonia are shown).

Involved representatives	<i>Associació Catalana de Municipis i Comarques</i> (The Catalan Association of Municipalities and Districts), <i>Federació de Municipis de Catalunya</i> (The Federation of Catalan Municipalities), The Government and Public Administration Department, The Department of the Interior (General Subbureau of local police coordination) and the Servei Català de Trànsit will
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Indicator 1	The number of local Road
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Value (2003)	Safety Plans approved
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1

Indicator 2	Budget administered to
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Value (2003)	local Road Safety Plans (PLSV)
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Programming

2005	To define the type of local Road Safety Plan for the Catalan municipalities
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Convention between the *Servei Català de Trànsit*, *Federació de Municipis de Catalunya* (The Federation of Catalan Municipalities), and the *Associació Catalana de Municipis i Comarques* (The Catalan Association of Municipalities and Districts)

2006	Forum to create the development of the municipal Road Safety Plans (PMSV)
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Development of the local Road Safety Plans in all municipalities of more than 50 000 (19)

2007	Evaluation of the local Road Safety Plans (PLSV) for municipalities of more than 50 000 habitants to adjust the type of local Road Safety Plan
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10. To examine the possibility of implementing lines of budgetary aid for a local Road Safety Plans (PLSVs)

The Servei Català de Trànsit will examine the possibility of implementing a budgetary aid system in town halls for promoting the local road safety.

Involved representatives	Servei Català de Trànsit (SCT- Catalan Transport Service)
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Programming	2006
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Objective:

To change the modal distribution

Actions:

11. The improvement of accessibility to industrial estates
12. An increase in the public transport availability in the metropolitan area of Barcelona
13. The implantation of BUS and people carrier lanes on the entry roads to Barcelona

In the design of the streets and roads many factors must be taken into account, such as the trip time, comfort, the environmental impact, energy consumption, cost and territorial planning on an urban and regional level.

Actually, road safety is not a decisive factor in the planning or in the design criteria of roads, apart from the state-controlled concepts.

As a result, road safety should be explicitly taken into account by planning policies.

It is particularly appropriate to apply these criteria in decisions related to modal selection, ground planning, city centre planning and the interactions between the available public transport and the modes of transport associated.

11. The improvement of accessibility to industrial estates

The Department of Territorial Policy and Public Works will carry out and studies to evaluate the accessibility of different Catalan industrial estates in order to provide more sustainable and safe means of transport.

From the results of the studies the necessary steps will be taken to improve accessibility conditions for these sustainable and safe means of transport.

Involved representatives	The Department of Territorial Policy and Public Works (The Secretary of Transport)
Indicator	Modal distribution (EMO)
Value	–
Programming	2005

12. An increase in the public transport availability in the metropolitan area of Barcelona

During the next triennium the availability of public transport in Catalonia will be amplified, as planned in the infrastructure master plan and as with the extensions of the tramway and the Metro in Llobregat.

It is foreseen that these actions will allow change in the modal distribution.

Involved representatives	The Department of Territorial Policy and Public Works (The Secretary of Transport)
Indicator 1	IMD (Intensidad media diaria, Mean Daily Flow)
Value (2004)	–
Indicator 2	Passenger volume
Value (2004)	–
Indicator 3	Modal distribution (EMO)
Value (2004)	–
Programming	Continuous

13. The implantation of BUS and people carrier lanes on the entry roads to Barcelona

The bus and people transport lanes (lanes exclusively for buses and people carriers) represents a measure to promote the increased occupation of vehicles and to improve the commercial speed of the interurban buses when entering cities.

Involved representatives	The Department of Territorial Policy and Public Works (The Secretary of Transport)
Indicator	Km of lanes
Value (2004)	0
Programming	2006

Objective:

Changes and adjustments in the legal environment

Actions:

14. To implement the point system driving license and data exchange with the Direcció General de Trànsit (General traffic administration)
15. To develop the general road regulation in order to incorporate road audits
16. To propose criminal law reforms
17. To propose reforms to the traffic, engine powered vehicles and road safety law

14. To implement the point system driving license and data exchange the Direcció General de Trànsit (General traffic administration)

The reoccurrence rate indicates the lack of solidarity on the part of some drivers who, as well as regularly ignoring the law, put other drivers in danger. For this reason the action is needed to correct this situation.

In Catalonia, in the year 2003 25191 drivers were prosecuted more than three times, 768 of them more than 10 times (see the recurrence rate table in Chapter 2, on the *Present status of road safety in Catalonia*).

With the introduction of the points system driving license, other measures associated with the reduction of accidents may also be introduced, as has become the norm in other European countries where it was introduced. The followings point may summarize the benefits:

- The implied constant evaluation leads to an improvement in attitude and behaviour of drivers at the wheel.
- To make the driver more responsible by the use of a degree of warnings and sanctions: an isolated error is permitted, but the consequences for a recurrence are more serious.
- Compared to the simple economic sanction, the points system driving licence has the same effect on all drivers independent of its acquisitive power.
- To identify the repressive system as an essential prevention element.
- The possibility to establish a points recovery system (the rehabilitation of careless or dangerous drivers) by the management and development of re-education courses.

The actions necessary to guarantee the exchange of offender data between the Servei Català de Trànsit and the central administration (Direcció General de Trànsit) will be taken.

Involved representatives	Servei Català de Trànsit (SCT- Catalan Transport Service)
Indicator 1	Introduction of the points system driving licence
Indicator 2	Number of re-offenders per year (more than 10 offences)
Value (2003)	768 offenders
Programming	2005

15. To develop the general road regulation in order to incorporate road audits

Road safety audits are studies of the effect of road safety on the existing infrastructures and in the planning phase of urban, transport and infrastructure projects.

By changes in the Regulation, action 26, the completion of the road safety audits may be completed in assuring that all routes are covered and put into operation in accordance with road safety principles.

Involved representatives	The Department of Territorial Policy and Public Works and the Servei Català de Trànsit
Programming	2005

16. To propose criminal law reforms

The Servei Català de Trànsit will propose criminal law reform to the state government in order to increase the punishments regarding the consumption of alcohol and other drugs, speeding, driving without a license and the manipulation of the tachometer as risk offences.

Involved representatives	The Department of the Interior and the Servei Català de Trànsit
Programming	2005

17. To propose reforms to the traffic, engine powered vehicles and road safety law

The actual version of the traffic, engine powered vehicle movement and road safety law considers the need to introduce various amendments, in order to make the road safety policies more effective as well as reinforcing the executive competence of the autonomous communities.

Involved representatives	The Department of the Interior and the Servei Català de Trànsit
Programming	2005

Objective:

Training and education in road safety and safe mobility

Actions:

18. The introduction into the education system of safe mobility as obligatory content of the new school curriculum
19. To analyse and evaluate road training and education
20. To develop the framework for road training and education
21. To train and inform road education trainers
22. To train road trainers and driving school directors
23. Education of children, young people and adults
24. Safe mobility regarding the work environment

The training and education for safe mobility fundamental in the reduction of traffic accidents and their consequences. For this reason, two major work directions have been taken that should allow us to obtain improved safety, and that will be developed during this triennium:

- The risk factors and the preventive measures, that are based in the detection of those elements that increase the risk for a certain person (for example, alcohol or speed) and the proposal of educative intervention centred on distributing information, establishing a base for habits and working emotions and attitudes in order to change behaviours that creates safety risks.
- The direction defined by the *Guia d'educació per a la mobilitat segura* (GEMS - Education Guide for Safe Mobility), which establishes for main spheres of intervention This deals with the personal risk factors which are the following:
 - Risk perception
 - Possible influences
 - Self awareness
 - Adaptability

All of the road safety education and training promoted by the Servei Català de Trànsit is based on the application of one or the other direction depending on the requirements.

18. The introduction into the education system of safe mobility as obligatory content of the new school curriculum

The deployment of the new school curriculum taking into account the introduction of safe mobility education at each education stage. This involves the integration of safe mobility education content in the common social areas of primary and secondary obligatory education, so that it forms part of the civic education.

Involved representatives	Department of Education
Programming	Continuous

19. To analyse and evaluate road training and education

There are two different propositions: One centred on discovering the best situation for safe mobility education and road safety training in Catalonia with the objective of opening new possibilities to improve safety; the other, to deepen the formal aspects and the content of training and education in other countries.

Both directions will have a permanent debate at the head of road safety training and education.

Involved representatives	The Dept. of Education, Department of Universities, Investigation and Investigation Company and Servei Català de Trànsit
Programming	Continuous

20. To develop the framework for road training and education

Various actions will be taken so that these work directions reach the institutions, bodies and people who can develop educational interventions. With this goal in mind, presentation activities have been started in order to diffuse these concepts, but above all awareness campaigns using all existing resources are being planned. The fundamental tool for better continuity will be the website for safe mobility education.

Involved representatives The Dept. of Education, Department of Universities, Investigation and Investigation Company, The Presidential Department (Secretary General for Youth) and Servei Català de Trànsit

Programming Continuous

21. To train and inform road education trainers

Different courses and activities will be carried out in order to offer at a better knowledge more information or even specialization to concerned professionals. On one hand, work will be done for a better development of concrete subjects such as leisure, the elderly or training of trainers, with the publication of material. On the other hand, the availability of training in education courses for safe mobility will be extended to a range of education representatives (Police trainers, teachers, civil servants, sports trainers...).

Involved representatives Department of Education, The Presidential Department (Secretary General for Youth), The Department of Well-being and Family, The Department of the Interior (Catalan Police School) and the Servei Català de Trànsit

Programming Continuous

22. To train road trainers and driving school directors

The actual trend to train driving schools as a support for obtaining a driving license requires a cultural change prioritising the handling of road safety above all other content. To respond to this demand, and the is developing courses that are fundamentally based on the development of road safety for road training teachers and courses for directors.

Also, the completion of a complementary courses for making awareness sessions will make it possible, using the trained professionals, to a high percentage of students enrolled in driving schools, which will aid direct change on the content being dealt with.

Involved representatives SCT Headquarters - Universitat Autònoma de Barcelona (UAB -Autonomous University of Barcelona) and Servei Català de Trànsit

Programming Continuous

23. Education of children, young people and adults

The development of different material for the improvement of safe mobility is planned. Within the existing theoretical framework, a movement will be made towards resources that, by their design and ludic-educative character, may reach the intended audience (children, young people, adults, the elderly, cyclists, mothers and fathers). These resources will be made available for trainers (trainers, teachers and educators, leisure educators, adults trainers...) in order to increase its efficiency.

Also, emphasis will be made on directions of practical road education that familiarize users with mobility: Beginning from the GEMS, experience with bicycles and motorcycles will be offered. Work will also be done, as an additional resource, with accident witnesses, in cooperation with the accident victim organizations.

Involved representatives The Department of Well-being and Family, The Department of Education, The Presidential Department (The Secretary General of Youth), The Department of Universities, Research and Research Society, The Department of the and Housing and the Servei Català de Trànsit

Programming Continuous

24. Safe mobility regarding the work environment

The professional environment is a sphere of safe mobility education due to the repercussions it has on the public road users. For this reason the plan envisages working on the transport of goods and passengers (with the special relevance of school transport), as much from an information level as from a level of training and awareness. Also, the promotion of interventions to reduce the work-related mobility risk will be continued through the general training of work-related risk experts or awareness programs for companies in order to obtain their cooperation in preventative programs.

Also the possibilities of modifying the current legislation will be studied so that professional drivers receive a specific initial training (in road safety spheres, driving times and rest, trip planning, vehicle loading, etc.) in order to exercise and develop their activities.

Involved representatives	The Department of Labour and Industry, the Department of Territorial Policy and Public-works (the General Administration of Ports and Transport) and the Servei Català de Trànsit
Programming	Continuous

Objective:

The improvement of safety on the road infrastructures

Actions:

25. Tracking of the TCA (identification and procedure planning)
26. The completion of road safety audits
27. To continue the road network classification according to EuroRAP
28. To promote the insulation of traffic pacification measures
29. To study road to signalling in Catalonia

25. Tracking of the TCA¹ (identification and procedure planning)

All of those zones where there is an existing concentration of accidents on the road and street network of Catalonia must be detected so that, progressively and consistently, their elimination may begin. Due to the required progressivism of this action, in the meantime all of the network should be classified, according to road safety parameters, in order to prioritise the proceedings and to offer useful information to the users.

Involved representatives	The Department of Territorial Policy and Public Works and the Servei Català de Trànsit
Indicator 1	Number of TCAs prepared
Indicator 2	Number of victims before/after for each stretch prepared
Programming	Continuous

26. The completion of road safety audits

The requirement of effective studies of road safety in the planning phase of urban, transport and road infrastructure projects.

On a strategic level, the implications of safety on new roads and traffic projects may arise during the so-called "test runs". This technique is based on the fact that each type of road has its own safety record according to the volumes of traffic and other factors. By modelling the type of road, the traffic volumes and the parameters of road safety indicators, the impact of the different alternatives proposed may be calculated.

A road safety auditor's course will be completed in order to train qualified persons in this sphere.

Involved representatives	The Department of Territorial Policy and Public-Works, Servei Català de Trànsit and the Universitat Politècnica de Catalunya (UPC - Polytechnical University of Catalonia)
Indicator 1	Completed number of audits
Programming	Continuous

27. To continue the road network classification according to EuroRAP

The EuroRAP program measures the quality of the road network in function of European Union level unified criteria relating two parameters: the accident rate and traffic intensity. This work method means that the stretches where there is a higher accident risk may be highlighted.

Since 2001 the classification of the Catalan Road network has been completed and will continue to be updated during the next triennium.

Involved representatives	The Department of Territorial Policy and Public Works and the Servei Català de Trànsit
Indicator	Length of the classified network:
Value (2002)	6356 km
Programming	Continuous

28. To promote the insulation of traffic pacification measures

The installation of speed reduction elements on the roadway is an example of traffic pacification measures being used with increasing frequency on Catalan public roads. The action is directed at promoting this type of low-cost measure that improves road safety in certain points.

Involved representatives	Town halls, The Department of Territorial Policy and Public Works and the Servei Català de Trànsit
Programming	Continuous

29. To study road to signalling in Catalonia

The driver perception of road signalling must be studied in order to evaluate its efficiency regarding road safety.

Involved representatives	The Department of Territorial Policy and Public Works and the Servei Català de Trànsit
Programming	Continuous

Objective:

To raise citizen awareness

Actions:

30. Preventative publicity campaigns against excessive or inadequate speed, alcohol excess or the disregard for passive safety elements.
31. Specific road safety media actions
32. Permanent and continuous evaluation of publicity campaigns
33. To transmit information about the associated risks of offences

30. Preventative publicity campaigns against excessive or inadequate speed, alcohol excess or the disregard for passive safety elements.

The publicity campaigns of the Servei Català de Trànsit are directed at accident causes and that the situations that generate risk in traffic: speed, local consumption and disregard for passive safety measures.

Involved representatives The Presidential Department (the Secretary of Communication), the Department of Agriculture, Livestock and Fishing and the Servei Català de Trànsit

Programming Continuous

31. Specific road safety media actions

The publicity campaigns will be accompanied by concrete and permanent actions in order to reinforce the main message. Also other punctual actions will take place such as the World Alcohol-Free Day, the Infant and Youth Fair, the World Road Safety Day, etc

Involved representatives The Presidential Department (The Secretary of communication) and the Servei Català de Trànsit

Programming Continuous

32. Permanent and continuous evaluation of publicity campaigns

It is essential that all the campaigns and actions completed are evaluated.

The evaluation may be used to know the effect of the campaign message on citizens in order to plan subsequent campaigns.

Involved representatives The Presidential Department (The Secretary of communication) and the Servei Català de Trànsit

Programming Continuous

33. To transmit information about the associated risks of offences

Drivers often perceive sanctions as a monetary source for the Administration. An awareness action directed at offenders would be to include an information sheet about the risk and the consequences for road safety of the offence committed with the accusation notification.

Involved representatives Servei Català de Trànsit (SCT- Catalan Transport Service)

Programming Continuous

C. Towards a reduction in the impact of accidents

Objective:

To reduce accident consequences

Actions:

34. To incorporate a massive condemnation methodology to increase the use of passive safety systems
35. A study that would determine the actions to be taken in order to reduce the time and improve the quality of victim assistance

Despite that the cost of health assistance to accident victims is higher than that for cancer and cardiovascular illnesses, the attention and the effort given by political figures and the medical community to accident victim health assistance have been unreasonably low.

Prevention would always be the ideal solution to the program of traffic accidents however an effective post trauma system is essential to treat the victims.

34. To incorporate a massive condemnation methodology to increase the use of passive safety systems

The improvement of vehicle occupant safety has been substantial over the recent decades. It is considered that if all cars were designed with the best collision protection in each class, 50% of serious or fatal victims could be avoided. The safety belt and helmet reduce the seriousness of injuries by about 50%. Attention will be concentrated on the vehicle rear seat passengers regarding the use of passive safety systems.

Contrary to common belief, the seat belt is most effective in low velocity impacts, that is, those which occur in urban zones. In the year 2003 in Catalonia 18.2% of car accident victims were not wearing a seat belt when the accident occurred: 16% of the accident victims on open roads and 21% of the accident victims in urban zones.

Child retention systems operate in almost the same way as safety belts. The mass of a small child's head corresponds to 25% of its weight while for an adult it is 6%. This means that the forces acting on the head and neck for a given situation would be stronger for a child than for an adult.

In 2003, 4.5% of the two-wheel vehicle accident victims in Catalonia were driving without a helmet; this figure represented 4% in the urban zone and 11% in the interurban zone.

The installation of automatic methods for detecting speed offenders would allow the reorganization of manual monitoring in order to face more serious offences: driving without the use of passive safety accessories. This action attempts to establish a new methodology to increase the use of passive safety systems. This would take the form of intensive prosecution during a determined time period (minimum 2 weeks) several times a year (minimum 3 times) in order to increase the use of passive safety systems.

Involved representatives	The Catalan government police–Mossos d’Esquadra, local police and the Servei Català de Trànsit
Indicator 1	The number of traffic accident victims who were not using passive safety accessories compared to the total number of victims
Value (2003)	Seatbelt: 18,2% Helmet: 4,5% Child retention system (victims from 0 to 3 years old): 34%
Indicator 2	Number of sanctions for disregard of safety accessories
Value (2003)	Seatbelt: 28.206 Helmet: 5.423
Programming	Continuous

35. A study that would determine the actions to be taken in order to reduce the time and improve the quality of victim assistance

The physiologic consequences of accident victims must be minimized by the use of more agile accident alert systems as well as more effective medical and rehabilitation services. The correct management of accidents following impact is a crucial factor in the and quality of survival.

The number of deaths and serious effects in the minutes subsequent to an accident must be reduced.

A study will be carried out to evaluate the actual situation and to analyse the measures to be taken in order to reduce the victim assistance time.

Involved representatives	The Department of Health, the Department of the Interior
Programming	2005

D. Towards an improvement in information systems

Objective:

To improve traffic information systems

Actions:

36. To exchange of data about mobility among different bodies
37. To homogenize and coordinate mobility data collection and the velocity of the data between different players
38. To exchange data on offenders with neighbouring countries
39. To share and exchange accident data with town halls and insurance companies

If the actions directed at improving the accident and mobility information systems are not directly related to a reduction in the accident rate, there are essential for the identification and continuous evaluation of the Plan development.

36. To exchange of data about mobility among different bodies

The creation of a mobility database that would create the data exchange among different organizations collecting data.

Involved representatives	The Department will Territorial Policy and Public-Works and the Serve Catalan de Transit, road title holders and highway licensees
Programming	
2005	Creation of the database
2006	Update of the database
2007	Update of the database

37. To homogenize and coordinate mobility data collection and the velocity of the data between different players

Today, the organizations that collect traffic information on the Catalan road network do this work independently and with their own objectives.

This action will attempt to begin collaboration between the Servei Català de Trànsit, town halls, the Department of Territorial Policy and Public-Works, the Minister for Promotion and the councils so that the data collected will also be used for improving road safety and traffic management.

Hourly or seasonal intensity parameters, hourly speed distributions, as well as the tracking of data during special dates will such as Christmas or bank

holidays may be of extreme use for analysis of the accident rate in Catalonia.

Thus, user behaviour may be studied and yet unknown attitudes may be identified.

Involved representatives	The Department will Territorial Policy and Public-Works and the Serve Catalan de Transit, road title holders and highway licensees
Programming	
2005	Creation of a homogenous database on mobility and speed
2006	Creation of the mobility and speed database
2007	Update of the mobility and speed database

38. To exchange data on offenders with neighbouring countries

Creation of a pilot process of offender data exchange according to methodology established in the European project VERA-2. Also, the Servei Català de Trànsit hopes to participate in the continuation of this project with the objective of studying the data exchange protocols.

Involved representatives	The Catalan government police–Mossos d'Esquadra, local police and the Servei Català de Trànsit
Programming	
2005	Creation of the database
2006	Update of the database
2007	Update of the database

39. To share and exchange accident data with town halls and insurance companies

The introduction of the new accident statistic questionnaire (new form) will improve accident data connection by the traffic police.

The Servei Català de Trànsit will create an accident database that will be shared with the town halls.

This will incorporate the Department of Agriculture, Livestock and Fishing (DARP) as an involved player so that it has an effect on road safety in rural zones.

Involved representatives

The Catalan government police –Mossos d’Esquadra, the local police, the Department of Territorial Policy and Public-Works, the Department of the Interior (the General Administration of Emergencies and Civil Defense), the Department of Agriculture, Livestock and Fishing and the Servei Català de Trànsit

Programming

- 2005 Creation of the database
- 2006 Update of the database
- 2007 Update of the database

E. Research and investigation

Objective:

Road safety investigation

Actions:

40. Study of the risk exposure on the Catalan Road network in time - space circumstances
41. An analysis of vehicle speed on the Catalan Road network by type of road and vehicle
42. The creation of interdisciplinary groups to analyse the accident rate in each territorial sphere
43. A comparative study of traffic management models
44. A study of the possible introduction of intelligent speed limitation systems in Catalonia
45. Study of the EuroNCAP investigation on vehicle safety: evolution in the number of vehicles and of the vehicles involved in accidents.
46. A comparative study of resources applied to road safety and management in other EU countries
47. To participate in the SUNflower project
48. The study of the influence of drugs and narcotics on driving
49. A study of the convictions for offences against road safety
50. A study of new proposals for legal change, adaptations and modifications
51. A comparative study of traffic standards
52. A study on measures to reduce accidents involving wildlife
53. A comparative study on the impact of road information in the reduction of the accident rate
54. A study to analyse the number of drivers who drive under the influence of alcohol

The value of the investigation is based on the systematic study of correctly collected data which will allow understanding of each element of the road safety problem. Thus, effective solutions may be planned and introduced. will

The investigation will be concentrated on establishing the definition of the desired future scenario as well as the intermediate actions to achieve this. This will be supported on three fundamental columns: technology, law and economics.

This should permit the definition of objectives and methods to achieve a perfect mobility model, benefiting from the synergy produced between the emerging information technology market and the different players involved in traffic. The administration must be allowed to take part and position regarding the final mobility model, making it possible within a shorter space of time.

40. Study of the risk exposure on the Catalan Road network in time - space circumstances

In order to successfully track Road Safety Plan objectives and to develop other studies of the accident rate, the mobility of Catalonia, by vehicle and by foot, must be understood.

Mobility is usually expressed in vehicle kilometre or person kilometre. There are differences in the risk exposure for different groups of citizens: genus, age, origin and destination, transport means ...

To understand the risks for each group of users the data from mobility capacities and surveys must be connected and updated.

The study would help establish a methodology and the basis for an estimation of the kilometres covered by each group of users on urban and interurban routes in Catalonia.

Involved representatives The Catalan government police–Mossos d’Esquadra and the Servei Català de Trànsit

Programming

- 2005 Study of methodology and creation of a basis
- 2006 Update
- 2007 Update

41. An analysis of vehicle speed on the Catalan Road network by type of road and vehicle

Statistics and studies carried out on the accident rate have shown that there is a direct relation between vehicle speed and the risk as well as the seriousness of accidents.

Risk rises along with an increase in speed because the relative driver reaction time to a variation in driving conditions is reduced and also because off the change in the vehicle dynamics, for example the increase in braking distances. The seriousness of a collision will also increase as a result of the increase in the vehicle kinetic energy which is directly proportional to the mathematical square of the vehicle speed; this energy is transformed into work deforming the vehicle in a collision.

The study will define a monitoring plan for traffic speeds on the basic road network of Catalonia, which will see the development of an automatic speeding detection camera installation plan (see action 5) and its subsequent tracking in order to evaluate the impact and effect of the measure.

Involved representatives The Catalan government police–Mossos d’Esquadra and the Servei Català de Trànsit

Programming

- 2005 Analysis of speed by type of road and type of vehicle
- 2006 Update
- 2007 Update

42. The creation of interdisciplinary groups to analyse the accident rate in each territorial sphere

This action is concentrated on the analysis of the accident rate in each territorial division by the creation of inter-discipline workgroups. A systematic methodology must be established to analyse a significant sample of accidents with victims in detail, in order to gain

more information and that provided by the accident communiqués.

Involved representatives The Department of Territorial Policy and Public Works and the Servei Català de Trànsit

Indicator Number of accidents analysed

Programming Continuous

43. A comparative study of traffic management models

A study will be carried out to compare the functions and structures of the traffic control centres in other countries.

Involved representatives Servei Català de Trànsit (SCT- Catalan Transport Service)

Programming 2006

44. A study of the possible introduction of intelligent speed limitation systems in Catalonia

Intelligent speed limitation systems are data transmission applications still being developed. They are based on the interaction between the vehicle and the environment and the objective is to limit the speed of the vehicles in an intelligent manner by a technical intervention on the vehicle. A device in the vehicle receives information about the maximum or recommended speed in the environment and reacts as a result.

In 2004, the Servei Català de Trànsit pushed for the completion of the first pilot installation test in the Spanish state of these systems for private vehicles. The test was carried out on 20 drivers and the results were extremely positive for the direct improvement of road safety.

This action attempts to analyse the possibility of installing intelligent speed control systems for Catalan drivers, be it voluntary, for professional drivers or for speed offenders.

Involved representatives The Department of Work and Industry and the Servei Català de Trànsit

Programming Continuous

45. Study of the EuroNCAP investigation on vehicle safety: the evolution in the number of vehicles in the country and vehicles implied in accidents

The NCAP appeared in the United Kingdom in 1995 and extended to the rest of Europe: Europe New Car Assessment Program (EuroNCAP). This program submits new models of vehicle to crash testing that is more strict than that required by current legislation when . The results are published in order to inform consumers about vehicles obtaining better results and, in this way, pressuring manufacturers achieving poorer results to increase the safety of their vehicles.

The study attempts to establish the level of penetration that this classification has had on consumers in order to evaluate the level of importance vehicle buyers give to the vehicle safety. Vehicles involved in traffic accidents are also compared in order to test the hypothesis of safer vehicles.

Involved representatives	The Department of Work and Industry and the Servei Català de Trànsit
Indicator	Number of vehicles conforming to the crash testing out of the total number of vehicles in the country
Programming	
2005	Study of vehicle safety
2006	Update
2007	Update

46. A comparative study of resources applied to road safety and management in other EU countries

The lowest accident rate indexes are found in countries where a global, integral and multi-discipline policy has been in place for some time. They do not reduce the problem to one single administrative organization no matter how powerful. Management is carried out on a government level, involving and coordinating all of the players and institutions and creating a corporation network with the industry, private institutions and the concerned care associations.

The study should serve to discover the road safety management structure of other countries, as well as resources, human and material, dedicated to this issue.

Involved representatives	Servei Català de Trànsit (SCT- Catalan Transport Service)
Programming	2005-2006

47. To participate in the SUNflower project

In accordance with the project begun in the year 2004, the Servei Català de Trànsit is participating in the European SUNflower-Plus 6 project, along with Sweden, United Kingdom, the Netherlands, Greece, Portugal, the Czech Republic, Hungary and Slovenia. This project is the continuation of the initial SUNflower project lead by Sweden, the United Kingdom and the Netherlands, the three countries with the lowest accident rates in Europe. This project benefits from the methodology used in previous project, amplifying it to examine the characteristics of the new groups of countries and to develop new case studies, such as new drivers and speeding.

Involved representatives	Servei Català de Trànsit (SCT- Catalan Transport Service)
Programming	2005

48. The study of the influence of drugs and narcotics on driving

To analyse and determine effects of psychoactive substances on people driving engine powered vehicles, for which, on one hand, and using the symptomatology, the substance may be identified and, on the other hand, the effects of these on the driver and their conscious state may be identified. Using the results of these studies as a basis, the Government of the State should consider necessary modifications to legislation.

Involved representatives	The Department of health and the Servei Català de Trànsit
Programming	2005

49. A study of the convictions for offences against road safety

To analyse and study criminal sentences (condemnatory or non-condemnatory) inspired by traffic procedures, mainly under Title XVII, Chapter IV of Criminal Law.

Involved representatives	The Department of the Interior (Direcció General de Seguretat Ciutadana - the General Administration of Citizen safety), the Servei Català de Trànsit and the Department of Justice
Programming	2005

50. A study of new proposals for legal change, adaptations and modifications

To study new proposals of possible changes, adaptations and modifications of current legislation regarding, among others, the treatment of re-offending drivers and the control of illegal races.

Involved representatives	The Catalan government police–Mossos d’Esquadra, local police and the Servei Català de Trànsit
Programming	2005 - 2006

51. A comparative study of traffic standards

To carry out a comparative study of the evolution and the effect that traffic regulations have had in countries in reducing the accident rates.

Involved representatives	The Department of the Interior (Direcció General de Seguretat Ciutadana - the General Administration of Citizen safety) and the Servei Català de Trànsit
Programming	2005 – 2006

52. A study on measures to reduce accidents involving wildlife

To study the possible measures that could be adapted to reduce the number of accidents caused by the invasion of wild animals on to the Catalan Road network.

Involved representatives	The Department of the Environment and Housing, the Department of Territorial Policy and Public Works, Servei Català de Trànsit
Programming	2005

53. A comparative study on the impact of road information in the reduction of the accident rate

To study the development and the effect that road traffic information has on the reduction of the accident rates in neighbouring countries.

Involved representatives	Servei Català de Trànsit (SCT- Catalan Transport Service)
Programming	2005 - 2006

54. A study to analyse the number of drivers who drive under the influence of alcohol

Preventative alcohol level testing, as well as having a dissuasive and sanctioning character, should also be indicators of the problem magnitude, that is, the should be representative of the driver behaviour when it comes to drinking and driving. So that this is possible, it is necessary that a part of these inspections be made in a random manner in space and in time. This would represent a positive effect for road safety sending the message to drivers that they should never drink and drive, reinforced by the fact that at any moment they may be subject to an alcohol test.

If a decision is made to make a percentage of random inspections (50 - 60%) then these tests must be identified as such in order to distinguish them from others, which would lead to processing modifications and databases.

Involved representatives	The Catalan government police–Mossos d’Esquadra, local police and the Servei Català de Trànsit
Indicator	% of random alcohol inspections compared to the total number of preventative inspections
Value	–
Programming	Continuous

F. Towards the management and execution of the plan

Objective:

To insure the fulfilment of objectives and continuous evaluation of the Plan

Actions:

55. Political leadership and management of the Plan
56. Involvement of all key players
57. The creation of a road safety observatory
58. Semester and annual evaluation

55. Political leadership and management of the Plan

The Interdepartmental Commission for Road Safety improvement will become the organ of interdepartmental coordination for the Administration of the Catalan government regarding traffic and road safety issues and will carry out a precise monitoring of the Catalan traffic system and its accident rate.

To promote the tasks and functions of the *Comissió Catalana de Trànsit i Seguretat viària* (The Catalan traffic and road safety commission) as an active organization to overcome the legal provisions that which will lend it the status of a consultative and participating organization.

Involved representatives	The Department of the Interior
Programming	Continuous

56. Involvement of all key players

To plan and to hold periodic meetings with all of the key players regarding road safety.

- Local authorities
- DGT and other autonomous institutions
- License holders of highways
- Road license holders
- Police
- Judges, magistrates and public prosecutors
- Journalists and media
- Universities and investigation centres
- Subject consultants
- European consultant institutions
- Other European partners
- The automobile industry
- Victim associations
- Driving clubs (Catalan, State and international)
- The beverage production sector and those related (by the DARP)
- Insurers, etc..

Involved representatives	Servei Català de Trànsit (SCT- Catalan Transport Service)
Programming	Continuous

57. The creation of a road safety observatory

The creation of a road safety observatory as a support tools to the tracking and continuous evaluation of the Road Safety Plan objectives and its leadership. Also, data must be provided on the accident rate, fatalities and mobility, by the completion of road safety statistical studies.

Involved representatives	The Department of Territorial Policy and Public Works, the Department of Health and the Department of the interior (Servei Català de Trànsit)
Programming	Continuous

58. Semester and annual evaluation

To evaluate the effects of the Road Safety Plan (PSV) 2005 - 2007, especially regarding those issues for which the Servei Català de Trànsit have exclusive responsibility.

Based on the actual results of the accident rate and the harmful effect of accidents and by using the indicators established in this Plan, The office of the Road Safety Plan will develop a report every six months which will analyse the fulfilment of the defined objectives.

The plan is a dynamic document that must be evaluated and continually updated. Independently of whether the objectives are being reached or not, actions will be proposed to modify the Plan and update it.

This report should be presented to the Interdepartmental Commission for Road Safety Impro-

vement and the Catalan Commission of Traffic and Road Safety.

To design directives for the development of the Road Safety Plan 2005 - 2007.

To implement an evaluation phase in each process, including the activity program of road safety in Catalonia.

To assemble a report on the semester evaluation of the Road Safety Plan 2005 -2007 progress the level of objective attainment.

Involved representatives Servei Català de Trànsit (SCT- Catalan Transport Service)

Programming

2006 January: Plan evaluation and update report

2007 January: Plan evaluation and update report

December: Plan evaluation

Action summary table

ACTION SUMMARY TABLE

STRATEGIES	ACTIONS:	INVOLVED REPRESENTATIVES	INDICATOR	VALUE	PROGRAMMING
A. Political action axes					
Cultural change					
	1. To head a Road Safety Plan	Dept. of the Interior			Continuous
	2. A road safety agreement with local governments	Town halls, municipality entities, Government and Public Administration Department and the Department of the Interior			Continuous
	3. Development of a local Road Safety Plan	Town halls, municipality entities, Government and Public Administration Department and the Department of the Interior and the SCT			Continuous
	4. To strengthen and support the <i>Comissió Catalana de Trànsit i Seguretat viària</i> (The Catalan traffic and road safety commission) and <i>la Comissió Interdepartamental</i> (The interdepartmental commission for road safety improvement)	Dept. of the Interior			Continuous
B. Towards risk reduction and accident prevention					
To combat the lack of road discipline regarding excessive or inadequate speed, the excess of alcohol and the non-use of passive safety accessories					
	5. To objectively increase the speed stretches monitored	Department of the Interior (the General Administration of Civil Defence) and the SCT	Number of monitored stretches Monitoring points with dynamic radar Number of sanctions imposed for speeding Number of vehicles speeding compared to the total number of vehicles in radar monitoring points	24 22 MMEE and 18 PPLL – –	Continuous
	6. To improve the quality of the alcohol testing	PG-MMEE, PPLL and SCT	% of preventative alcohol testing positive results	3,6%	Continuous
	7. To make exhaustive alcohol level monitoring on those drivers involved in accidents with victims	PG-MMEE and PPLL	% of alcohol tests made due to an accident compared to the number of drivers involved in accidents with victims	41,6%	Continuous
	8. To make exhaustive alcohol and drug monitoring on drivers killed in road accidents	Dept. of Justice (the Institute of Legal Medicine) and the SCT	Results of the alcohol and drug testing made on drivers killed in road traffic accidents	–	Continuous
To promote municipal cooperation on road safety					
	9. Local Road safety Plans (PLSV)	ACM ² , FMC ³ , the Government and Public Administration Department, Dept. of the Interior (The General Sub-administration of Local Police Coordination) and the SCT	The number of local Road Safety Plans approved Budget applied to the development execution of the Local Road Safety Plan (PLSV)	1	2005: Definition of the Local Road Safety Plan type 2006: Local Road Safety Plan (PLSV) for municipalities of more than 50,000 inhabitants 2007: Evaluation of Local Road Safety Plan (PLSV) for municipalities of more than 50,000 inhabitants

	10. To examine the possibility of implementing lines of budgetary aid for a local Road Safety Plans (PLSVs)	SCT		2006
To change the modal distribution	11. The improvement of accessibility to industrial estates	DPTOP (The Secretary of Mobility)	Modal distribution (EMO)	2005
	12. An increase in the public transport availability in the metropolitan area of Barcelona	DPTOP (The Secretary of Mobility)	IMD (Intensidad media diaria, Mean Daily Flow) PT passenger volume Modal distribution (EMO)	Continuous
	13. The implantation of BUS and people transporter lanes on the entry roads to Barcelona	DPTOP (The Secretary of Mobility)	Km of lanes	2006
Changes and adjustments in the legal environment	14. The introduction of a points system driving license with a data exchange with the DGT	SCT	Introduction of the points system driving licence Number of re-offenders (+10 counts) per year	2005
	15. To develop the general road regulations in order to incorporate road audits	DPTOP and the SCT		2005
	16. To propose criminal law reforms	Dept. of the Interior and the SCT		2005
Training and education in road safety and safe mobility	17. To propose reforms to the traffic, engine powered vehicles and road safety law	Dept. of the Interior and the SCT		2005
	18. The introduction into the education system of safe mobility as obligatory content of the new school curriculum	Dept. of Education		Continuous
	19. To analyse and evaluate road training and education	Dept of Education, DURSI and the SCT		Continuous
	20. To develop the framework for road training and education	Dept of Education, DURSI, Dept of the Prime Minister (General Secretary for Youth) and the SCT		Continuous
	21. To train and inform road education trainers	The Dept. of Education, the Department of the Prime Minister (the General Secretary for Youth), the Department of Well-being and Family, the Department of the Interior (the police school Catalonia) and the SCT		Continuous
	22. To train road trainers and driving school directors	Chair of the SCT-UAB and SCT		Continuous
	23. Education of children, young people and adults	Dept. of Well-being and Family, Dept. of Education, the Department of the Prime Minister (General Secretary for Youth), DURSI, Dept. of the Environment and Housing and the SCT		Continuous

STRATEGIES	ACTIONS:	INVOLVED REPRESENTATIVES	INDICATOR	VALUE	PROGRAMMING
	24. Safe mobility regarding the work environment	DPTOP (General Administration of Ports and Transport) and the Dept. of Labour and Industry and the SCT			Continuous
The improvement of safety on the road infrastructures	25. Tracking of the TCA (identification and procedure planning)	DPTOP and the SCT	Number of TCAs prepared Number of victims before/after for each stretch prepared		Continuous
	26. The completion of road safety audits	DPTOP, SCT and UPC	Completed number of audits		Continuous
	27. To continue the road network classification according to EuroRAP	DPTOP and the SCT	Length of the classified network:	6.356	Continuous
	28. To promote the insulation of traffic pacification measures	Town halls , DPTOP and the SCT			Continuous
	29. To study road to signalling in Catalonia	DPTOP and the SCT			Continuous
To raise citizen awareness	30. Preventative publicity campaigns against excessive or inadequate speed, alcohol excess or the disregard for passive safety elements.	Dept of the Prime Minister (Secretary of Communication), DARP and the SCT			Continuous
	31. Specific road safety media actions	Dept of the Prime Minister (Secretary of Communication) and the SCT			Continuous
	32. Permanent and continuous evaluation of publicity campaigns	Dept of the Prime Minister (Secretary of Communication) and the SCT			Continuous
	33. To transmit information about the associated risks of offences	SCT			Continuous

C. For a reduction in accident consequences

To reduce accident consequences	34. To incorporate a massive condemnation methodology to increase the use of passive safety systems	PG-MMEE, PPLL and SCT	The number of traffic accident victims who were not using passive safety accessories compared to the total number of victims Number of sanctions for disregard of safety accessories	Seatbelt Helmet Victims 0-3 yrs Seatbelt Helmet	18,2% 4,5% 34% 28.206 5.423	Continuous
	35. A study that would determine the actions to be taken in order to reduce the time and improve the quality of victim assistance	Dept of Health and Dept of the Interior				2005

D. Towards an improvement in information systems

To improve traffic information systems	36. To exchange of data about mobility among different bodies	DPTOP, Road license holders, Highway License Holders and the SCT				2005: Creation of the database 2006: Updates 2007: Updates
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37. To homogenize and coordinate mobility data collection and the velocity of the data between different players	DPTOP, Road license holders, Highway License Holders and the SCT	2005: Creation of a homogenous basis for data collection 2006: Creation of the database 2007: Updates
38. To exchange data on offenders with neighbouring countries	PG-MMEE, PLL and SCT	2005: Creation of the database 2006: Updates 2007: Updates
39. To share and exchange accident data with town halls and insurance companies	PG-MMEE, PLL, DPTOP, Dept. of the Interior (General Administration of Emergencies and Civil Defence), DARP and the SCT	2005: Creation of the database 2006: Updates 2007: Updates

E. Research and investigation

Road safety investigation		
40. Study of the risk exposure on the Catalan Road network in time - space circumstances	PG-ME and the SCT	2005: Study of methodology and creation of a data base 2006: Updates 2007: Updates
41. An analysis of vehicle speed on the Catalan Road network by type of road and vehicle	PG-ME and the SCT	Annual updates
42. The creation of interdisciplinary groups to analyse the accident rate in each territorial sphere	DPTOP and the SCT	Continuous
43. A comparative study of traffic management models	SCT	2006
44. A study of the possible introduction of intelligent speed limitation systems in Catalonia	Dept of Labour and Industry and the SCT	Continuous
45. Study of the EuroNCAP investigation on vehicle safety	Dept of Labour and Industry and the SCT	2005: Study of the EuroNCAP investigation on vehicle safety 2006: Updates 2007: Updates
46. A comparative study of resources applied to road safety and management in other EU countries	SCT	2005-2006
47. To participate in the SUNflower project	SCT	2005
48. The study of the influence of drugs and narcotics on driving	Dept. of Health and the SCT	2005
49. A study of the convictions for offences against road safety	Dept. of the Interior (GA of Civil Defence), the SCT and the Dept of Justice	2005

STRATEGIES	ACTIONS:	INVOLVED REPRESENTATIVES	INDICATOR	VALUE	PROGRAMMING
	50. A study of new proposals for legal change, adaptations and modifications	PG-ME, PL and the SCT			2005-2006
	51. A comparative study of traffic standards	Dept. of the Interior (GA of Civil Defence), the SCT			2005-2006
	52. A study on measures to reduce accidents involving wildlife	Dept of the Environment, DPTOP and SCT			2005
	53. A comparative study on the impact of road if information in the reduction of the accident rate	SCT			2005-2006
	54. A study to analyse the number of drivers who drive under the influence of alcohol	PG-ME, PL and the SCT	% of random alcohol tests compared to the total		Continuous

F. Towards the management and execution of the plan

Continuous evaluation of the Plan					
55. Political leadership and management of the Plan	Dept. of the Interior				Continuous
56. Involvement of all key players	SCT				Continuous
57. Creation of a Road Safety Observatory	DPTOP, Dept of Health, Dept. of the Interior (SCT)				Continuous
58. Semester and annual evaluation	SCT				2006: Evaluation update 2007: Evaluation update

¹ TCA: Accident Black Spots

² The Catalan Association of Municipalities

³ The Federation of Catalan Municipalities

