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ROAD ACCIDENTS IN SPAIN

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An analysis of the evolution of Road Safety in Spain during the last ten years would reveal wide differing trends depending on which elements are taken into consideration, and would invite to deepen into the patterns of each and every one of the variables having a direct or indirect influence on traffic.

It is certain that the figures for 1993 doled out a total of 79,925 injury accidents, while in 2002 the record shows 98,433 cases. Almost unquestionably, 1993 and the years around were largely positive in the context of accident evolution. After the rising trends in the 1980s, the 1990s were marked at their beginning by the implementation of a vast array of changes targetting traffic rules, new road safety campaigns, expansion of the A-road network, in short, a whole package of fresh policies which succesfully achieved to reduce the number of accidents.

Table 1

Year	Injury Accidents	1993=100
1993	79,925	100
1994	78,474	98
1995	83,586	105
1996	85,588	107
1997	86,067	108
1998	97,570	122
1999	97,811	122
2000	101,729	127
2001	100,393	126
2002	98,433	123

However, these round figures are not wholly exacting. The total number of vehicles must also be considered when drawing out from some variable's crossover interaction the accident-prone liability in the country; between 1993 and 2002 the total number of vehicles rose by around 39% in the case of private cars, 19% for motorcycles and 51% in the case of industrial vehicles - namely, an overall increase of 41% which is clearly underlined in the vehicle rate per 1,000 people, which went up from 455 in 1993 to 616 in 2002.

This fact might allow a conclusion that, while in 1993 there were 449 accidents per 100,000 vehicles, in 2002 the proportion was 393 per 100,000: a result which deters from a negative assessment.

Table 2

Year	Total Vehicles	Number of Vehicles Per 1,000 Inhabitants	Number of Injury Accidents Per 100,000 Vehicles
1993	17,809,897	455	449
1994	18,218,924	465	431
1995	18,847,245	480	443
1996	19,542,104	497	438
1997	20,286,408	515	424
1998	21,306,493	539	458
1999	22,411,194	564	436
2000	23,284,215	580	437
2001	24,249,871	600	414
2002	25,065,732	616	393

Furthermore, an analysis of this sort could not do without taking into account the shifting vehicular flows. A figure comparison is not a mere oddity in this sense but something much more meaningful: it provides a logical rationale to assess the ensuing increase of accident risk levels, and to infer that road safety evolution during the last 10 years has been positive, though still leaving little room for optimism.

Table 3

Year	Millions of vehicles-km ⁽¹⁾	1995=100
1995	166,272	100
1996	173,688	104
1997	179,763	108
1998	188,680	113
1999	201,807	121
2000	208,508	125
2001	217,567	131

⁽¹⁾ Numbers relating to the traffic flow on highways. Traffic through roads which are municipally administered are not included; according to some estimates, it may account for the 3.5% of the total traffic.

On the other hand, stressing that the large number of fatalities keeps being the most tragic and negative result of traffic accidents is worth being emphasized. In 2002, the number of fatalities within the first 30 days after the accident had happened was quantified in 5,347, compared to 6,378 in 1993, i.e., the number of fatalities dropped by 1,031, this represents a 16% reduction and a significant decrease in the number of serious accidents, probably because of the spectacular improvements in

passive safety equipment during recent years: airbags, child restraint devices, safer seat-belts, more resistant structures, front vehicle structures compatible with other vehicles. After all these elements hit the motoring market, their effectiveness has objectively enhanced road safety and has obviously reduced their sequelae.

Similarly, it is worth examining the relative results brought forth when contrasting the fatality toll with the total population, a parameter which is internationally accepted for cross-country comparisons: according to our data, in 1993 there were 163 fatalities per one million people, in 2002 the rate fell to 131.

Table 4

Year	Fatalities	Fatalities Per 10 ⁶ Population
1993	6,378	163
1994	5,615	143
1995	5,751	147
1996	5,483	139
1997	5,604	142
1998	5,957	151
1999	5,738	144
2000	5,776	144
2001	5,517	137
2002	5,347	131

As concerns morbidity according to age, the results are also encouraging: as shown in Table 5, the reduction is specially sharp within the group of young people up to 24, the one with highest exposure risk.

Table 5 Number of people killed by 1,000,000 Population

Age	In 1993	In 2002
From 0 to 14	40	25
From 15 to 17	136	130
From 18 to 20	289	247
From 21 to 24	308	235
Up to 24 years	144	113
From 25 to 34	214	170
From 35 to 44	161	131
From 45 a 54	156	120
From 55 to 64	146	118
From 65 and over	147	119
TOTAL	163	131

At any rate, as long as the roads are the scene for an onset of accidents, all necessary actions must necessarily be implemented with a view to reduce and atone their sequelae. In this sense, the Spanish High Council for Traffic and Road Safety approves a yearly Road Safety National Plan referring in detail to the whole catalogue of intended measures on each particular aspect of traffic: education and training, enforcement and control, road lay-outs and vehicle arrangements, elaboration and development of the necessary regulations, and also the promotion of research and studies allowing to go into the causal factors of accidents and the tools to deter them. As long as people are killed on the roads, we must persist in our efforts.

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