

MARCH 2022

ANALYSIS OF THE SOCIAL COST OF TRAFFIC ACCIDENTS AND THE UNIT SOCIAL COST OF TRAFFIC ACCIDENTS WITH FATALITIES OR SERIOUSLY INJURED PERSONS, FOR THE PERIOD 2016-2020

ABSTRACT

Project MARS: „Modernization and Restructuring of the Road Sector“



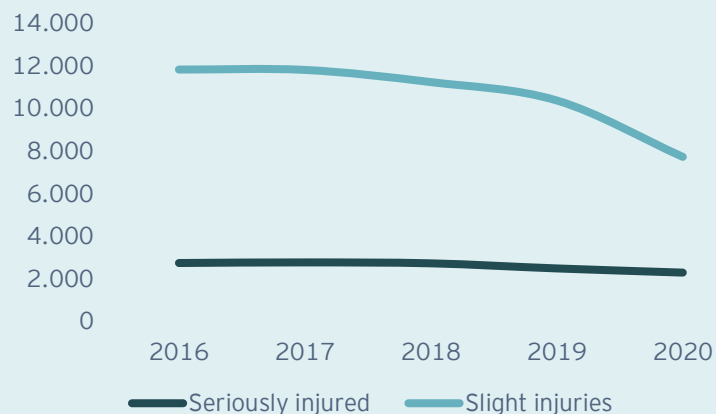
Republika Hrvatska
MINISTARSTVO MORA,
PROMETA I INFRASTRUKTURE

In the last five years, 158,006 traffic accidents have been recorded in the Republic of Croatia, of which 49,573 are accidents with casualties.

In the period from 2016 to 2020, a total of 67,602 people suffered in traffic accidents:

- A total of 1,489 people were killed (~3%),
- 13,041 people were seriously injured,
- 53,072 people were slightly injured.

During this period, the number of traffic accidents with fatalities decreased by 28.5%, and the number of fatalities decreased from 307 in the initial year of the analysis to 237 in the last year (-22.8%).

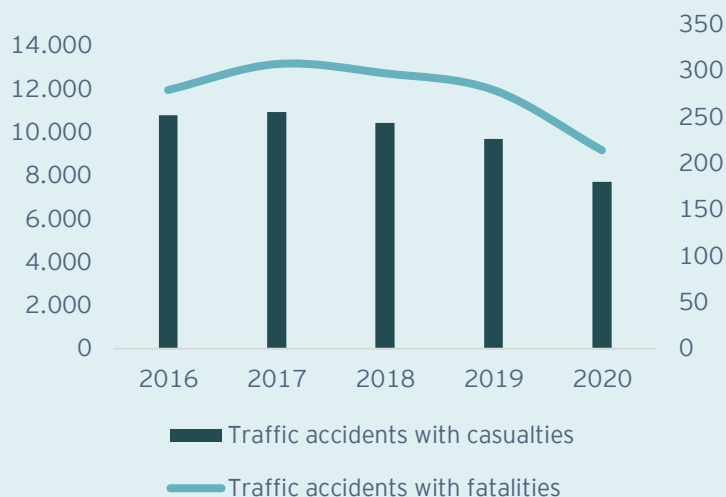


Graph 1 Trends in the number of severely and lightly injured persons in the period from 2016-2020. years

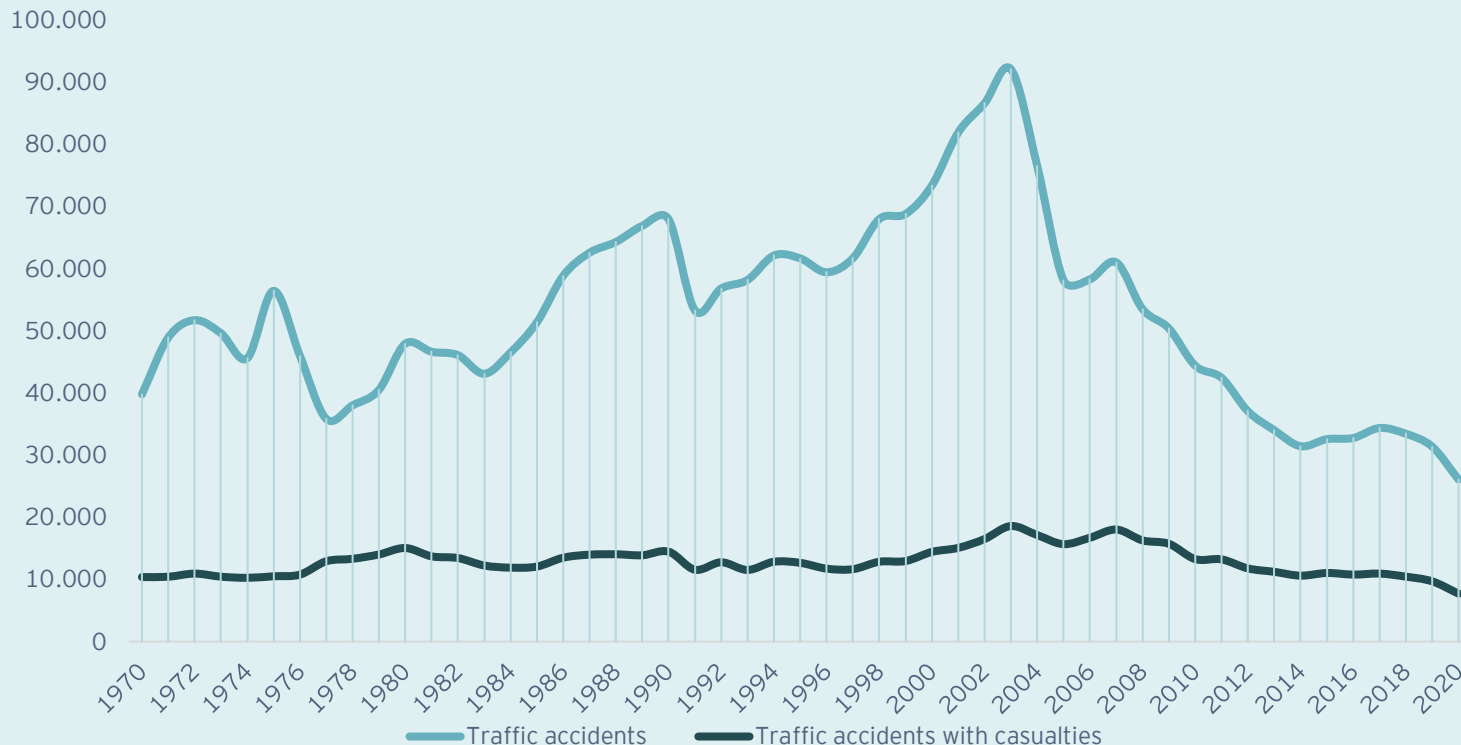
The share of fatalities in the total number of traffic accidents is almost constant for the entire observed period, which is on average 0.94%.

Of the total number of traffic accidents, it is on average:

- 31.37% of accidents with casualties,
- 0.94% of accidents with fatalities,
- 8.25% of accidents with a seriously injured person,
- 33.59% of accidents with slight injuries.



Graph 2 Trends in the number of traffic accidents with casualties in the period from 2016 to 2020



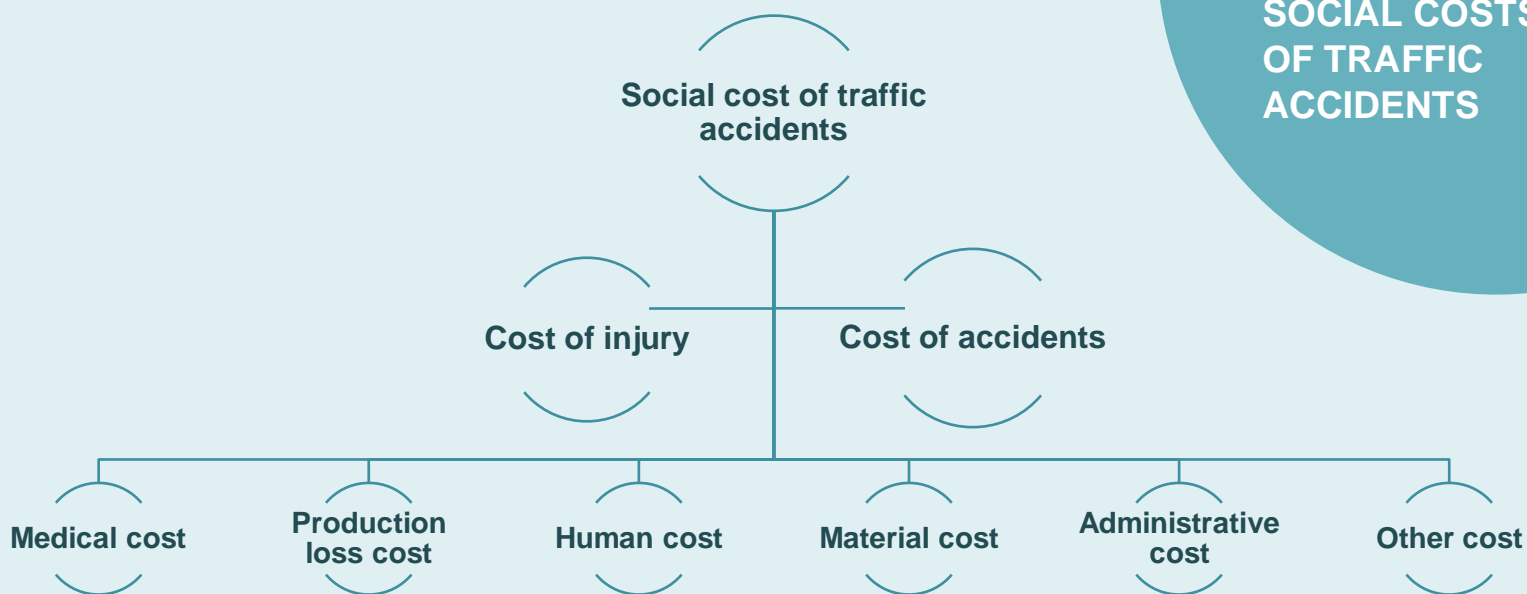
Graph 3 Trends in the number of traffic accidents and traffic accidents with casualties in the period 1970-2020

Legal obligation

In accordance with Article 71b of the Roads Act (NN 84/11, 22/13, 54/13, 148/13, 92/14, 110/19), the Ministry of the Sea, Transport and Infrastructure is obliged to prepare an analysis of the average social cost of a traffic accident and the average social cost of an accident with severe consequences.

* Traffic accident statistics were collected from the Road Safety Bulletin (Ministry of Internal Affairs).

SOCIAL COSTS OF TRAFFIC ACCIDENTS

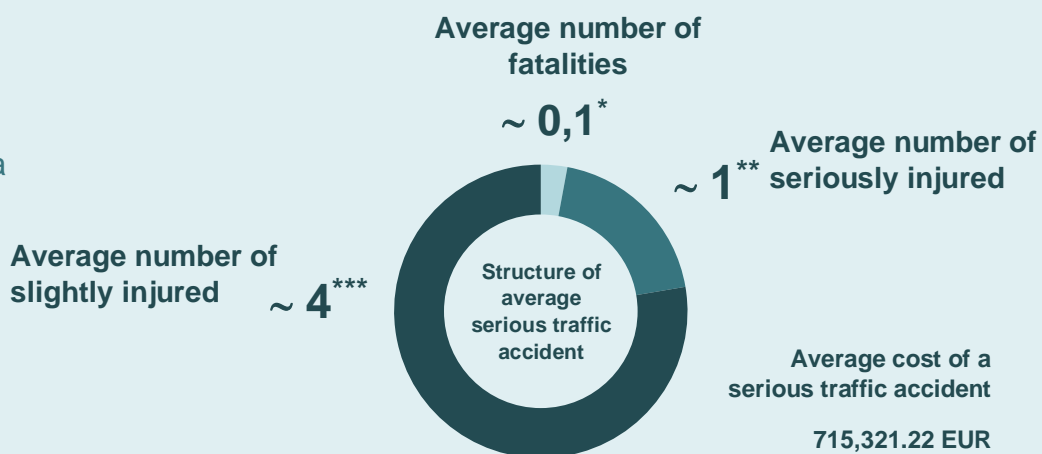


Graph 4 Division of social costs of traffic accidents

Table 1 Costs of traffic accidents by cost categories [EUR]

| Cost category | Fatalities | Seriously injured | Minor injuries |
|----------------------|------------------|-------------------|----------------|
| Medical costs | 5.756 | 17.722 | 1.525 |
| Production loss cost | 694.699 | 46.245 | 2.829 |
| Human cost | 1.682.221 | 244.208 | 16.533 |
| Material costs | 12.248 | 8.079 | 5.636 |
| Administrative costs | 6.727 | 4.626 | 1.989 |
| Other costs | 3.856 | 438 | 550 |
| Total costs | 2.405.507 | 321.318 | 29.062 |

According to the ratio of injured to fatalities calculation in one serious traffic accident, the values were multiplied by the costs obtained by category, and the average cost of a serious traffic accident was obtained.



Graph 5 Average cost of a serious traffic accident and average distribution of a serious traffic accident by type of casualties

*Average number of fatalities - 0,114287864

** Average number of seriously injured - 1,003127178

*** Average number of slightly injured - 4,062973683

Purchasing power parity

All standard values from the SafetyCube have been adjusted to purchasing power parities in 2015 and have been adjusted to the level of the euro value in 2020, which is the last year observed in the preparation of this document. The correction factor by which the EUR values from 2015 were adjusted to the EUR values in 2020 is 1.06.