CARE – Road safety dashboard

User Guide

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Contents:

Introduction:

The current document refers to CARE, the EU database on road crashes leading to death or injury.

The CARE Road Safety dashboard allows citizens to browse/filter, through an interactive graphical reporting tool containing, a predefined series of variables and indicators for all EU/EFTA countries.

This is based on:

- Yearly datasets received from countries
- EC estimates for some countries where no data was submitted, provided that a minimum threshold of 75% of countries have submitted datasets for the given year

Architecture:

The **CARE** (Road Safety) **Dashboard** is publicly available through the relevant point of the EC Road Safety website: https://road-safety.transport.ec.europa.eu/european-road-safety-observatory/methodology-and-research/care-database_en .

When clicking on it, a sort of *specific* webpage opens showing some interactive modules/charts.

Since data presented in the dashboard are refreshed every morning through the execution of some updating processes querying the CARE database, the CARE dashboard always displays indicators updated with the last yearly CARE datasets provided by countries and uploaded to the database.

Data for year t-1 are usually available towards the end of year t or beginning of t+1.

The data for a given year are displayed on the dashboard once 75% of the countries have provided a dataset for that year.

For the remaining 25% of the countries, **EC estimates** are displayed to provide consistent and comparable Time/Country series.

Estimates are generated either by distributing on dashboard variables the provisional total figures received by countries or by duplicating previous country indicators/variables for the missing year.

Estimates are replaced by ordinary datasets as soon as countries provide them.

User Guide:

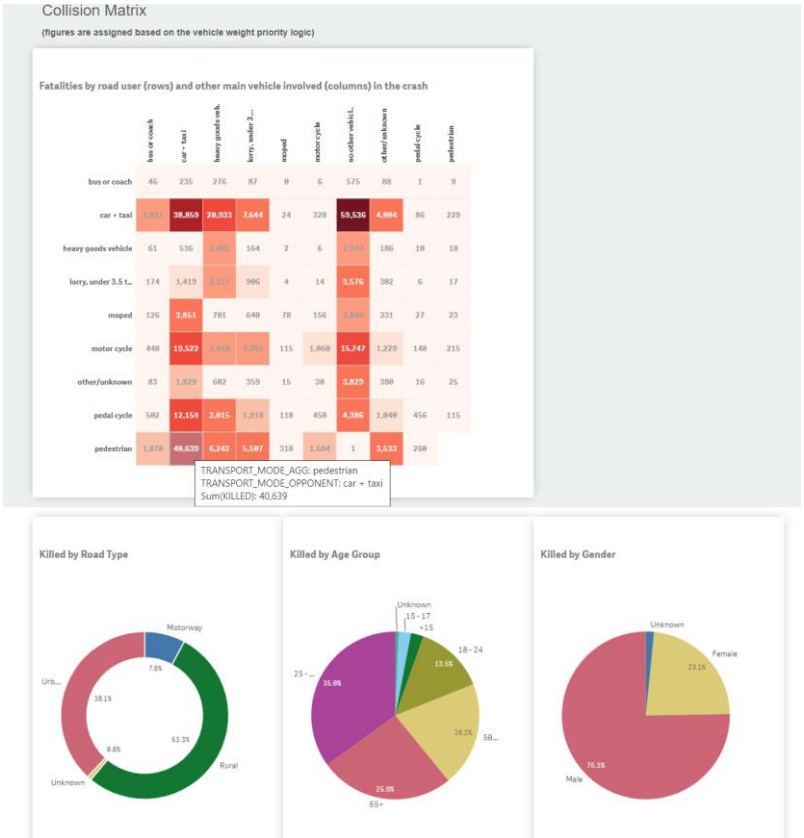
By a functional point of view, the CARE dashboard is a webpage where a list of key variables and relevant values are made available in the upper part (see Annex 1) allowing users to filter variables such as Country Group(s), Country Code(s), Year(s) of the crash and Transport Mode(s).

If any values are selected within these modules, ALL variable values are considered and, therefore, displayed on charts unless values get selected directly within charts.

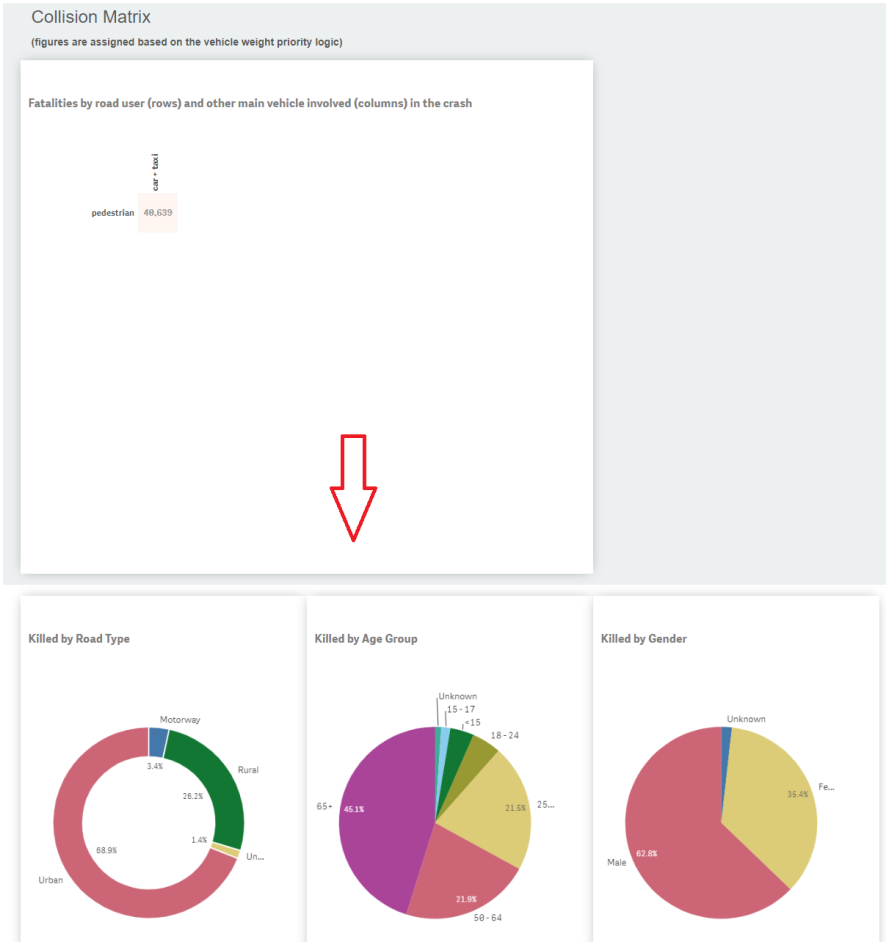
The above means that, in addition to using modules available in the upper part, values can be selected also by clicking them on charts.

Values selected in the lists of values or in charts, change the view/ the content of all charts available in the webpage (i.e. if one chooses year of crash = 2021 through the years list or in the relevant value of chart "Trend over years", all other chart indicators (excepting prefiltered charts) will be filtered through that value. The selection can eventually be crossed with other variable values, for example with Transport Modes = "car + taxi" or other variables).

For instance, when filtering within the Collision Matrix (showing Road user fatalities in collision with main Transport Modes involved) a specific cell – in the image the crossing value of ***Pedestrians*** with ***car + taxi*** –, pie charts located below the matrix change accordingly from the following view:



To:



where pie charts show figures of the specific transport mode (Pedestrian/car + taxi) chosen in the Collision Matrix.

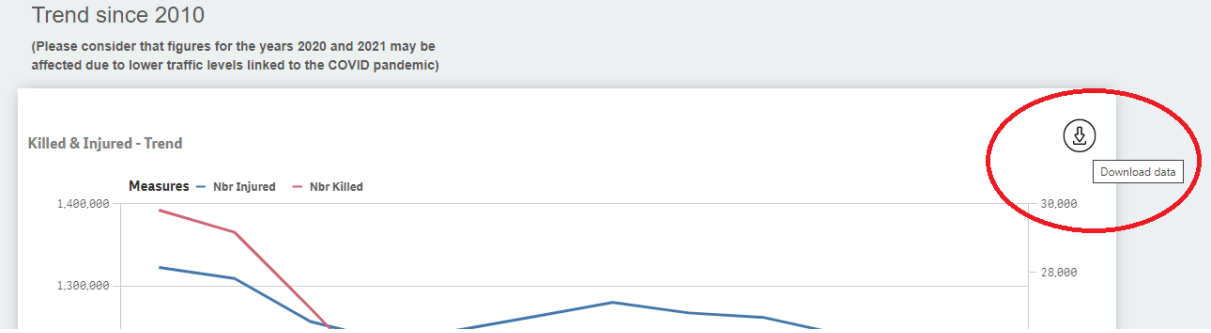
Charts, “Killed per million inhabitants” (see Annex 2) and “Crashes by severity” (see Annex 3), are pre-filtered based on the last year available.

While the first one allows to filter countries for the specific chart and also for others, the second one, showing the number of crashes can’t be used to filter values.

If one wants to clear ALL filters/selections, two functions are available in the page headers:

Raw data used by charts can be downloaded locally as Excel files by using the relevant function available when overlapping the mouse on the right top corner of each chart (excepting for the map).

Please note that if charts displayed are filtered, downloaded data will be filtered as well.



Explanation about charts:

Collision Matrix

For the matrix, the data cover fatalities in single-vehicle crashes and crashes involving one or more traffic units. For the majority of fatal crashes, only one other vehicle is involved in the crash. For multi-vehicle crashes, the 'main vehicle' is the heaviest of the vehicles involved as this tends to be responsible for the most serious consequences. As a result, the figures in each column likely underestimate the number of cases a particular vehicle was involved in a crash.

In other detailed words, the Collision Matrix shows fatalities for each Transport Mode taking in account the main opponent involved in the accident. If no opponent is found, it displays the value "none" (Single vehicle accidents).
This main opponent has been defined following a "weight" priority logic, the ordered list is :
Weight & priority:

- *'heavy goods vehicle'*
- *'bus or coach'*
- *'agricultural tractor'*
- *'lorry, under 3.5 tonnes'*
- *'car + taxi'*
- *'motor cycle'*
- *'moped'*
- *'pedal cycle'*
- *'Motorised micro-mobility device'*
- *'pedestrian'*

- *'other'*
- *'unknown'*

For each fatality, it will look for the main opponent and place it accordingly in the matrix following the above logic.

For instance, a pedestrian fatality in an accident involving a car and also a heavy goods vehicle, will appear in the matrix as a pedestrian fatality with main opponent being heavy goods vehicle.

Crashes by severity

For the countries which a dataset was received – *No estimations are generated for this chart* – and for the last year considered, the bar chart displays the Share (%) by Accident Severity of the number of crashes.

Accident Severity is assigned to a crash based on *the highest level of injury occurred to persons involved* (i.e. if in an accident one person is killed and three others are injured, the accident is considered "Fatally injured", if one person is seriously injured and another is slightly injured, the accident is considered "Seriously Injured", if excepting fatalities, no details are provided about injury types, accidents are considered as "Injured (not specified)", etc.)

Metadata:

Indicators:

- **Killed** = Death within 30 days of the road accident (confirmed suicide and natural death are not included)
- **Injured =** The road user was seriously or slightly injured (but not killed within 30 days) in the road accident and hospitalized at least within 24 hours
- **Seriously Injured** = Injured (although not killed) in the road accident and hospitalized at least within 24 hours – Injury classification depends on several systems (AIS, ISS, hours, etc.) and assigned by the country
- **Slightly Injured** = Injured (although not killed) in the road accident and hospitalized at least within 24 hours – Injury classification depends on several systems (AIS, ISS, hours, etc.) and assigned by the country
- **Killed per million inhabitants** = shows the number of fatalities per million country inhabitants. It allows a comparison between countries.

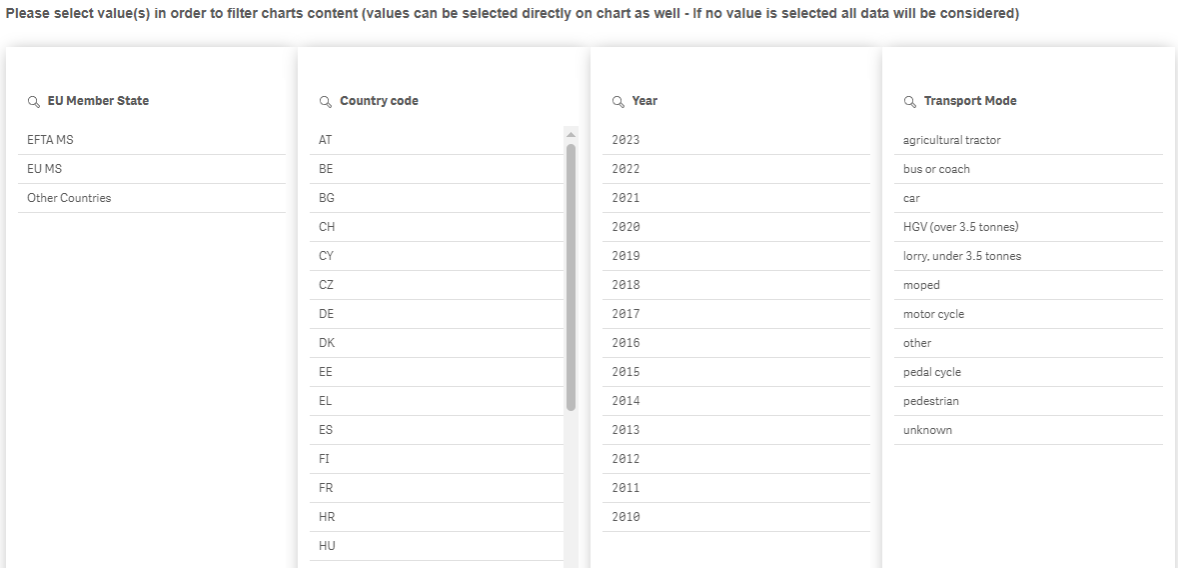
Variables:

- **EU Member State** = The group a country belongs to (i.e. EU, EFTA or other countries not belonging to any of them)

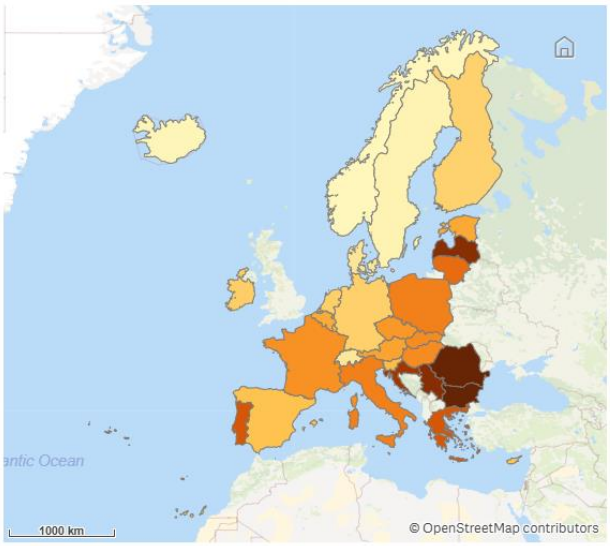
- **Year** = The year the accident date refers to
- **Transport Mode** = The vehicle aggregated type involved in the accident. Pedestrians are considered as a specific category
- **Age group** = indicates age groups of persons involved in crashes as reported by the Police at the time of the accident.
- **Gender** = indicates the gender of the person involved in a crash as reported by the Police
- **Area** = it refers to the Area (combined with the Road Type) where the accident occurred (values: Motorway (outside Urban), Rural, Urban, Unknown)
- **Accident Severity** = is a value assigned to a crash (accident) based on the highest level of injury occurred to persons involved

Annex:

1)



2)



Killed per million inhabitants

Latest year only (Value is displayed by placing the cursor on the country - Colours depend on the number killed per million inhabitants of the country)

3)