



2017
STATISTICAL
YEARBOOK
OF TRAFFIC
ACCIDENTS IN
CATALONIA





2017 STATISTICAL YEARBOOK OF TRAFFIC ACCIDENTS IN CATALONIA



We are pleased to present the 2017 edition of the *Statistical Yearbook of Traffic Accidents in Catalonia*, which, as it has collected in recent years, presents all of the data on urban and interurban road accidents compiled by the Traffic Accident Data Collection System, always keeping the main variables of road safety in mind.

2017 closed on a snapshot similar to the previous year in terms of both the number of accidents and fatalities in traffic accidents, with a still-noticeable cumulative decrease since the beginning of the decade, but with a certain slowing in the downward trend, especially over the last five years. This result, which shows stagnation, is no surprise if you consider what is happening in the rest of Europe.

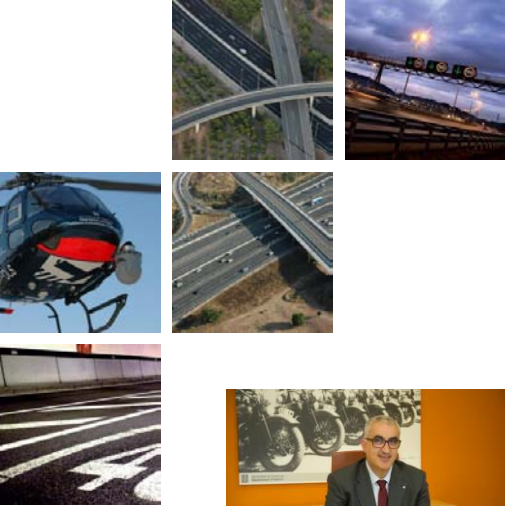
Catalonia, which is among the European regions with the lowest number of fatalities in traffic accidents per million inhabitants, had a total of 283 fatal victims, with 199 cases in interurban areas, which means one more person than in 2016. This is still a totally unacceptable figure, right at the time when we had started to catch sight of Vision Zero, no fatal accidents, the goal that the European Union is asking us to reach by 2050.

At the start of this decade, especially when the 2014-2020 Strategic Road Safety Plan was approved, put in practice through successive three-year plans, we knew that it would also be important to overcome a situation of assumed normality, where traffic accidents occur, to get society to see this issue as a problem to be eradicated. We have vehicles and infrastructures that are getting better and better, and now we need a joint effort to reduce human error as much as possible.

In any case, this Yearbook continues to be a useful tool for following the positive evolution of accidents, and we appreciate the work on collecting and analysing data that is done by the *Mossos d'Esquadra*, Local Police, and the team of road safety experts at the Catalan Traffic Service. If we have the data, we will know why there are accidents, and we will know how to act.

Miquel Buch i Moya
Minister of the Interior





The *Statistical Yearbook of Traffic Accidents in Catalonia 2017* is the report that records the state of road safety for the entire year, with all of the data regarding accidents on urban and interurban roads, collected in order to analyse the course taken, to know where we are with improving safe mobility, and to be aware and ambitious about what is left for us to do in trying to reach the goal of Vision Zero.

In 2017, as mobility has continued to increase, we saw a certain stagnation with respect to the figures obtained in the previous year, although the trend consolidated since the beginning of this decade shows a 25.7% decrease in fatalities. Nevertheless, there is some good news in the details of the evolution of these statistics: Road safety in urban areas continues to increase, and this year produced the lowest number of fatalities in history, going from 100 to 84.

The data in 2017 not only show this decrease in urban areas, but also complement and contrast with other elements that continue to cause concern, such as the persistent presence of speed, distraction, and the consumption of alcohol and drugs. These factors in accidents are the main causes when we try to understand the increase in head-on collisions, cars running off the road, and accidents with multiple victims, which also stood out negatively this year.

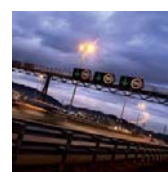
In any case, the overall and specific analysis provided by this Yearbook also provide us with a changing portrait of road safety and the new dynamics in movement of a society that is increasingly aware of the need for safe, sustainable, and healthy mobility. Consequently, government bodies must be proactive in implementing road safety policies that are highly preventive in nature; Although they must also be dissuasive, as the number of victims has not decreased as much as we would have liked.

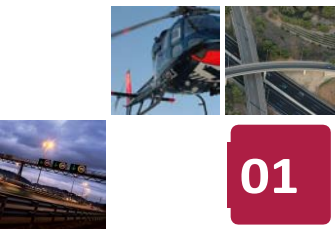
We are coming to the end of the decade, and we must meet the goals of the 2017-2019 Road Safety Plan, which we committed to, reducing the number of fatalities that we had in 2010 by 50%. For this reason, we can neither relax nor become complacent; we must always be stay on our toes, because road safety for each person is the symbol of social welfare.

Juli Gendrau i Farguell
Director

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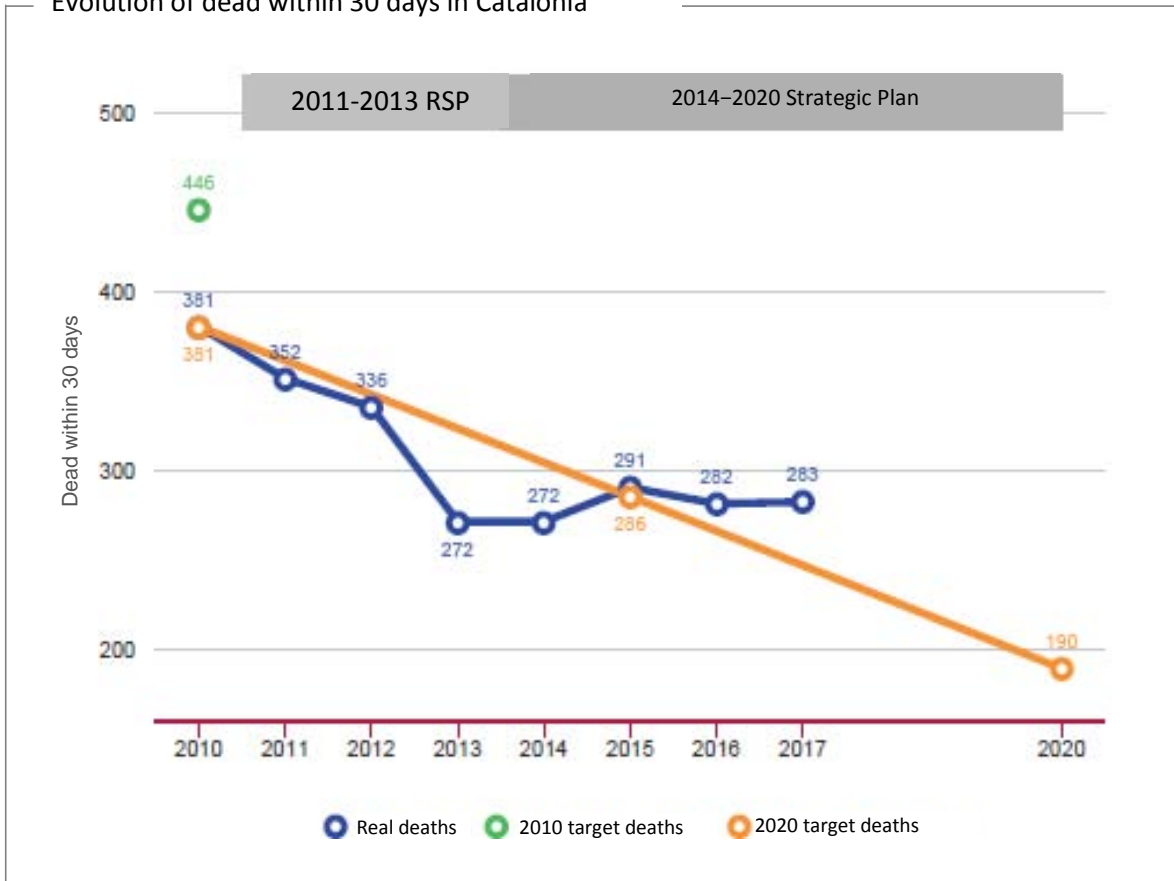


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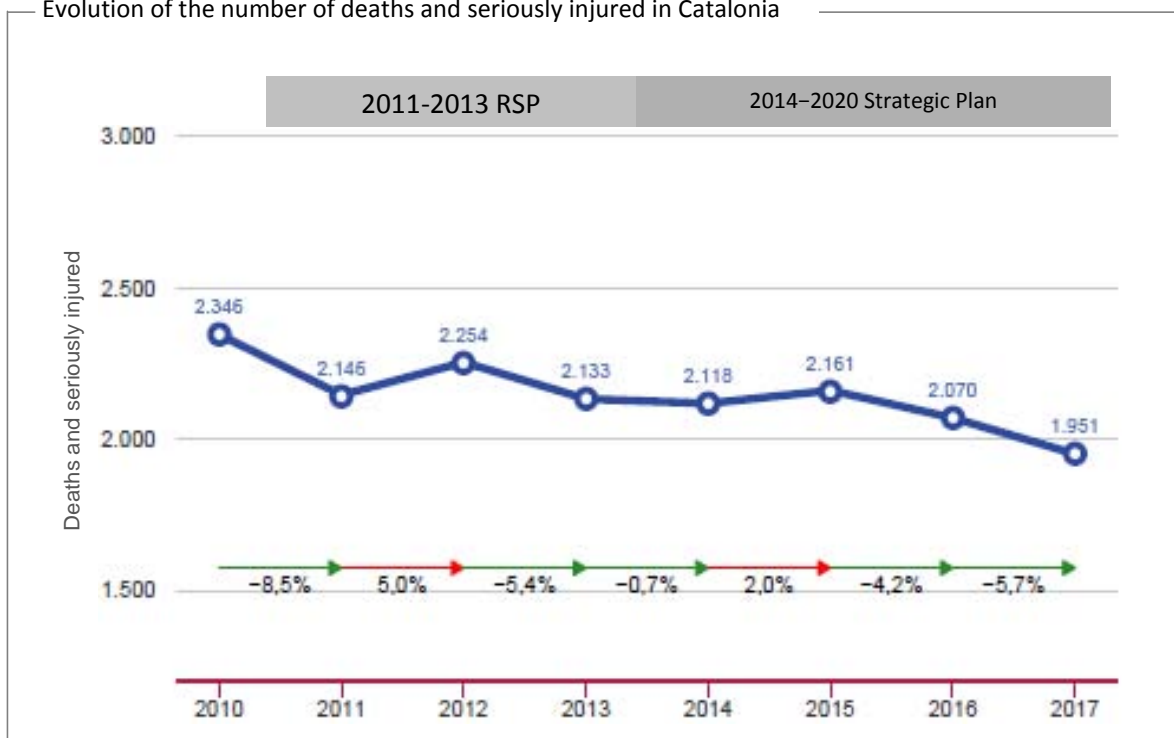
Evolution of the main variables in road safety

Accident rate indicators

Evolution of dead within 30 days in Catalonia



Evolution of the number of deaths and seriously injured in Catalonia





Accident rate indicators

Evolution of accident rates (dead within 30 days)

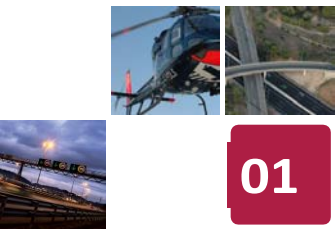


Data from the 2016 driver census and motorization are provisional.

Evolution of accident rates (accidents with deaths and seriously injured)



Data from the 2016 driver census and motorization are provisional.

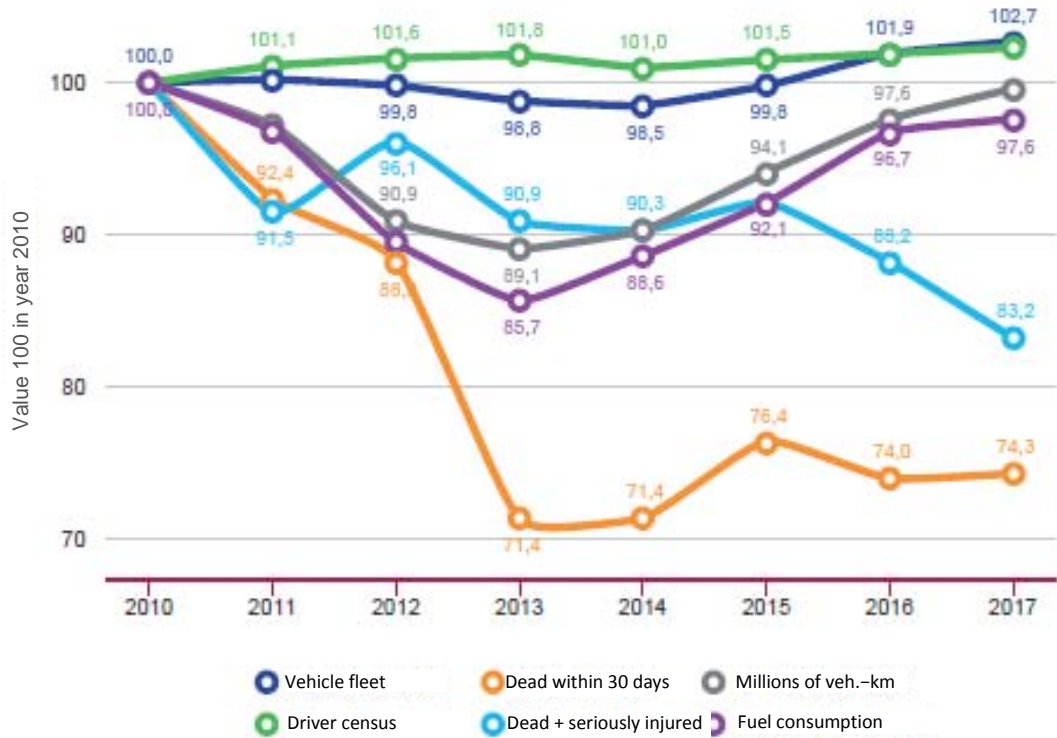


01

Evolution of the main variables in road safety

Accident rate indicators

Evolution of mobility and accident rates



Data from the 2016 driver census and motorization are provisional.

Evolution of dead within 30 days in urban and interurban areas





Evolution of drug abuse positive tests

Evolution of alcohol indicators

There are several indicators to assess alcohol consumption among drivers on Catalan roads:

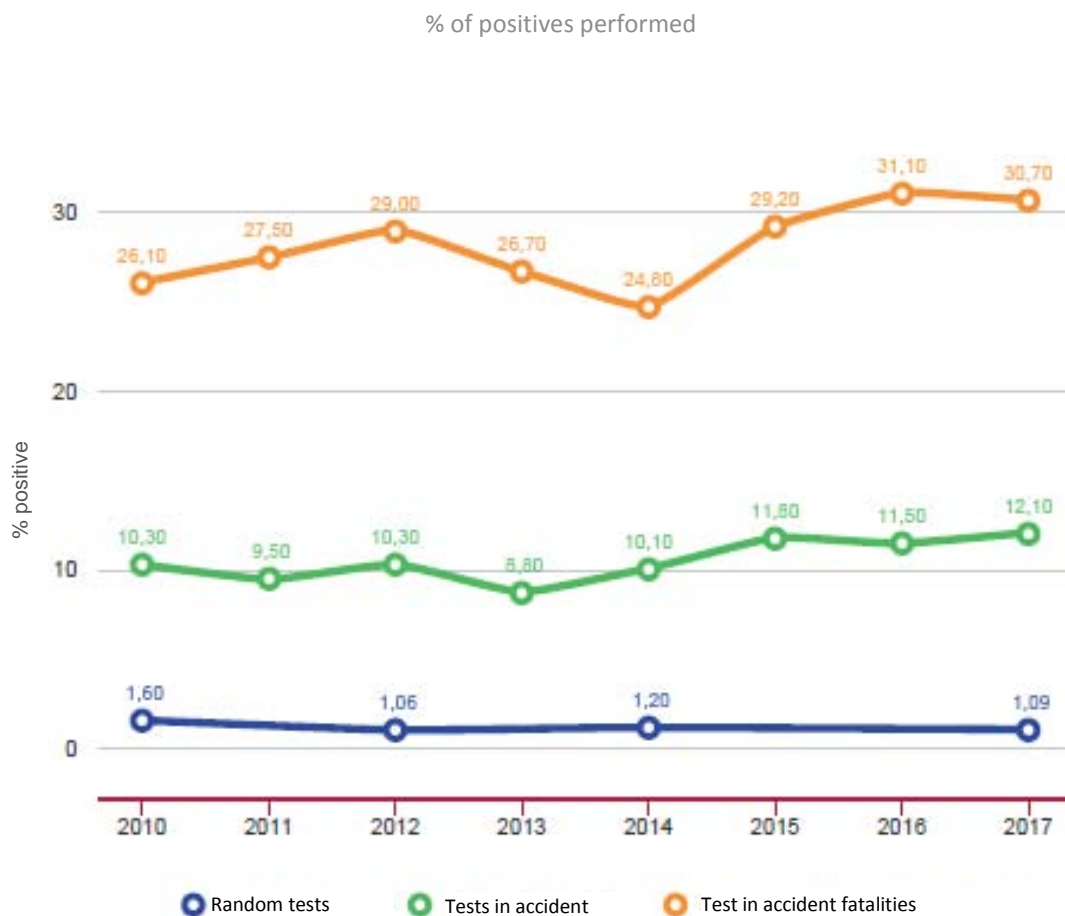
-The Institute of Legal Medicine performs toxicological tests on some drivers killed in traffic accidents in both urban and interurban areas.

-The Catalan police (*Mossos d'Esquadra*) or local police make alcohol tests on drivers involved in traffic accidents in both urban and intercity routes.

-The Catalan Traffic Service, together with the Mossos d'Esquadra, conduct random alcohol tests to calculate what percentage of drivers exceed the alcohol limit allowed, only in the interurban areas. This study was done in 2010, 2012, 2014 and 2017.

The percentage of positives detected in each test allows to obtain a direct relation between alcohol consumption, accidents and accident fatalities.

Approximately 1% of drivers in traffic have an alcohol level above that allowed. Among the injured, this percentage is around 12% and among drivers killed in 2017 it exceeds 30%.

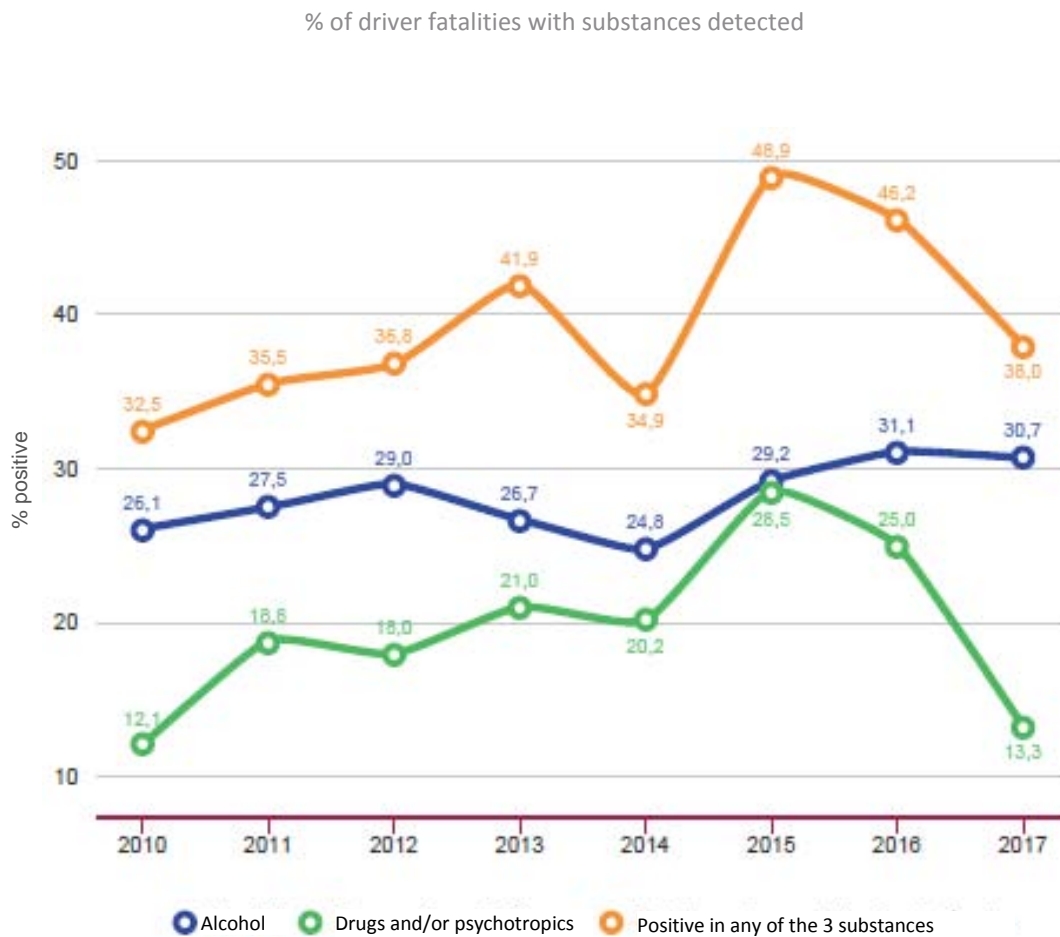


Evolution of drug abuse positive tests

Evolution of toxicology tests

The Institute of Forensic Medicine of Catalonia (IMLC), aside from detecting alcohol also performs toxicology tests in search of drugs or psychotropic drugs.

This year, of every 10 drivers killed in accidents more than 3 had consumed some type of substance, although in the last two years the detection of drugs has decreased by more than half.





Evolution of passive safety elements

Use of safety elements by people injured in accidents 2010-2017



Summary of indicators. 2016-2017 benchmark

Evolution of accident rate indicators

Indicator	Year 2016	Year 2017	Increase	Evolution
Dead within 30 days	282	283	0.4%	✘
Dead + seriously injured	2,070	1,951	-5.7%	✔
Accidents with D + SI	1,793	1,721	-4.0%	✔
Acc. with D+SI / 1,000 tons of fuel	0.41	0.39	-4.9%	✔
Control and prevention indicators. Inducers	Year 2016	Year 2017	Increase	Evolution
Alcohol and drug consumption	Year 2016	Year 2017	Increase	Evolution
% positive tests of drivers in accidents	11.5	12.1	0.6%	✘
% positive alcohol tests of dead	31.1	30.7	-0.4%	✔
% positive drug tests of dead	6.1	3.0	-3.1%	✔
% positive psychotropic drug tests of dead	18.9	10.2	-8.7%	✔
Passive safety	Year 2016	Year 2017	Increase	Evolution
% helmet users in motorcycle accidents. Urban area	99.2	99.0	-0.2%	✘
% helmet users in motorcycle accidents. Interurban area	99.3	99.2	-0.1%	✘
% use of safety belt and child restraint systems. Urban area	95.3	95.9	0.6%	✔
% use of safety belt and child restraint systems. Interurban area	98.1	98.0	-0.1%	✘



Summary of indicators. 2010-2017 benchmark

Evolution of accident rate indicators

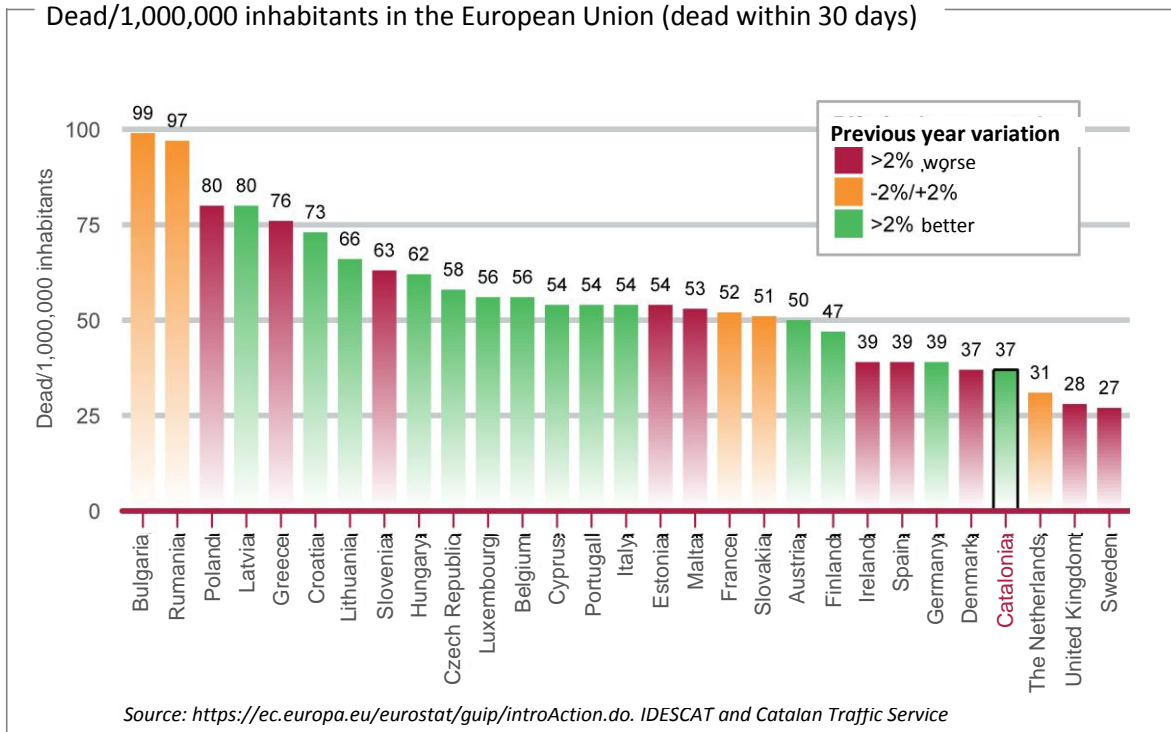
Indicator	Year 2010	Year	Increase	Evolution
Dead within 30 days	381	283	-25.7%	✓
Dead + seriously injured	2,346	1,951	-16.8%	✓
Accidents with D + SI	1,984	1,721	-13.3%	✓
Acc. with D+SI / 1,000 tons of fuel	0.44	0.39	-11.4%	✓

Control and prevention indicators. Inducers	Year 2010	Year 2017	Increase	Evolution
Alcohol and drug consumption	Year 2010	Year 2017	Increase	Evolution
% positive tests of drivers in accidents	10.3	12.1	1.8%	✗
% positive alcohol tests of dead	26.1	30.7	4.6%	✗
% positive drug tests of dead	7.0	3.0	-4.0%	✓
% positive psychotropic drug tests of dead	5.1	10.2	5.1%	✗

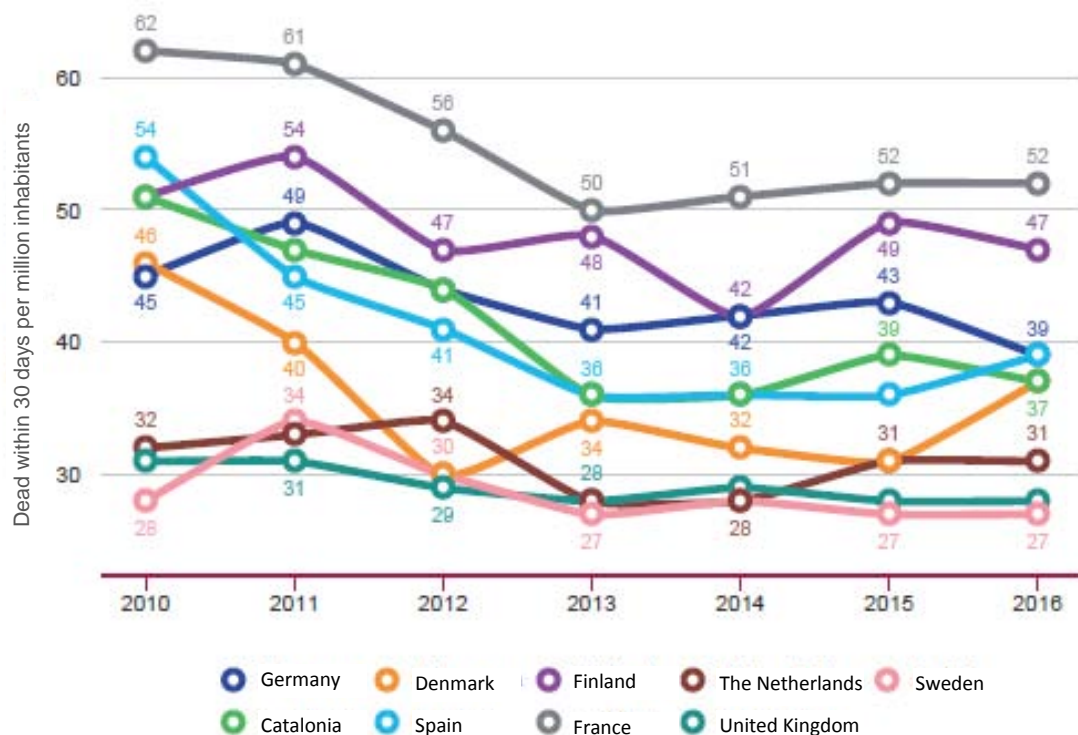
Passive safety	Year 2010	Year 2017	Increase	Evolution
% helmet users in motorcycle accidents. Urban area	98.9	99.0	0.1%	✓
% helmet users in motorcycle accidents. Interurban area	98.1	99.2	1.1%	✓
% use of safety belt and child restraint systems. Urban area	94.1	95.9	1.8%	✓
% use of safety belt and child restraint systems. Interurban area	97.3	98.0	0.7%	✓

Evolution of the main variables in road safety

European benchmark (data from the previous year)



Evolution of fatalities in the European Union among the leading countries

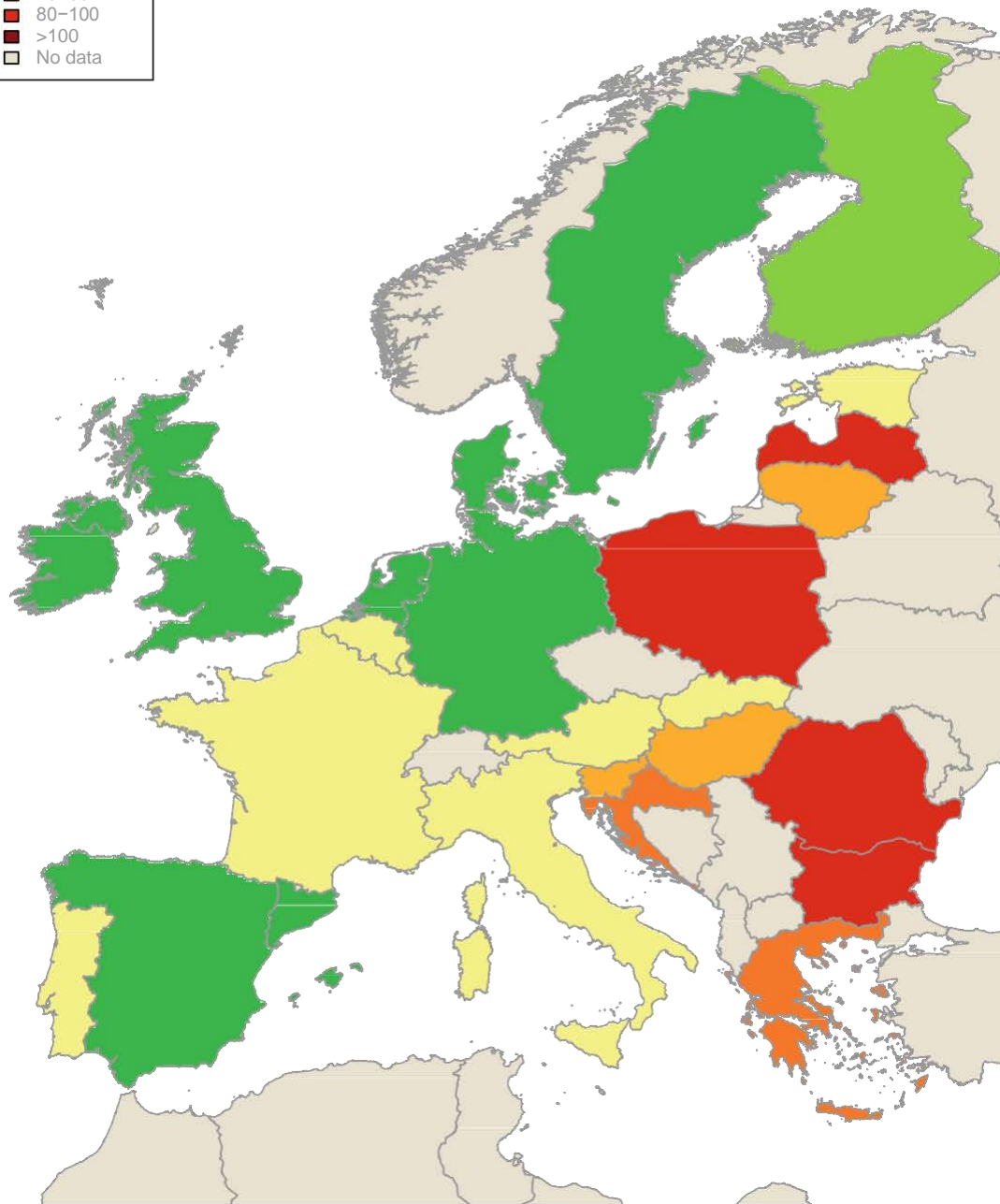
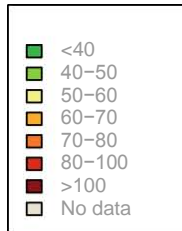


In European sphere the data for 2017 are not yet available. In Catalonia, the 283 deaths within 30 days will keep the indicator within 30 days / 1,000,000 inhabitants.



European benchmark (data from the previous year)

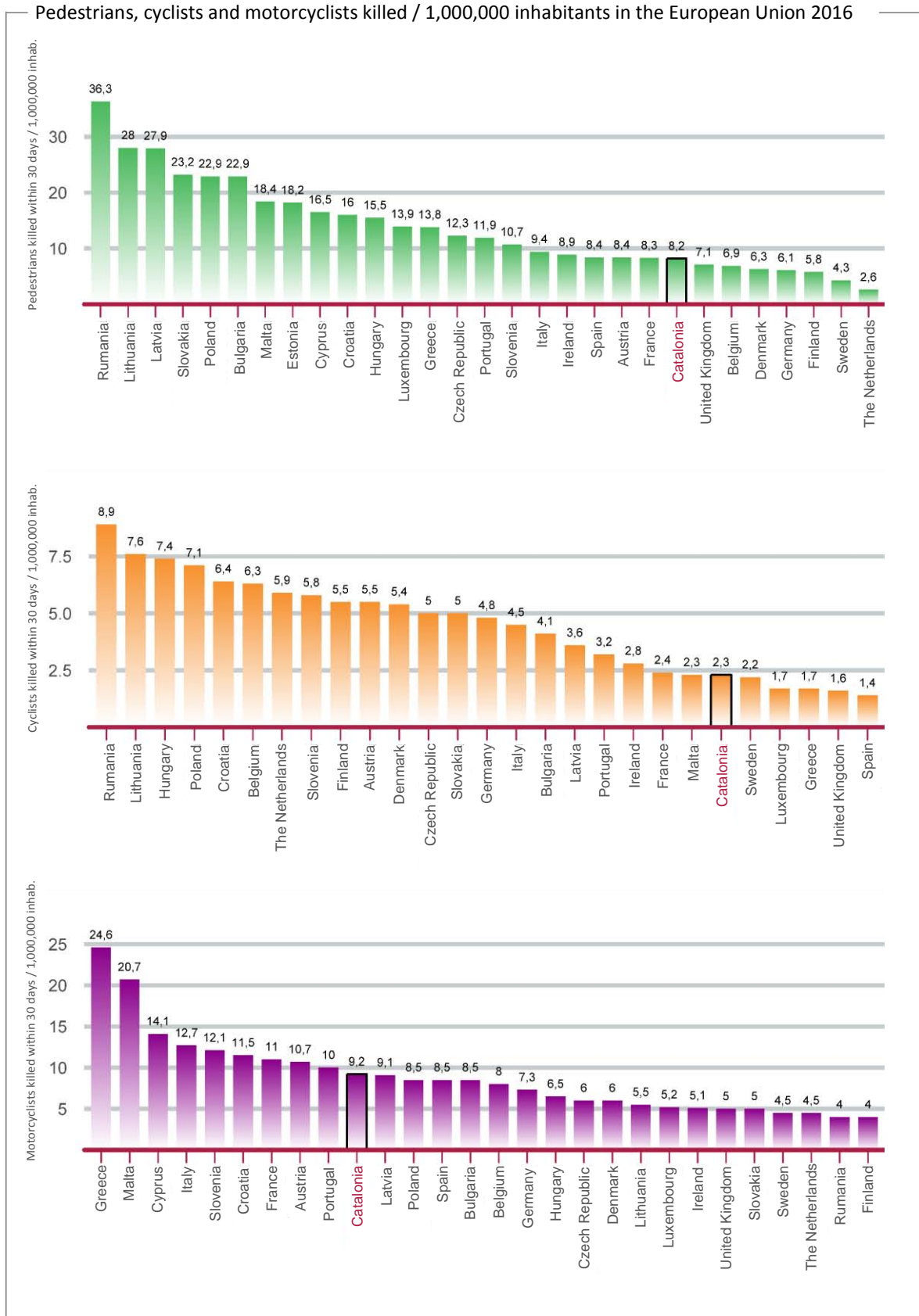
Dead/1,000,000 inhabitants in the European Union 2016

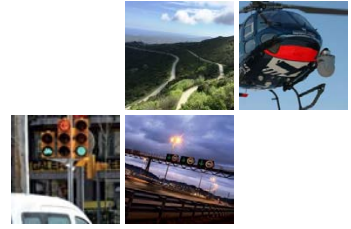


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Evolution of the main variables in road safety

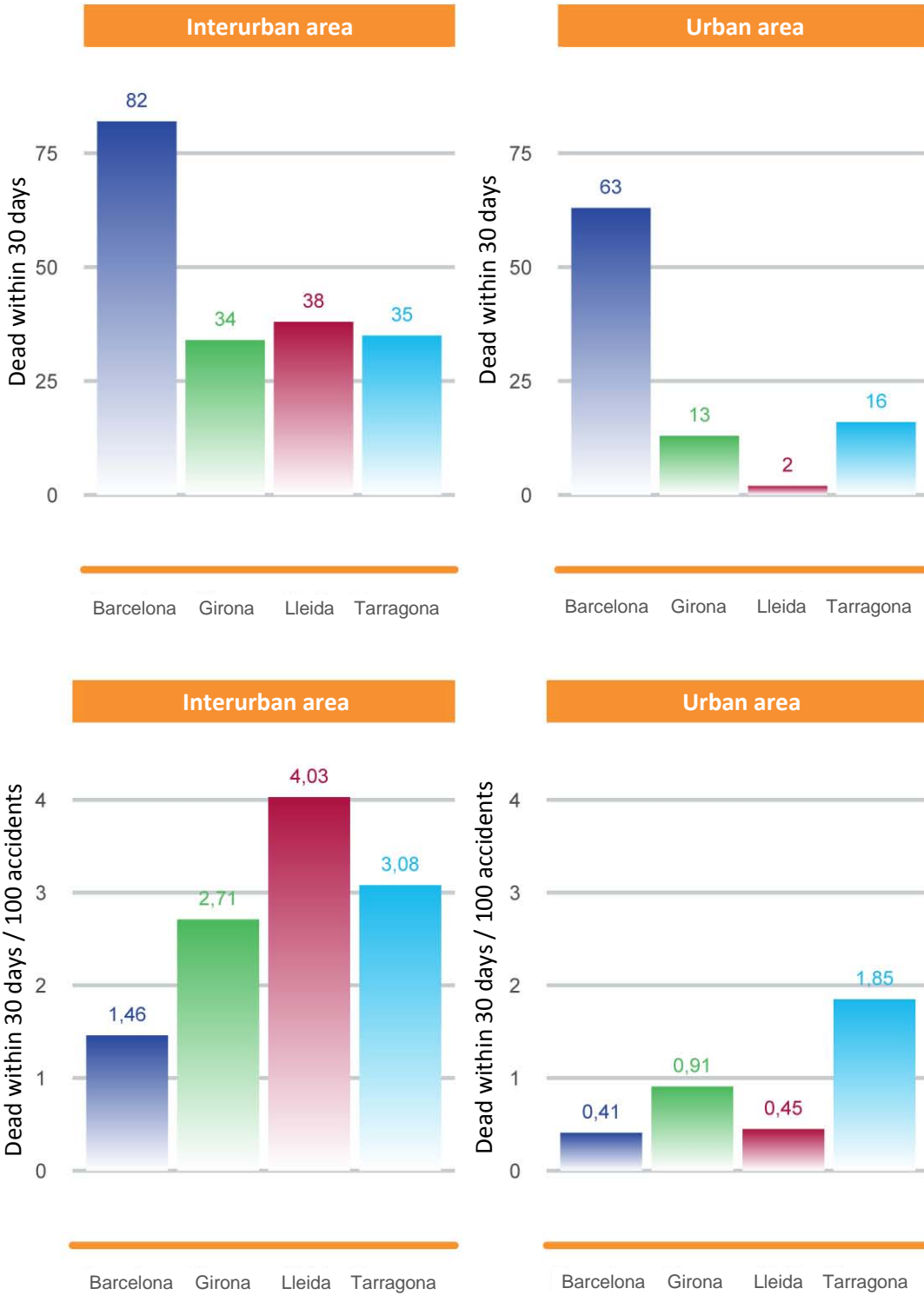
European benchmark (data from the previous year)





Dead within 30

Dead within 30 days per district



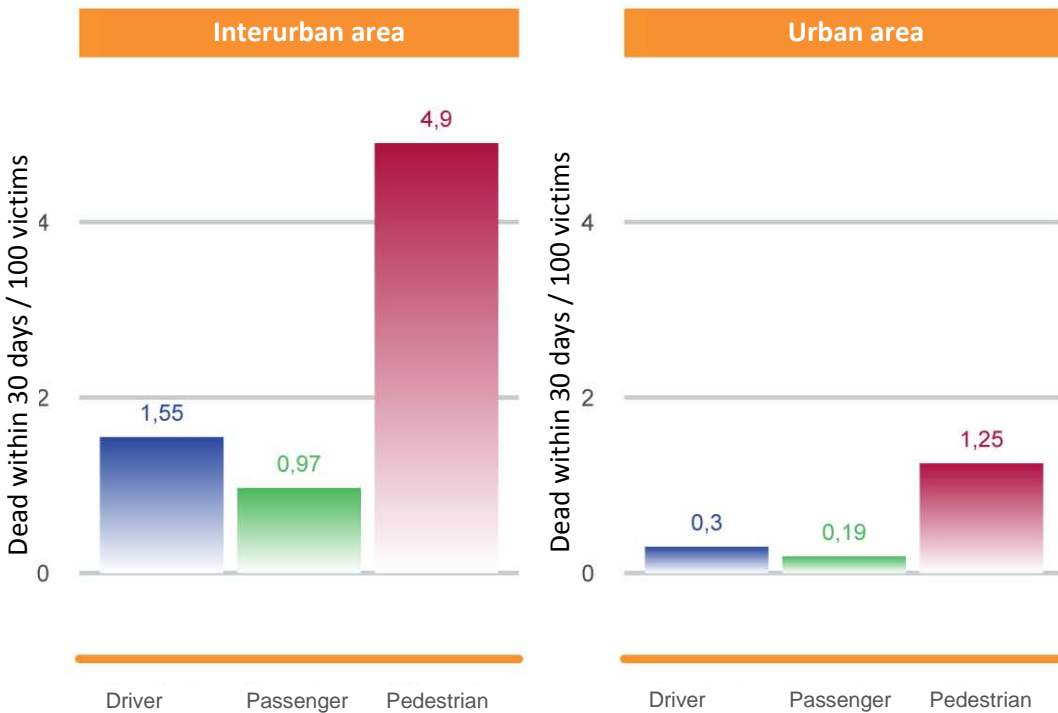
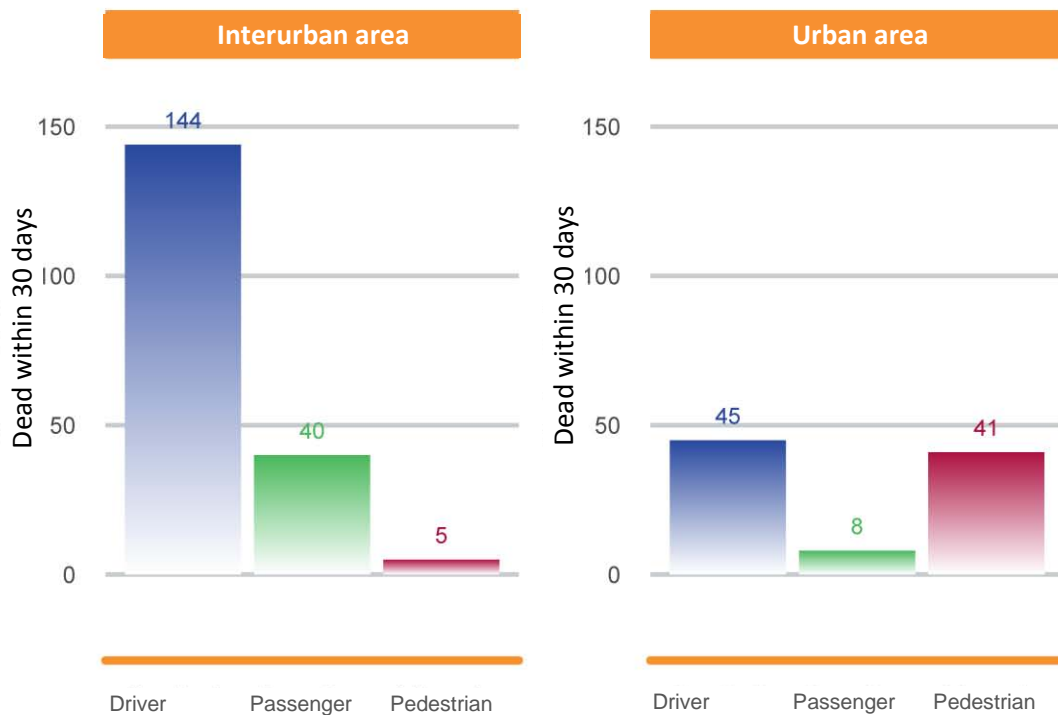


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Main results in Catalonia in 2017

Dead within 30

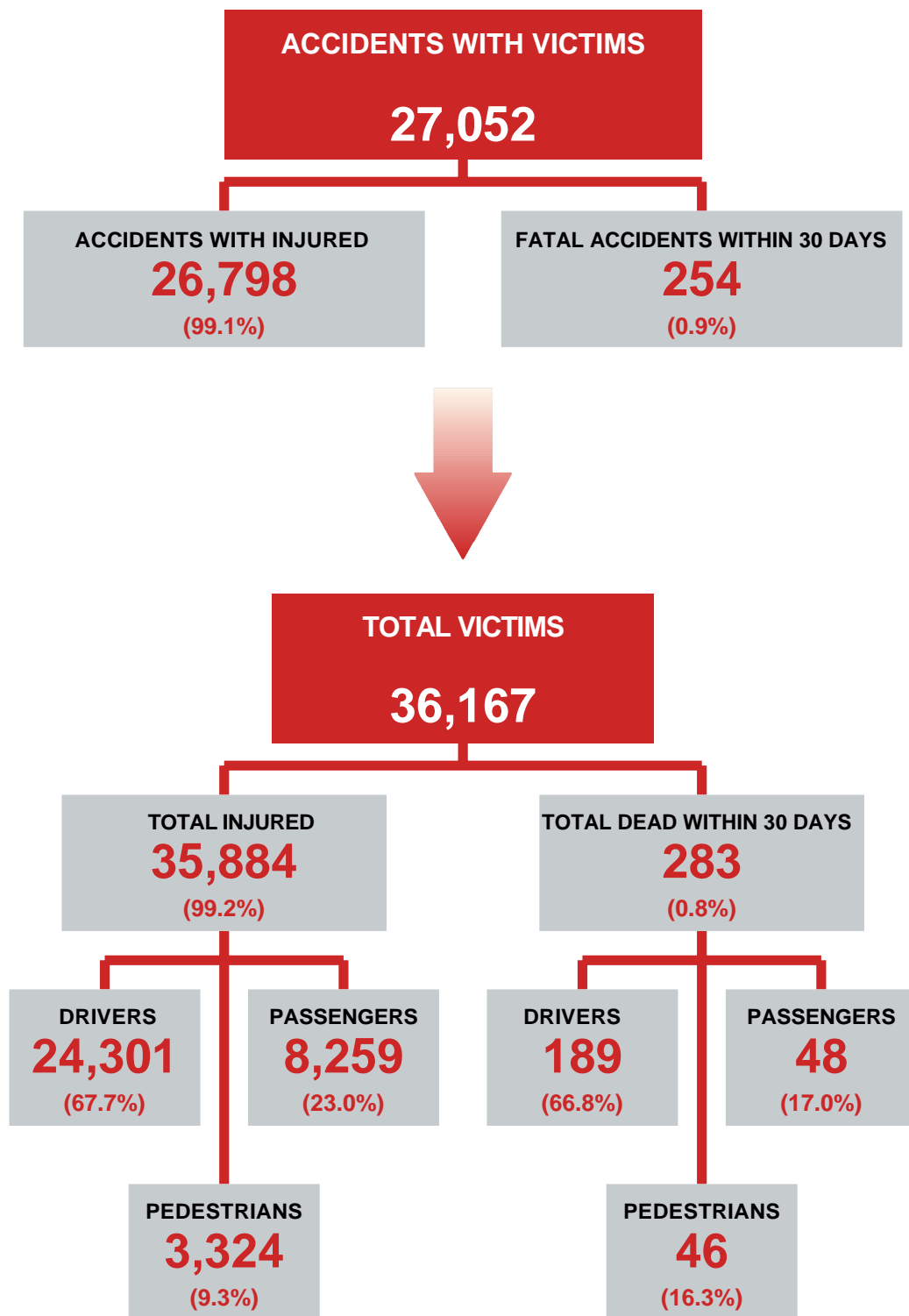
Dead within 30 days by position





Dead within 30

Accidents with casualties and type of casualty



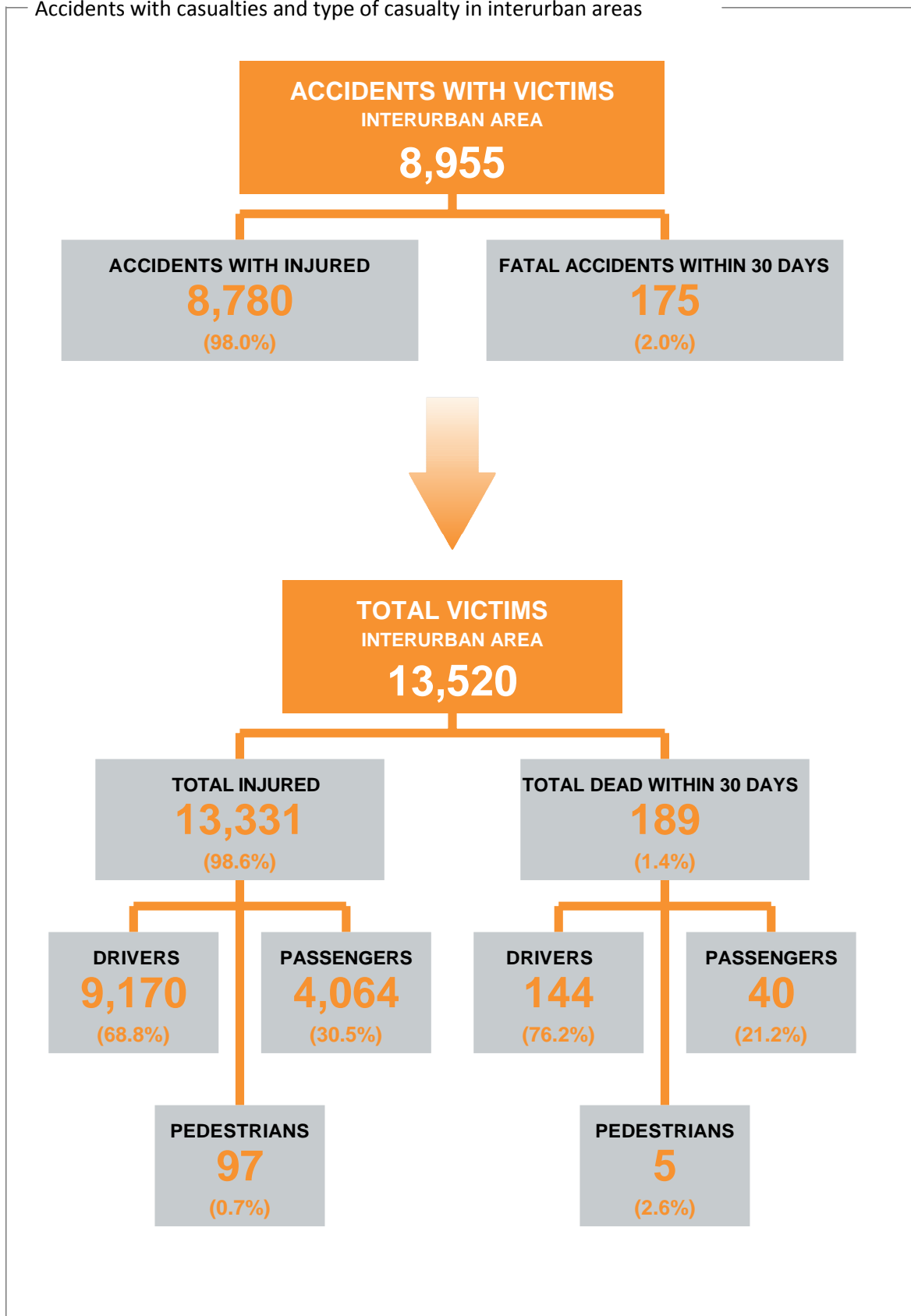


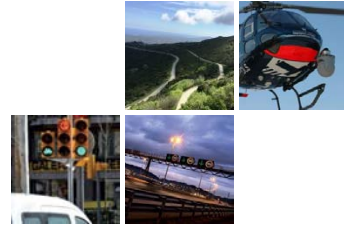
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Main results in Catalonia in 2017

Dead within 30 days

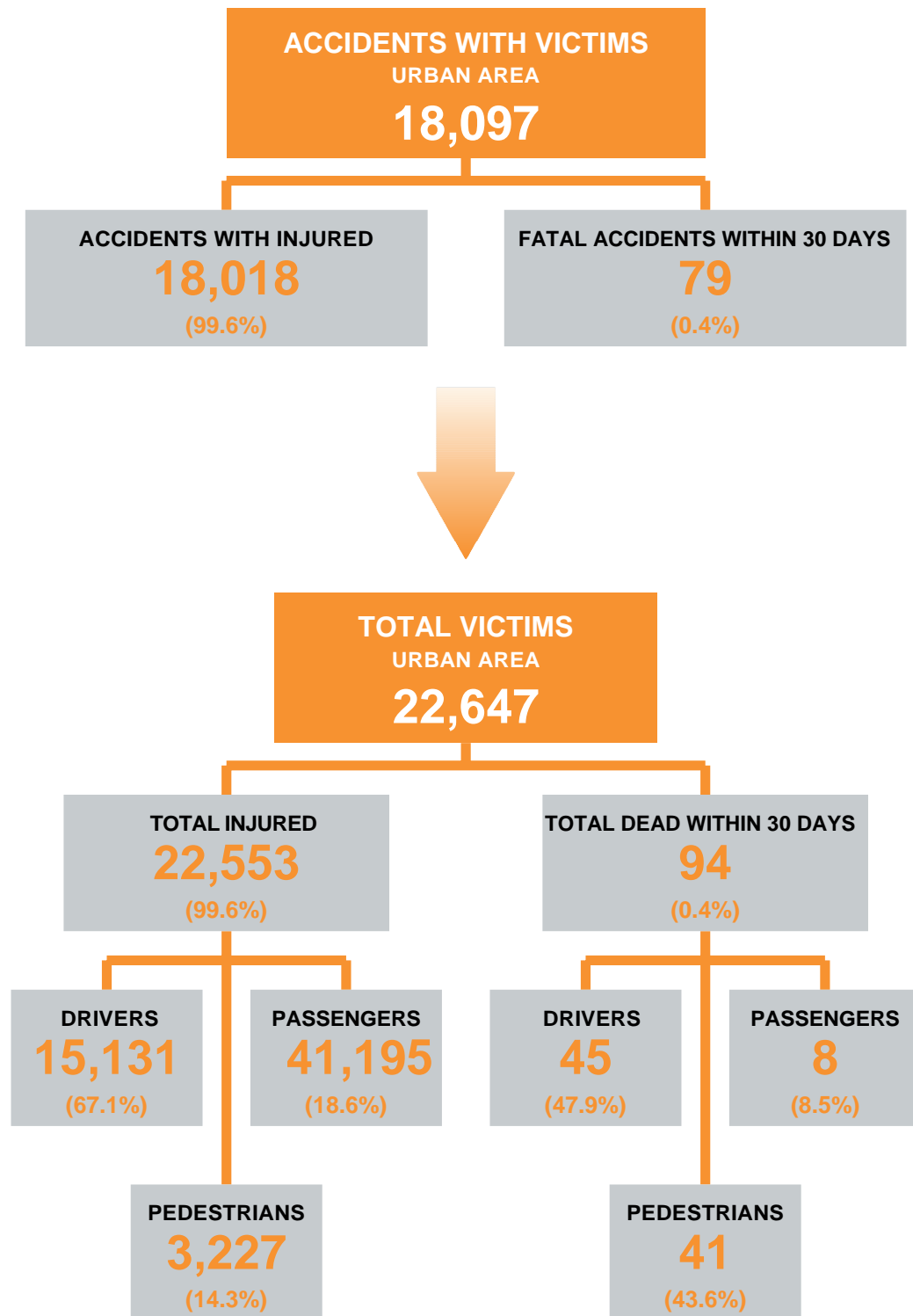
Accidents with casualties and type of casualty in interurban areas





Dead within 30 days

Accidents with casualties and type of casualty in urban areas



Description of overall (dead in 24 hours)

— Data in accident rate per sphere

Area	Sphere	Accidents with victims	Fatal accidents	Dead	Deaths and seriously injur.	Seriously injured	Slightly injured
Interurban	Barcelona	5,622	63	72	471	399	8,067
	Girona	1,255	27	33	145	112	1,731
	Lleida	942	32	34	176	142	1,273
	Tarragona	1,136	23	29	154	125	1,503
	Total		8,955	145	168	946	778
Urban	Barcelona	15,364	44	44	702	658	18,490
	Girona	1,421	10	10	126	116	1,657
	Lleida	449	2	2	64	62	522
	Tarragona	863	12	16	113	97	973
	Total		18,097	68	72	1,005	933

— Status of traffic accident casualties

Area	Status	Dead	Deaths and seriously injured	Seriously injured	Slightly injured
Interurban	Driver	129	712	583	8,602
	Passenger	33	195	162	3,655
	Pedestrian	5	24	19	78
	Other	1	15	14	239
	Total		168	946	778
Urban	Driver	38	570	532	14,606
	Passenger	7	61	54	2,250
	Pedestrian	27	341	314	2,927
	Other	0	33	33	1,859
	Total		72	1,005	933

— Transport modes of traffic accident casualties

Area	Transport mode	Dead	Deaths and seriously injured	Seriously injured	Slightly injured
Interurban	2-wheel motor vehicles	45	344	299	2,358
	Light vehicles	98	472	374	9,334
	Heavy vehicles	5	28	23	326
	Bicycles	11	58	47	432
	Other vehicles	4	20	16	46
	Pedestrians	5	24	19	78
	Total		168	946	778
Urban	2-wheel motor vehicles	23	440	417	9,649
	Light vehicles	17	130	113	6,875
	Heavy vehicles	1	7	6	757
	Bicycles	2	71	69	1,337
	Other vehicles	2	16	14	98
	Pedestrians	27	341	314	2,926
	Total		72	1,005	933



Description of overall (dead in 24 hours)

— Data in accident rate per sphere (%)

Area	Sphere	Accidents with victims	Fatal accidents	Deaths and seriously injur.	Deaths and seriously injur.	Seriously injured	Slightly injured
Interurban	Barcelona	62.78	43.45	42.86	49.79	51.29	64.16
	Girona	14.01	18.62	19.64	15.33	14.40	13.77
	Lleida	10.52	22.07	20.24	18.60	18.25	10.12
	Tarragona	12.69	15.86	17.26	16.28	16.07	11.95
Total		100.00	100.00	100.00	100.00	100.00	100.00
Urban	Barcelona	84.90	64.71	61.11	69.85	70.53	85.44
	Girona	7.85	14.71	13.89	12.54	12.43	7.66
	Lleida	2.48	2.94	2.78	6.37	6.65	2.41
	Tarragona	4.77	17.65	22.22	11.24	10.40	4.50
Total		100.00	100.00	100.00	100.00	100.00	100.00

— Status of traffic accident casualties (%)

Area	Status	Dead	Deaths and seriously injured	Seriously injured	Slightly injured
Interurban	Driver	76.79	75.26	74.94	68.41
	Passenger	19.64	20.61	20.82	29.07
	Pedestrian	2.98	2.54	2.44	0.62
	Other	0.60	1.59	1.80	1.90
Total		100.00	100.00	100.00	100.00
Urban	Driver	52.78	56.72	57.02	67.49
	Passenger	9.72	6.07	5.79	10.40
	Pedestrian	37.50	33.93	33.65	13.52
	Other	0.00	3.28	3.54	8.59
Total		100.00	100.00	100.00	100.00

— Transport modes of traffic accident casualties (%)

Area	Transport mode	Dead	Deaths and seriously injured	Seriously injured	Slightly injured
Interurban	2-wheel motor vehicles	26.79	36.36	38.43	18.75
	Light vehicles	58.33	49.89	48.07	74.23
	Heavy vehicles	2.98	2.96	2.96	2.59
	Bicycles	6.55	6.13	6.04	3.44
	Other vehicles	2.38	2.11	2.06	0.37
	Pedestrians	2.98	2.54	2.44	0.62
Total		100.00	100.00	100.00	100.00
Urban	2-wheel motor vehicles	31.94	43.78	44.69	44.58
	Light vehicles	23.61	12.94	12.11	31.77
	Heavy vehicles	1.39	0.70	0.64	3.50
	Bicycles	2.78	7.06	7.40	6.18
	Other vehicles	2.78	1.59	1.50	0.45
	Pedestrians	37.50	33.93	33.65	13.52
Total		100.00	100.00	100.00	100.00



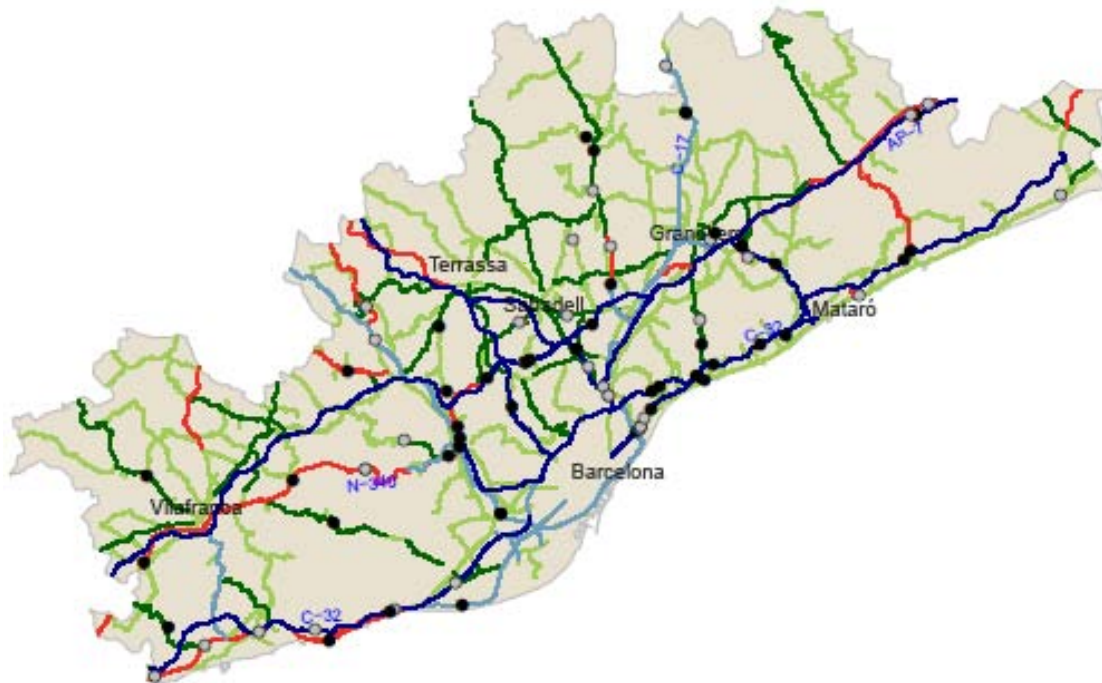
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Main results in Catalonia in 2017

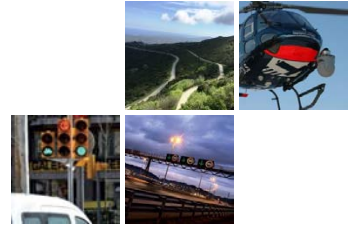
Territorial description

Location of fatal road accidents

Metropolitan Area of Barcelona

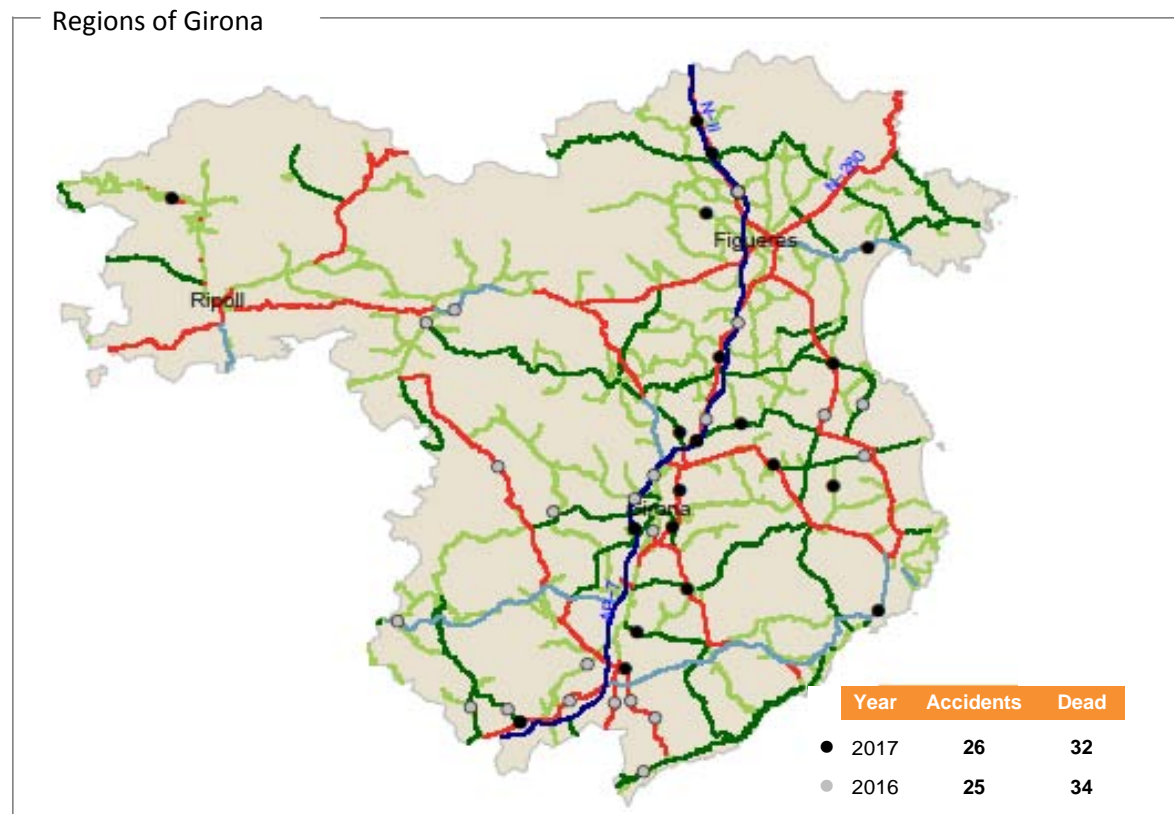


Year	Accidents	Dead
● 2017	47	52
● 2016	30	33



Territorial description

Location of fatal road accidents





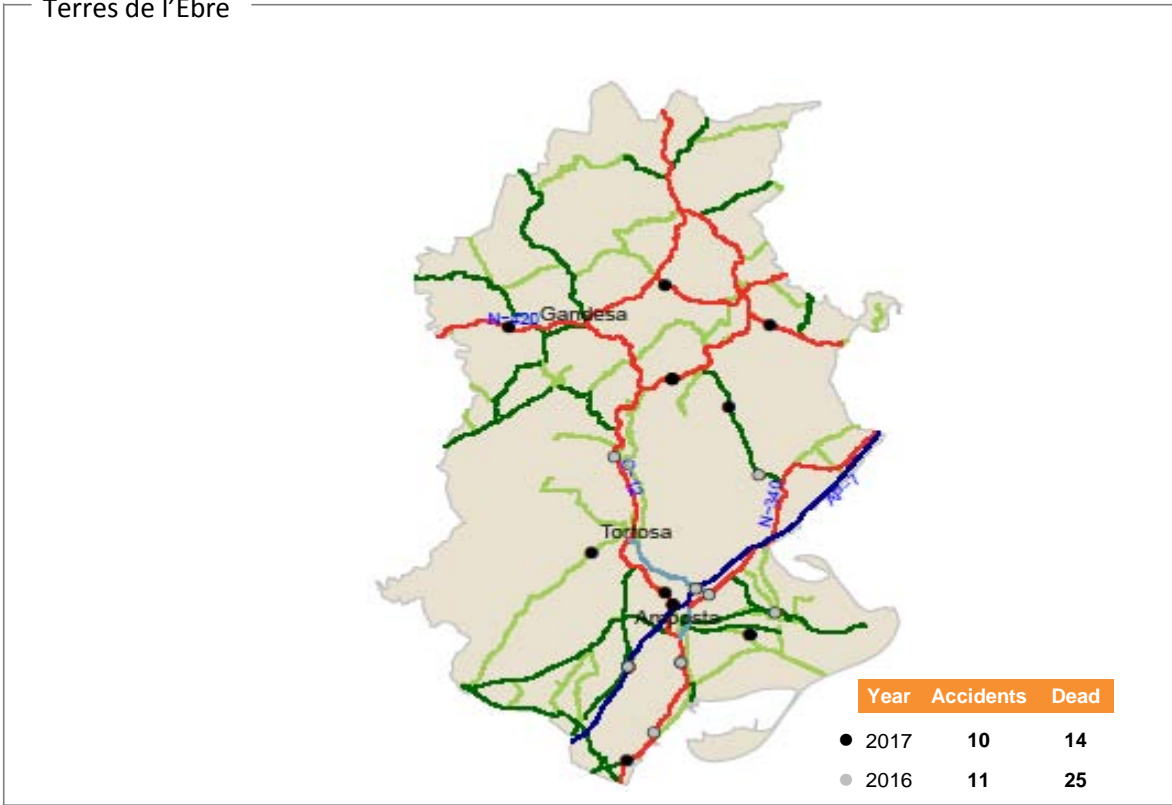
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Main results in Catalonia in 2017

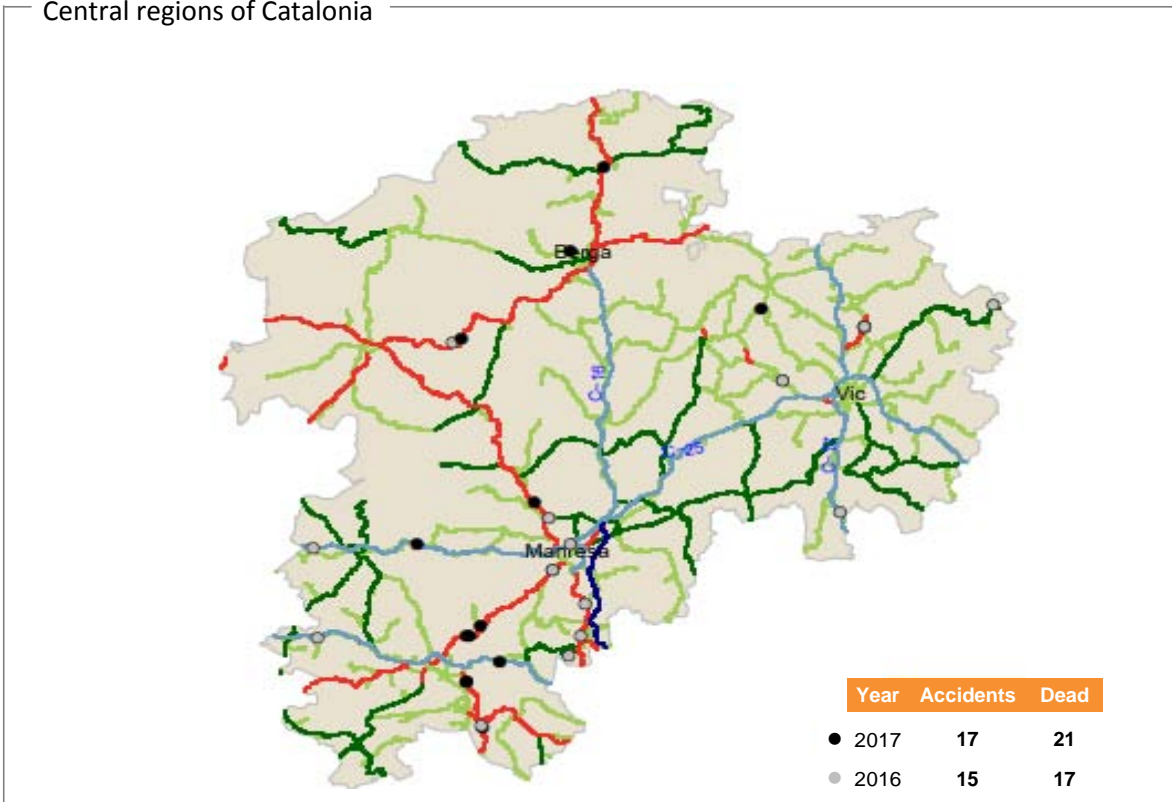
Territorial description

Location of fatal road accidents

Terres de l'Ebre



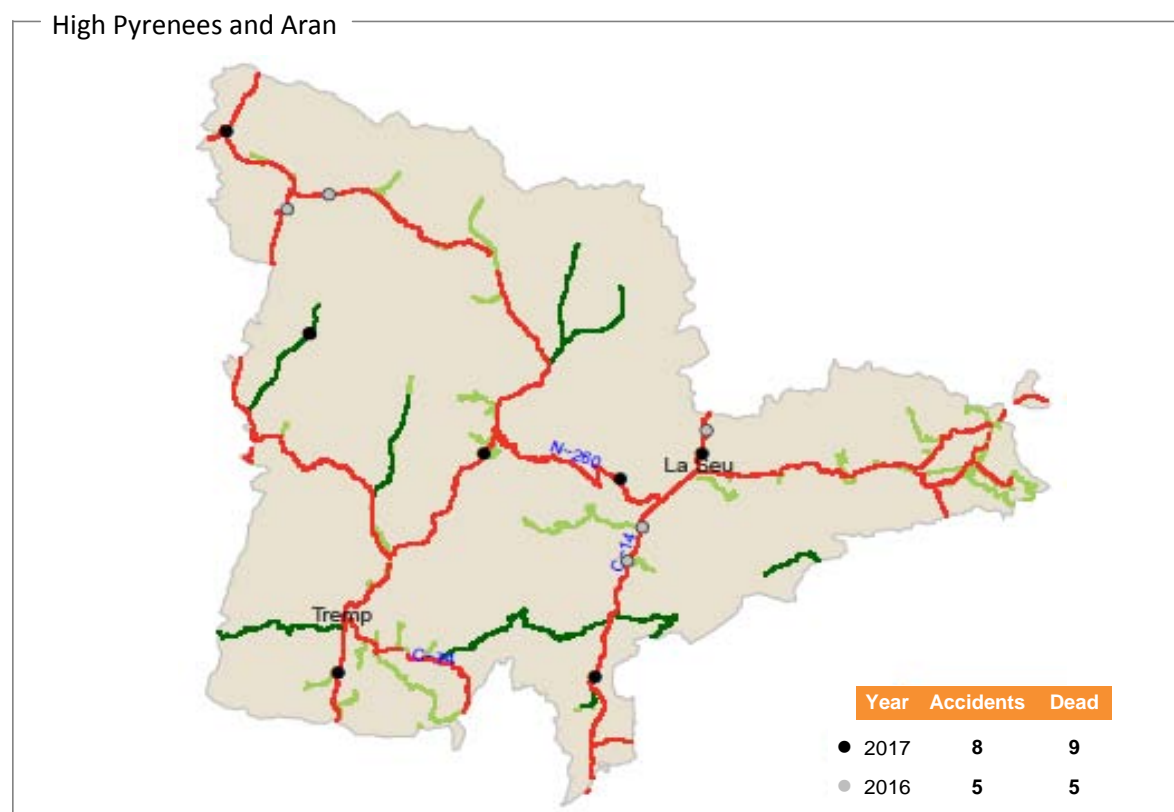
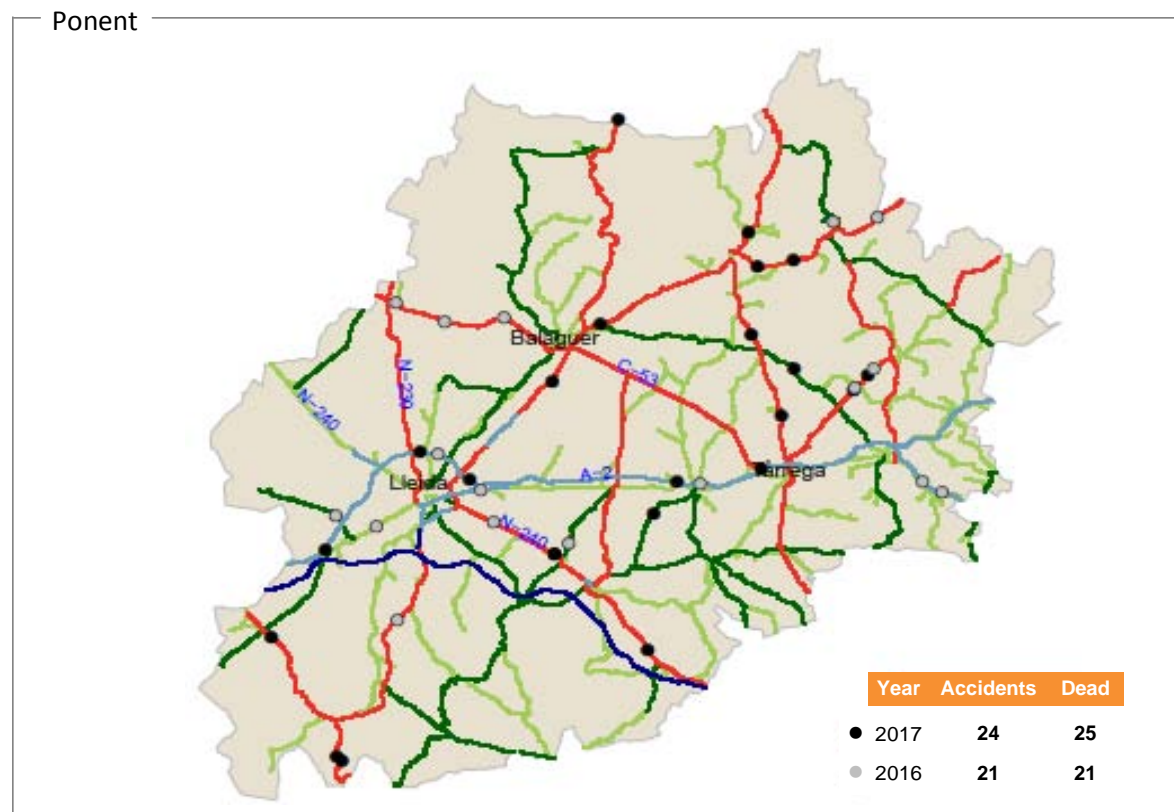
Central regions of Catalonia





Territorial description

Location of fatal road accidents



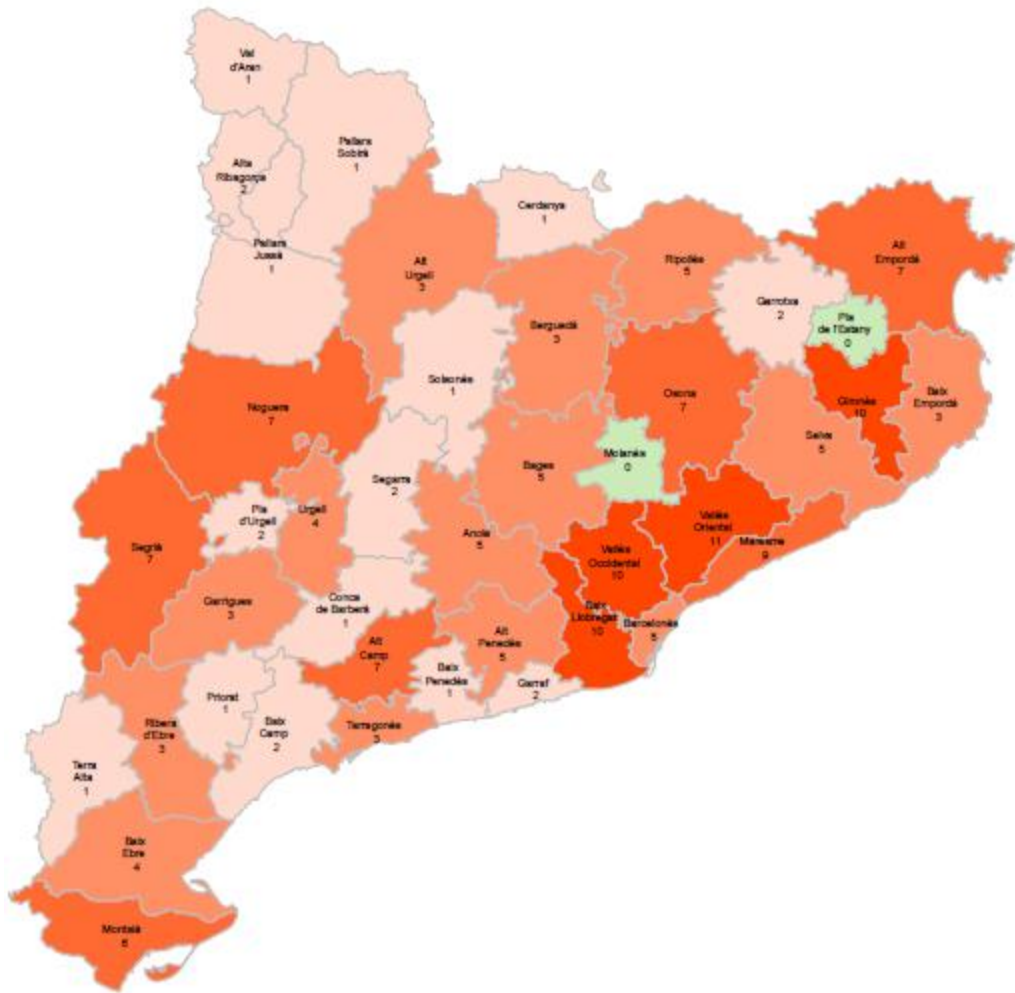


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Main results in Catalonia in 2017

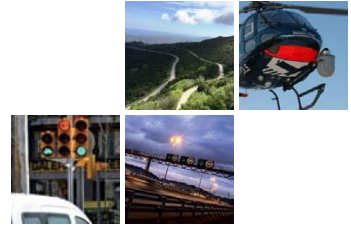
Territorial description

Number of dead in 24 hours per region. Interurban area



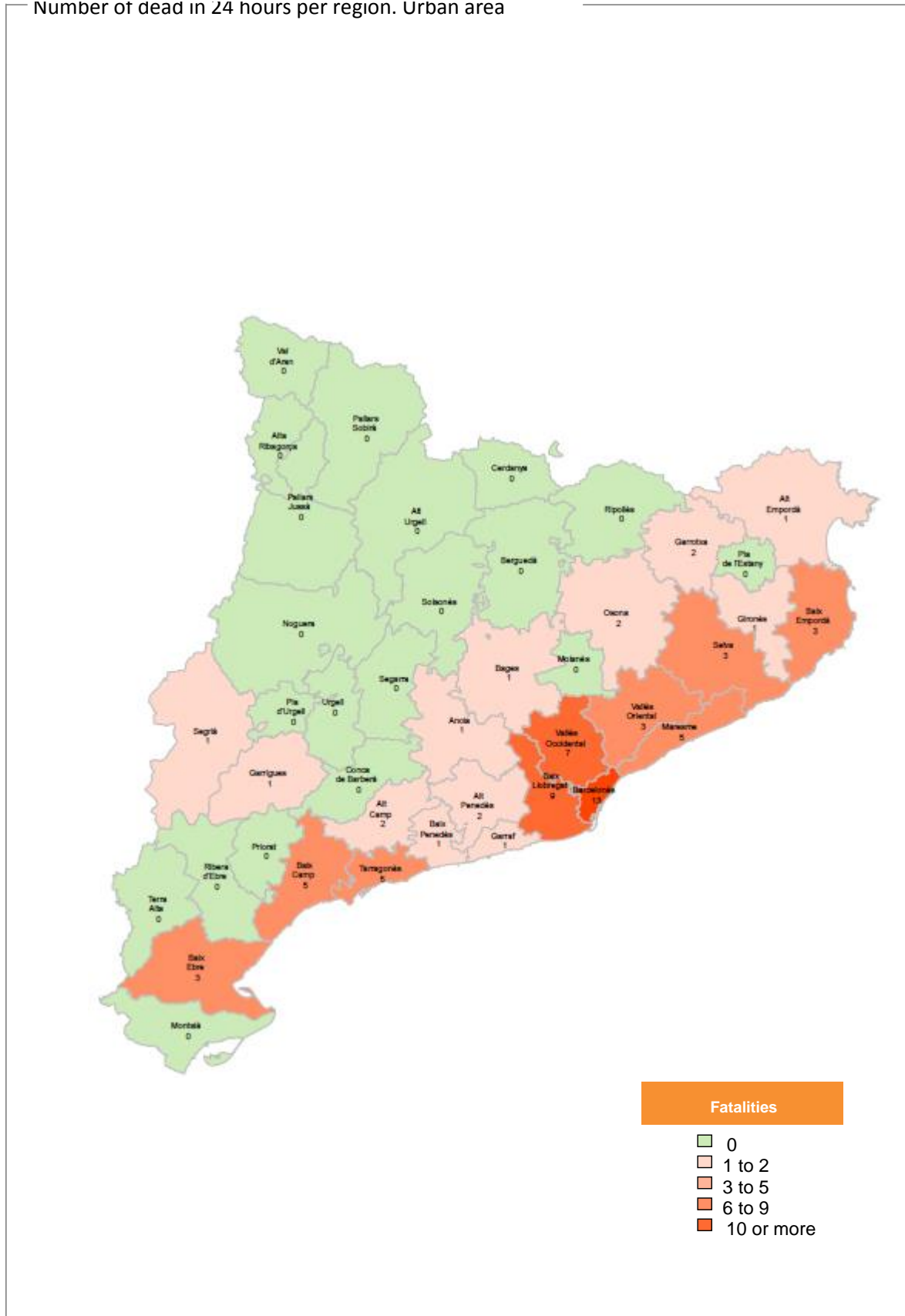
Fatalities

- 0
- 1 to 2
- 3 to 5
- 6 to 9
- 10 or more



Territorial description

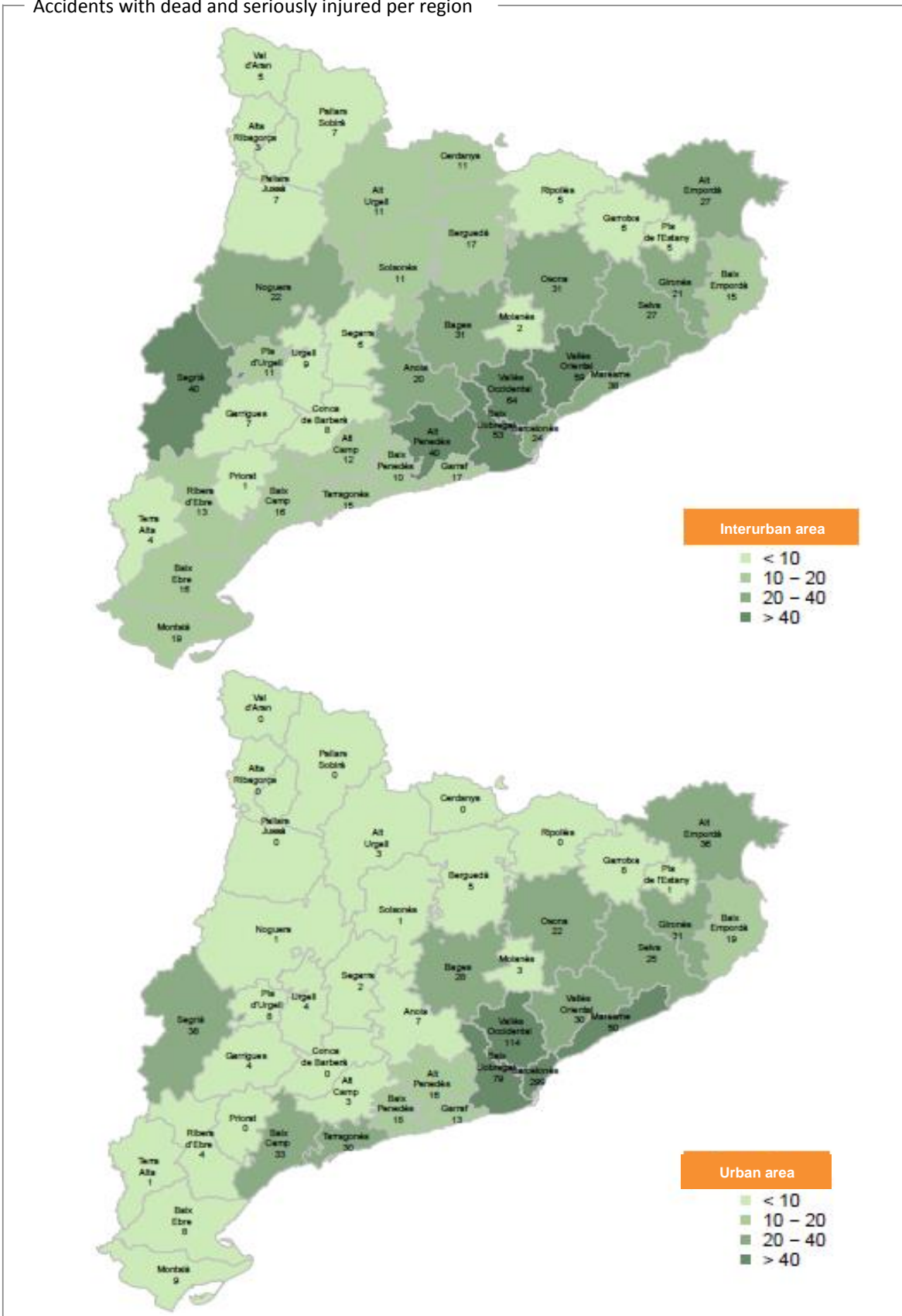
Number of dead in 24 hours per region. Urban area

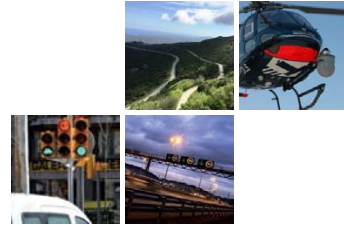




Territorial description

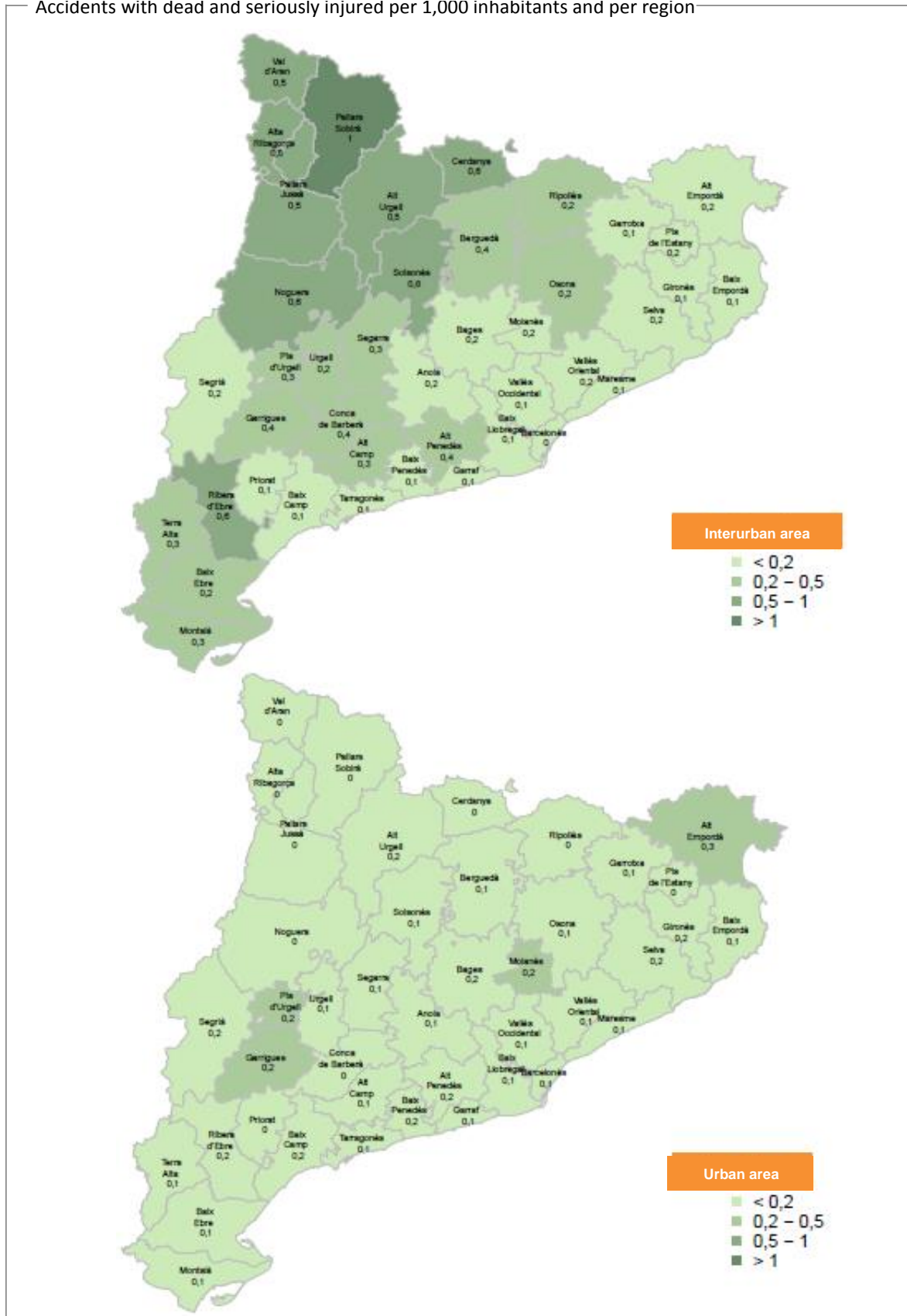
Accidents with dead and seriously injured per region





Territorial description

Accidents with dead and seriously injured per 1,000 inhabitants and per region





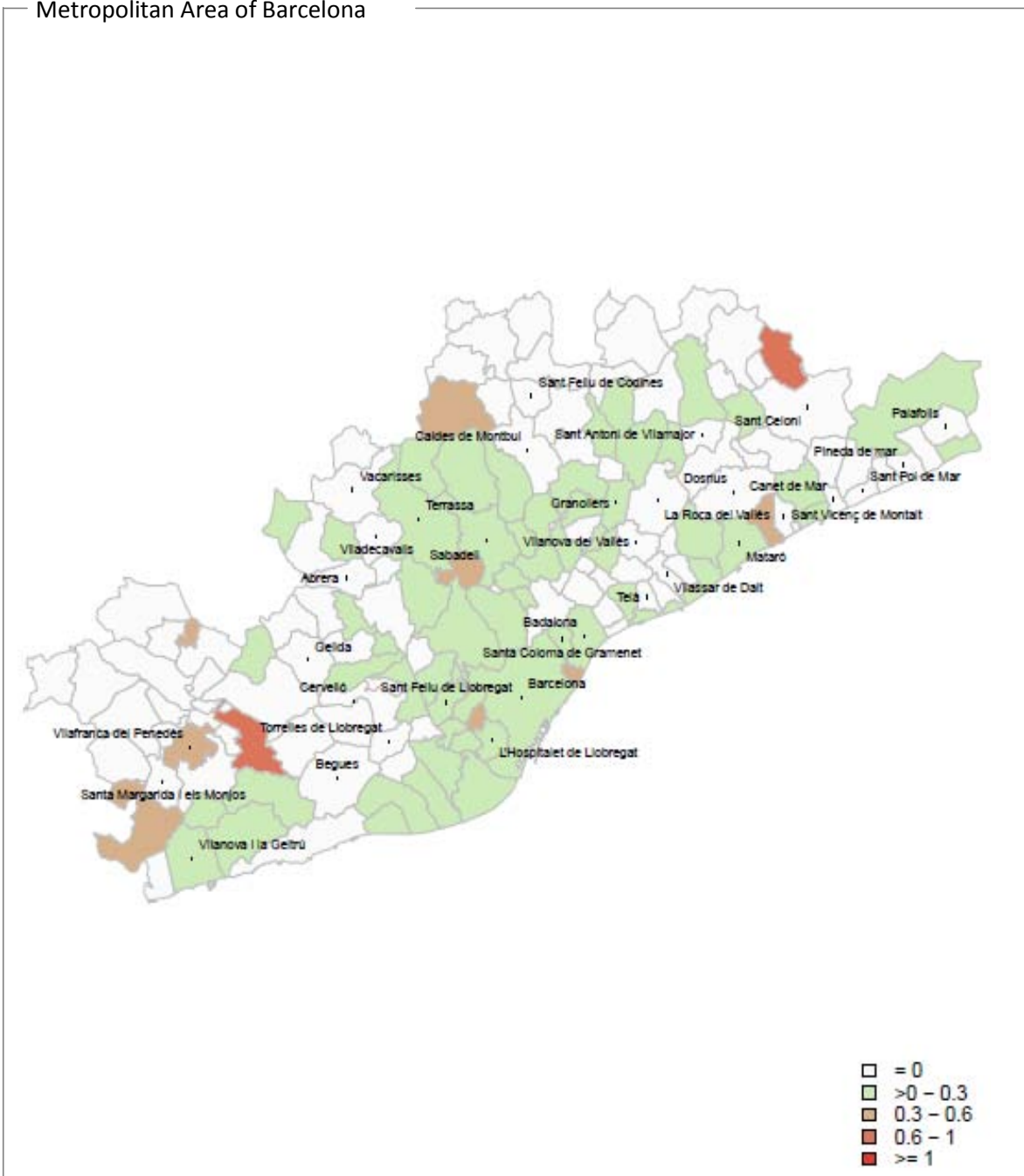
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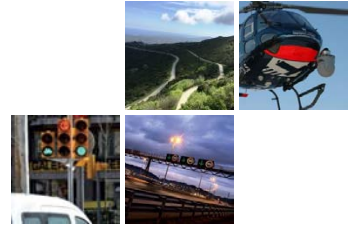
Main results in Catalonia in 2017

Territorial description

Accidents with dead or seriously injured in urban areas per 1,000 inhabitants, per municipality

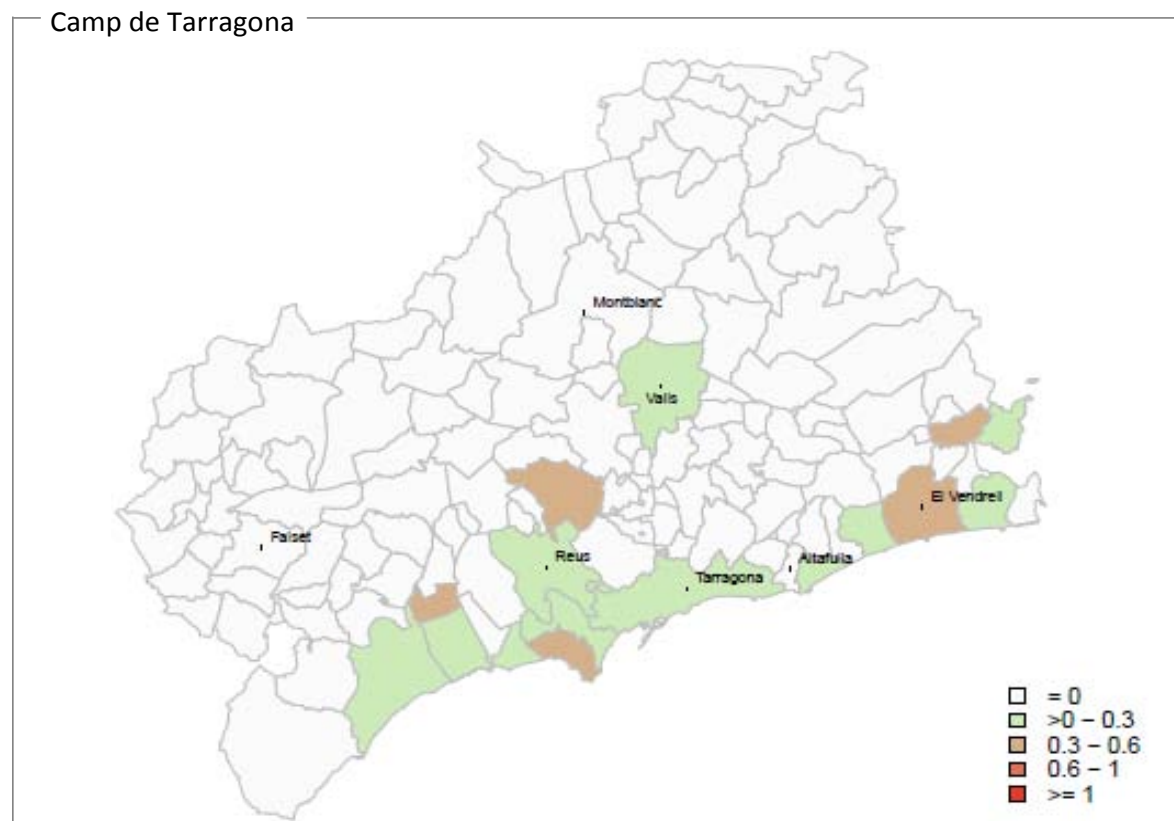
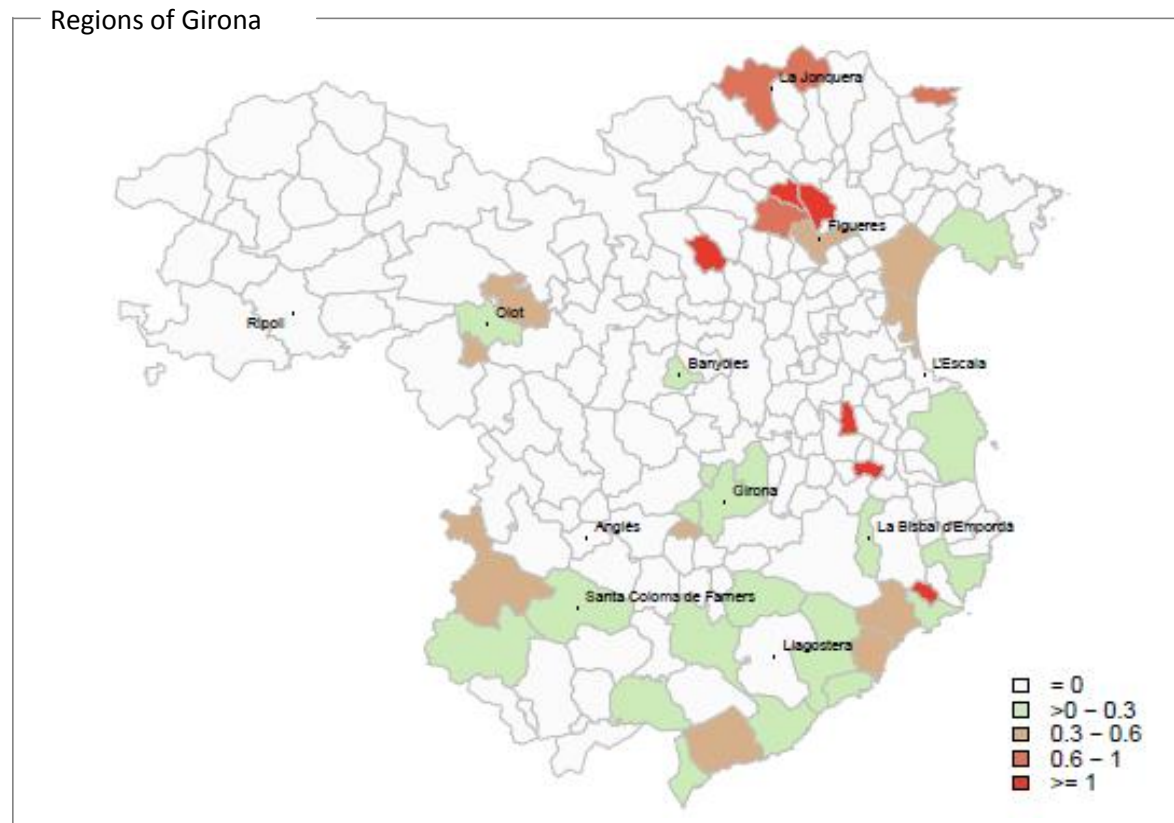
Metropolitan Area of Barcelona





Territorial description

Accidents with dead or seriously injured in urban areas per 1,000 inhabitants, per municipality



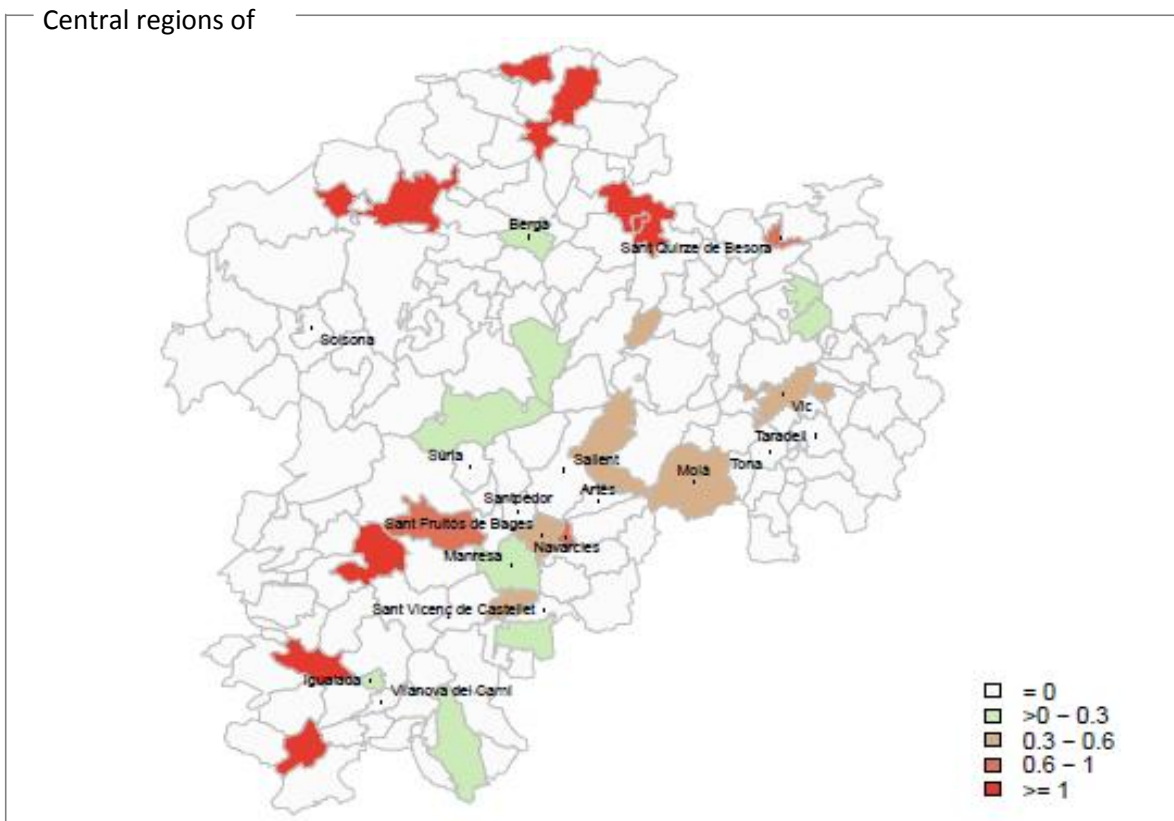
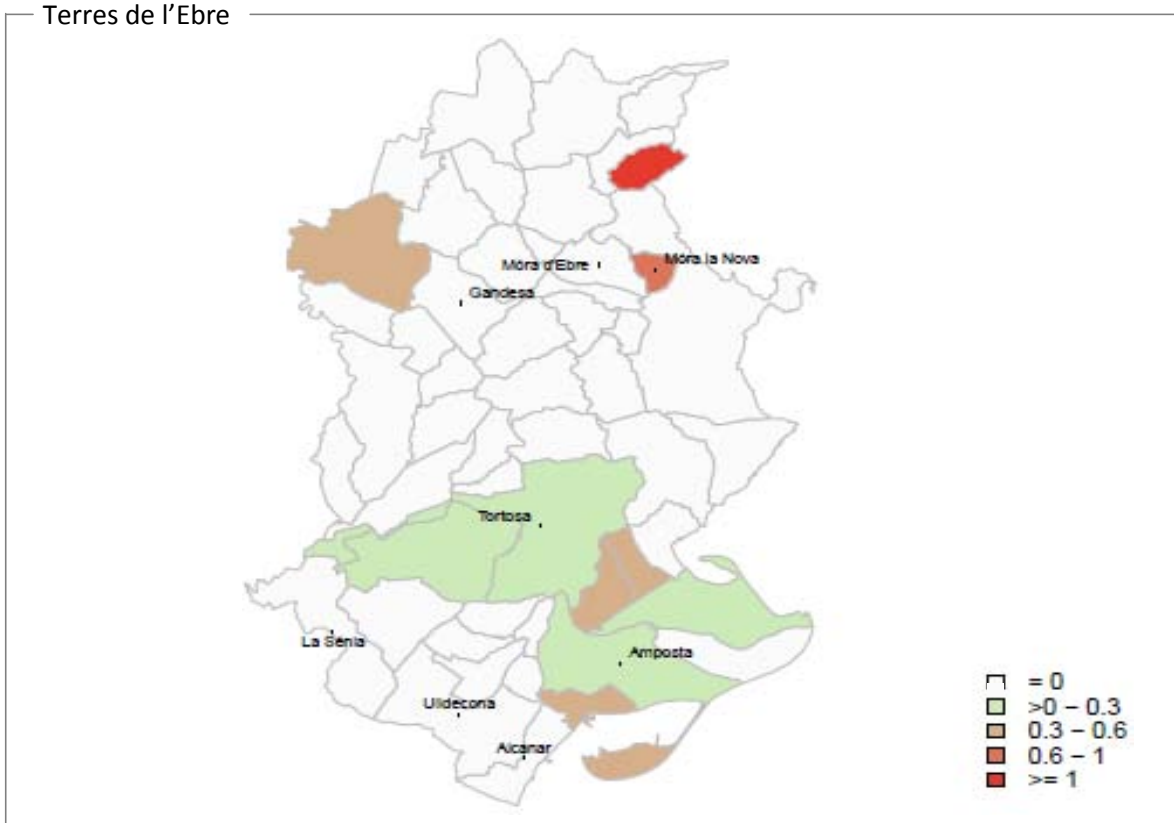


02

Main results in Catalonia in 2017

Territorial description

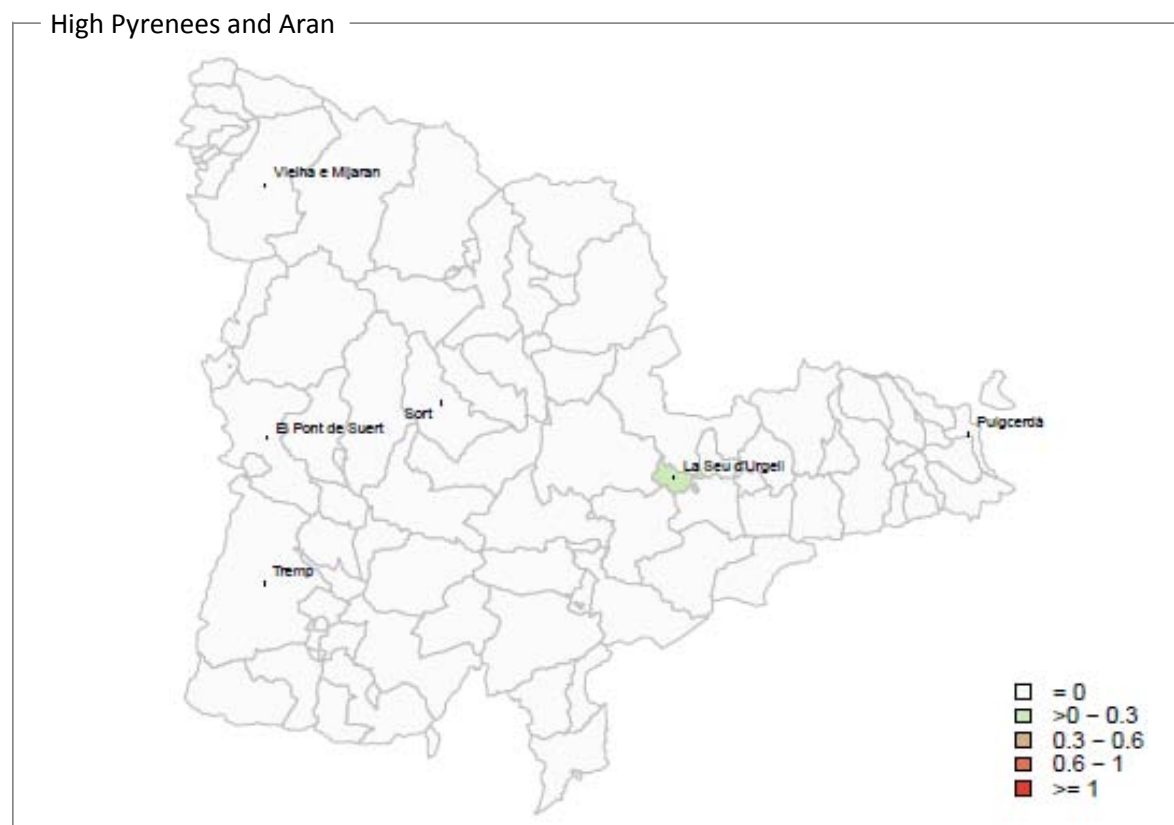
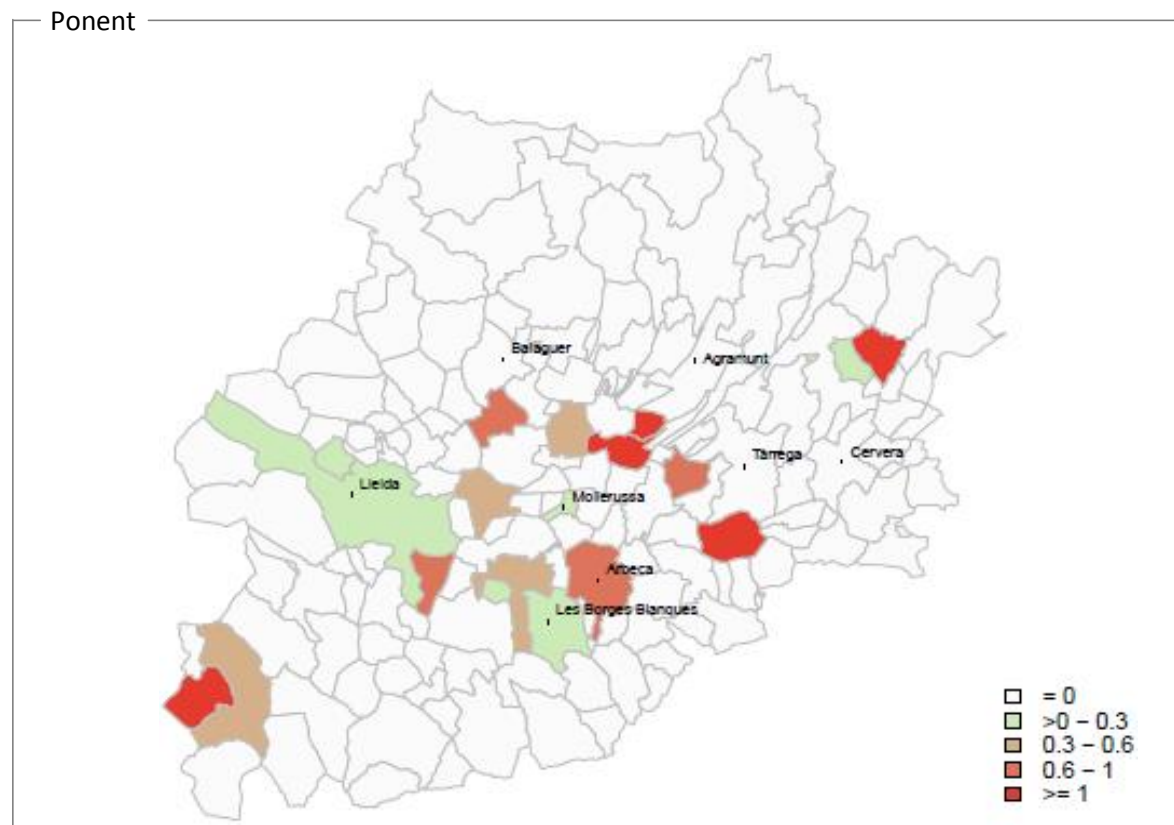
Accidents with dead or seriously injured in urban areas per 1,000 inhabitants, per municipality





Territorial description

Accidents with dead or seriously injured in urban areas per 1,000 inhabitants, per municipality



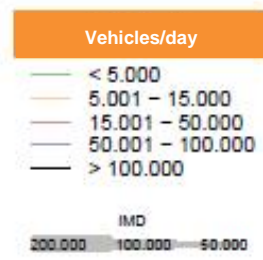
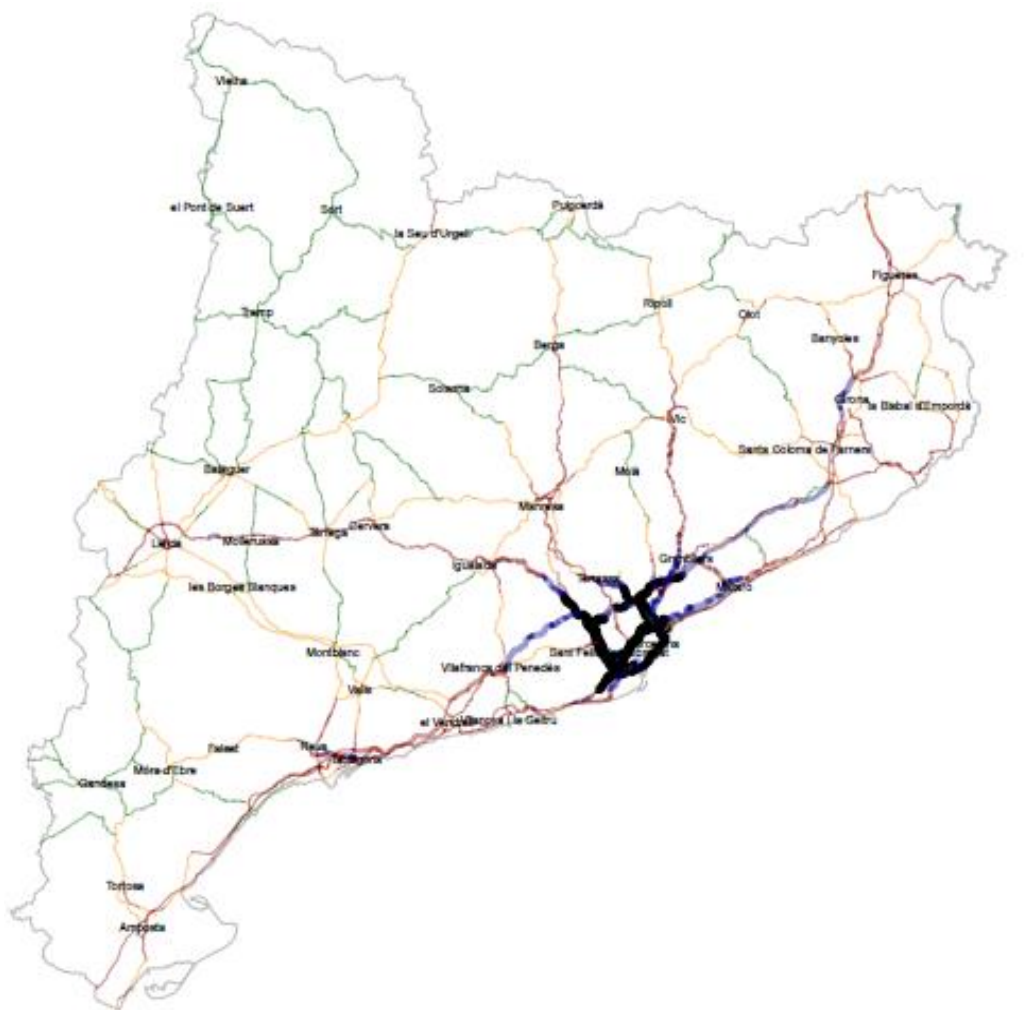


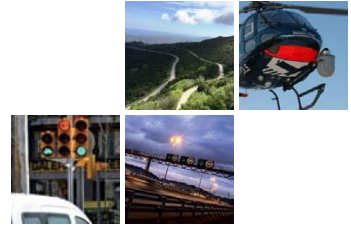
02

Main results in Catalonia in 2017

Territorial description

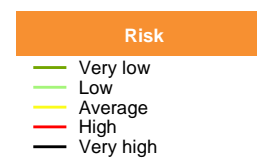
Traffic density on the road network





Territorial description

Risk index per stretch (EuroRAP Catalonia 2014-2016)



ADI
 200,000 100,000 1,000
 Three-year period 2012 - 2014

Territorial description

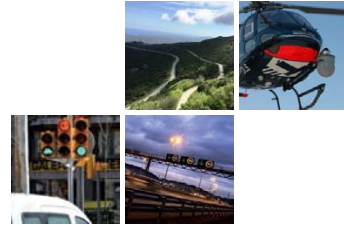
— Ranking of the 10 most dangerous stretches. EuroRAP Catalonia 2014-2016

Road	Beginning	End	Accidents	Dead	Seriously injured	Total casualties	ADI	RI*
BP-1417	Barcelona (X B-20)	St. Cugat del Vallès (X BV-1462)	5.3	0.3	6.0	75.0	7,518	170
BV-1221	Terrassa (X B-40)	Matadepera UA ending (Natural Park limit)	2.0	0.3	1.7	7.7	8,024	126
N-260	X N-1411	X LV-4055 (Martinet)	2.0	0.7	1.7	9.0	5,029	108
C-14	X C-1412b to Ponts	X C-26 to Bassella	4.0	2.0	3.3	30.3	6,446	99
B-502	Vilassar de Mar (X N-II)	Argentona (X C-1415c)	1.7	0.0	1.7	5.7	7,433	98
C-245	Gavà (Castelldefels municipality limit)	Cornellà (Av Baix Llobregat roundabout)	5.0	0.3	5.0	129.3	15,571	88
BP-2121	Vilafra de la Penedès (X N-340a)	X BV-2122 (Sant Martí Sarroca)	2.0	0.0	2.3	20.0	7,264	84
GI-641	Torroella de Montgrí (X C-31)	l'Estartit	1.3	0.0	1.7	23.3	7,955	84
BV-5001	B-20 northern entrance	Martorelles (X B-500, X BV-5006)	2.7	0.0	3.3	28.7	8,903	81
B-682 / GI-682	Malgrat de Mar (X N-II)	Lloret (X C-63)	6.0	0.3	6.3	75.3	19,982	79

— Stretches without accidents with fatalities or seriously injured

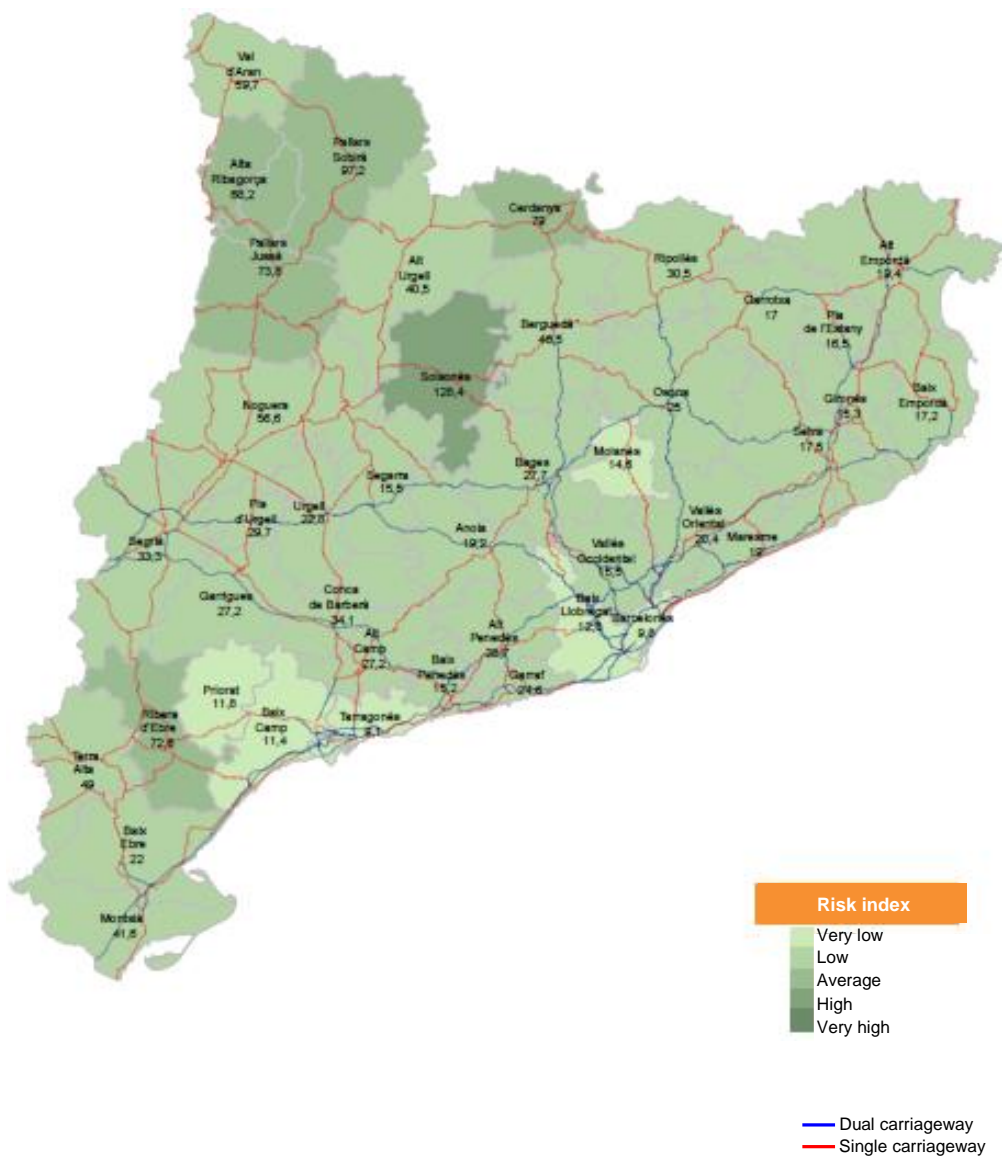
Road	Beginning	End	Total casualties	ADI	RI*
C-16	Terrassa (X C-58)	Terrassa (Start of concession, X C-58, X B-120)	5.3	48,175	0
C-16	St. Cugat de Vallès (X B-30)	Terrassa (X C-58)	12.0	23,035	0
N-340	Start variant Amposta	End variant Amposta	4.7	22,834	0
T-315	Reus (X city ring)	Vila-seca (X N-340)	9.0	16,471	0
C-25	C-17 (Gurb) common stretch end	Calldetenes (X N-141d)	4.7	15,800	0
C-32	El Vendrell (X N-340, A-P7 entrance)	Vilanova i la Geltrú (X C-15)	10.0	15,623	0
C-32	Calella (X N-II, BV-5126)	Palafolls (N-II crossing)	11.3	15,338	0
C-66	La Bisbal UA starting (Vulpellac)	La Bisbal d'Empordà UA ending	5.7	14,551	0
B-141	Ripollet (X BV-1411)	Sta. Perpètua de Mogoda (X B-140)	11.7	10,990	0
BV-2113	St. Pere de Ribes (X B-211a)	St. Pere de Ribes (X C-246a)	3.3	10,552	0
BV-2005	St. Vicenç dels Horts (X BV-2002)	Torrelles de Llobregat	16.0	9,026	0
C-250	Quart municipality starting	Quart (X C-65)	7.7	8,472	0
AP-2	Borges Blanques crossing	Montblanc crossing	4.7	8,429	0
BV-5103	Cardedeu (X BV-5108)	X C-35	7.7	8,354	0
AP-2	Aragon / Catalonia border	Lleida crossing	1.3	7,969	0
TV-3146	Port de Tarragona (X C-31B)	Far de Salou	0.7	7,565	0
BV-4501	Manresa, crossing road from C-55	Santpedor (BV-4511)	5.7	7,523	0
TP-2125	El Vendrell - Santa Oliva municipality limit	TV-2122, Sant Jaume dels Domenys	17.3	7,415	0
BV-4608	Sant Hipòlit de Voltregà (X BV-4609)	Manlleu (centre)	3.0	6,770	0
BV-5033	St. Andreu de Llavaneres (X N-II)	St. Andreu de Llavaneres (X BV-5031)	2.7	6,271	0
T-721	Constantí (X TV-7211)	La Pobla de Mafumet (X T-750)	2.0	6,159	0
BV-5222	Manlleu (X B-522)	Roda de Ter (X C-153)	4.7	6,136	0
BV-5108	Cardedeu (X c. Dr. Klein)	Cànoves and Samalús (X BP-5107)	2.3	5,777	0
C-13/C-13B	Lleida (X LL-12)	Lleida (X C-11)	1.3	5,626	0
BV-1433	L'Ametlla del Vallès (X C-17)	Llerona (X N-152a)	3.0	5,565	0
BV-1229	St. Vicenç de Castellet (X C-55)	Pont de Vilomara	1.0	5,211	0

(RI) Risk Index = Accidents with dead and seriously injured * 10⁹ / Average Daily Intensity of vehicles * length * 365

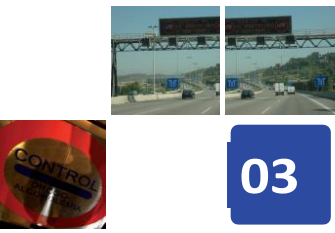


Territorial description

Risk index in interurban areas per region



(RI) Risk Index = Accidents with dead and seriously injured * 10⁹ / Average Daily Intensity of vehicles * length * 365

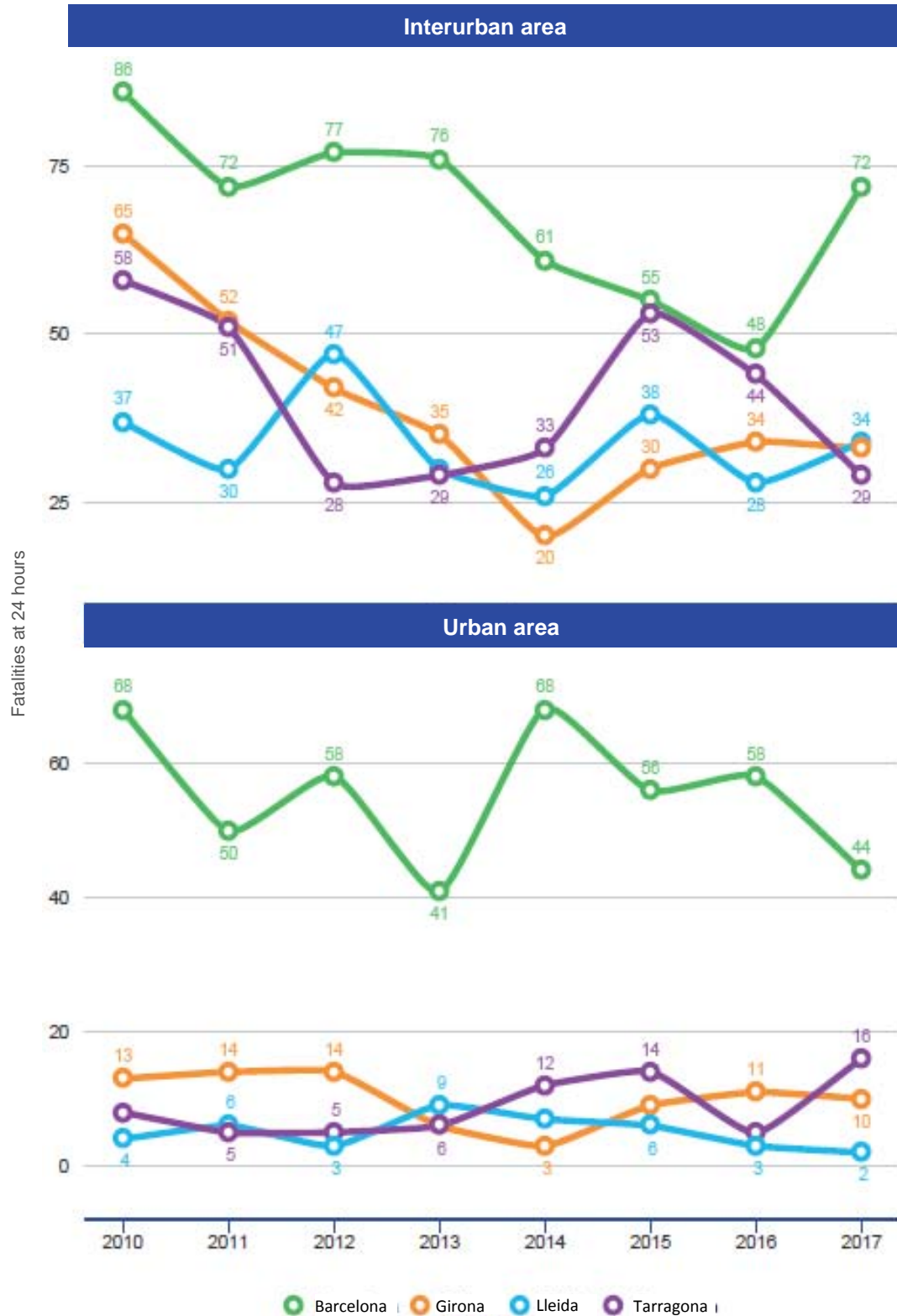


03

Evolution of fatalities at 24 hours in Catalonia

Territorial

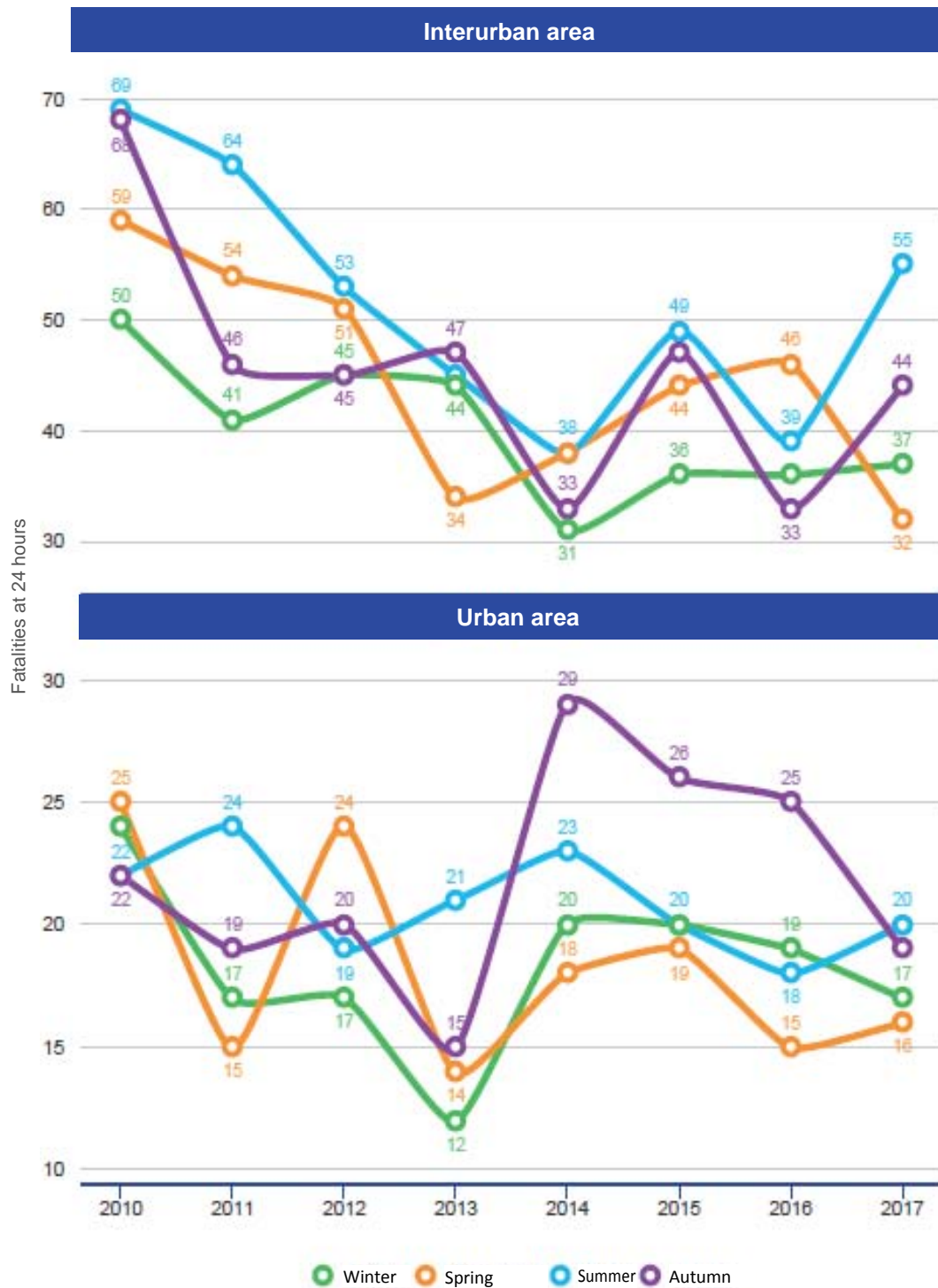
Evolution of the number of fatalities at 24 hours per district and area



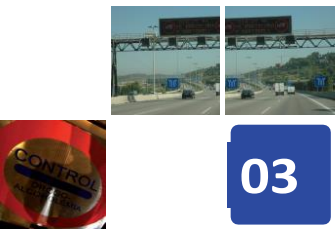


Temporary

Evolution of the number of fatalities at 24 hours per season and area



To define the seasons, calendar months are used. Summer includes the full months of June, July and August. Autumn includes the full months of September, October and November. The winter to December, January and February. And the spring to March, April and May.

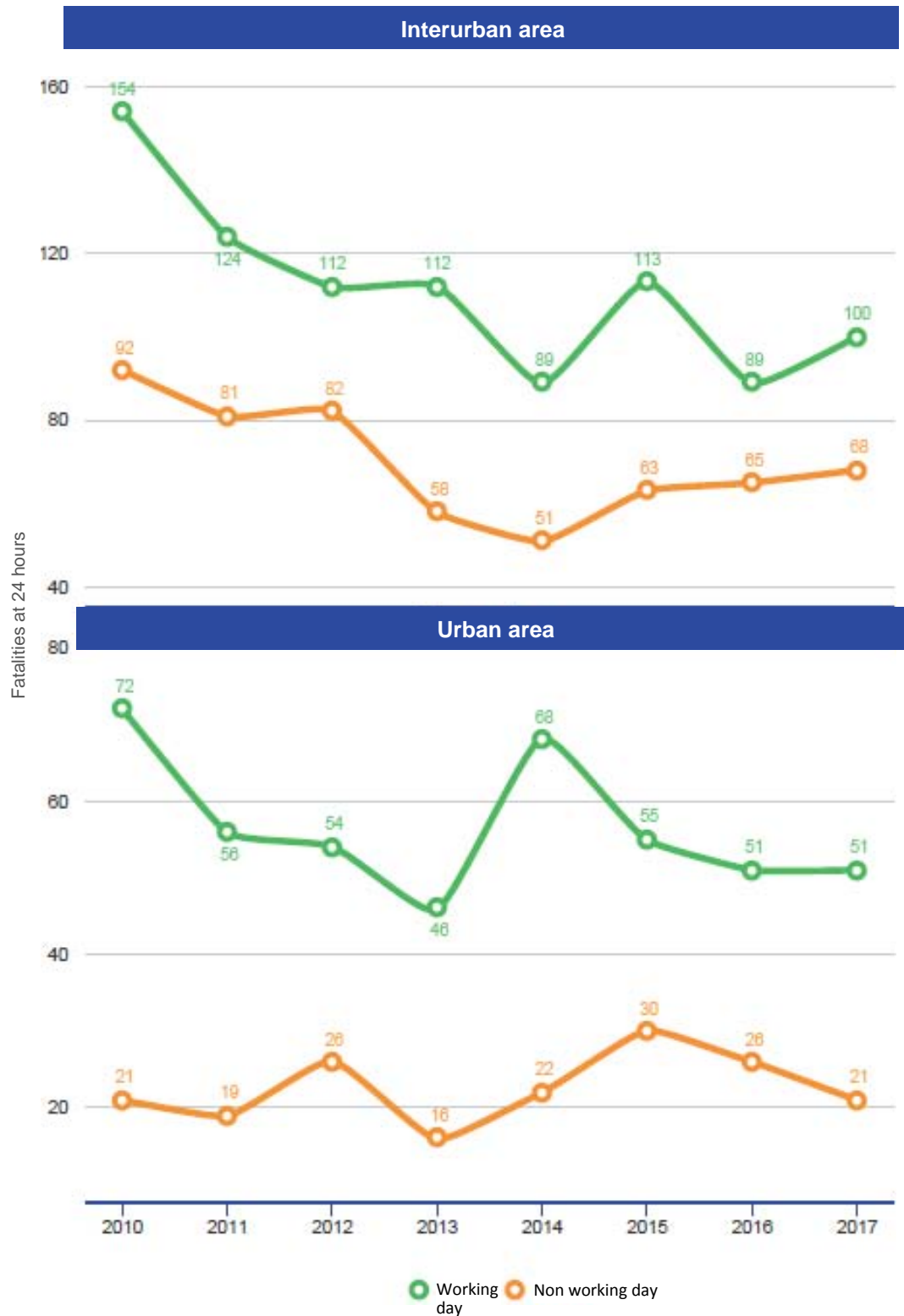


03

Evolution of fatalities at 24 hours in Catalonia

Temporary

Evolution of the number of fatalities at 24 hours per type of day and area

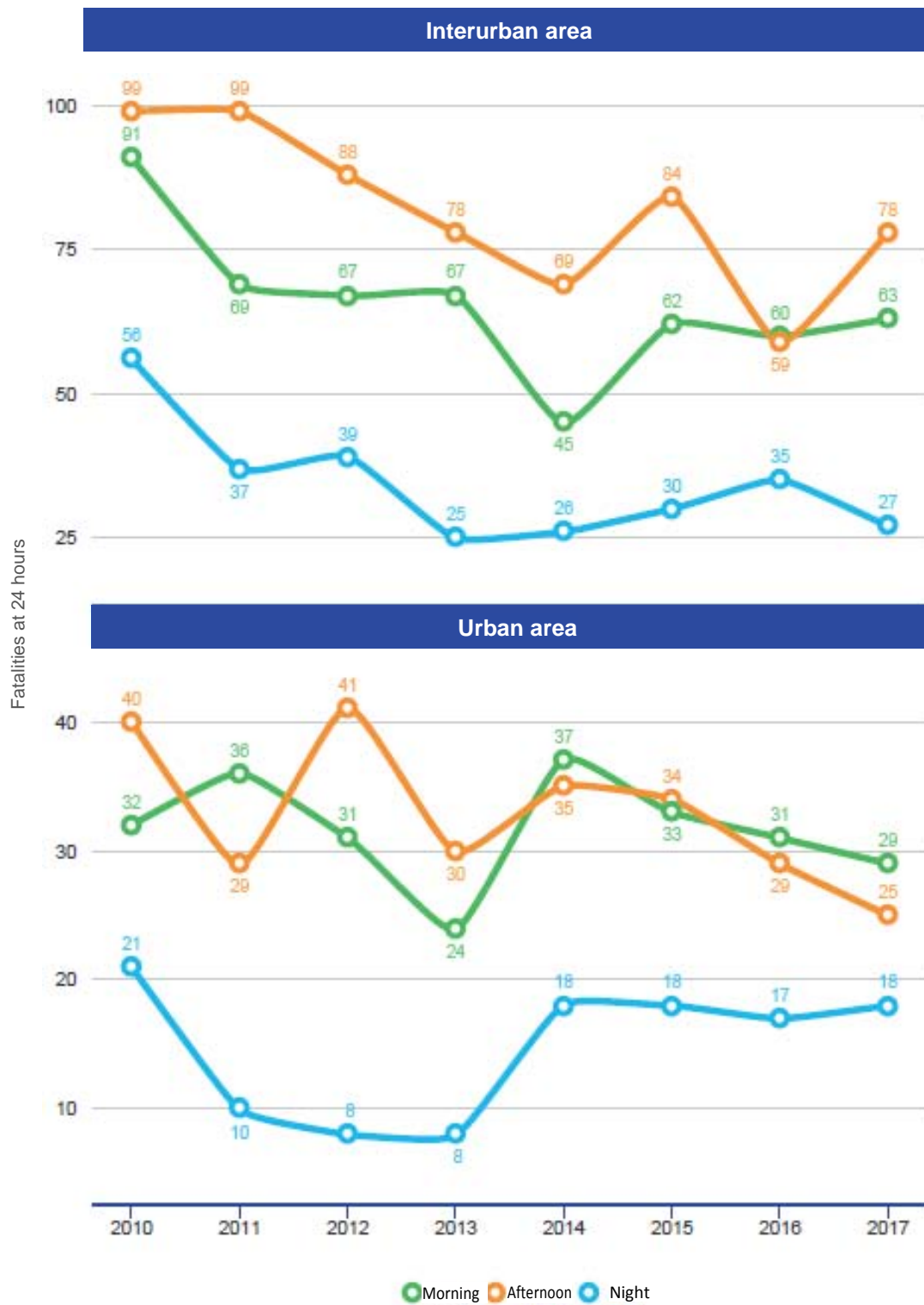


Saturdays, Sundays and national holidays are considered non working days.

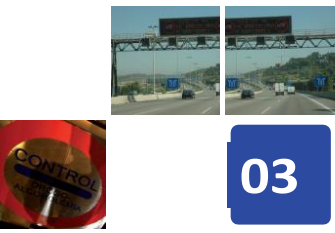


Temporary

Evolution of the number of fatalities at 24 hours per day and area



Morning is considered from 6:00h to 13:59h, afternoon from 14:00h to 21:59h, and night from 22:00h to 5:59h.

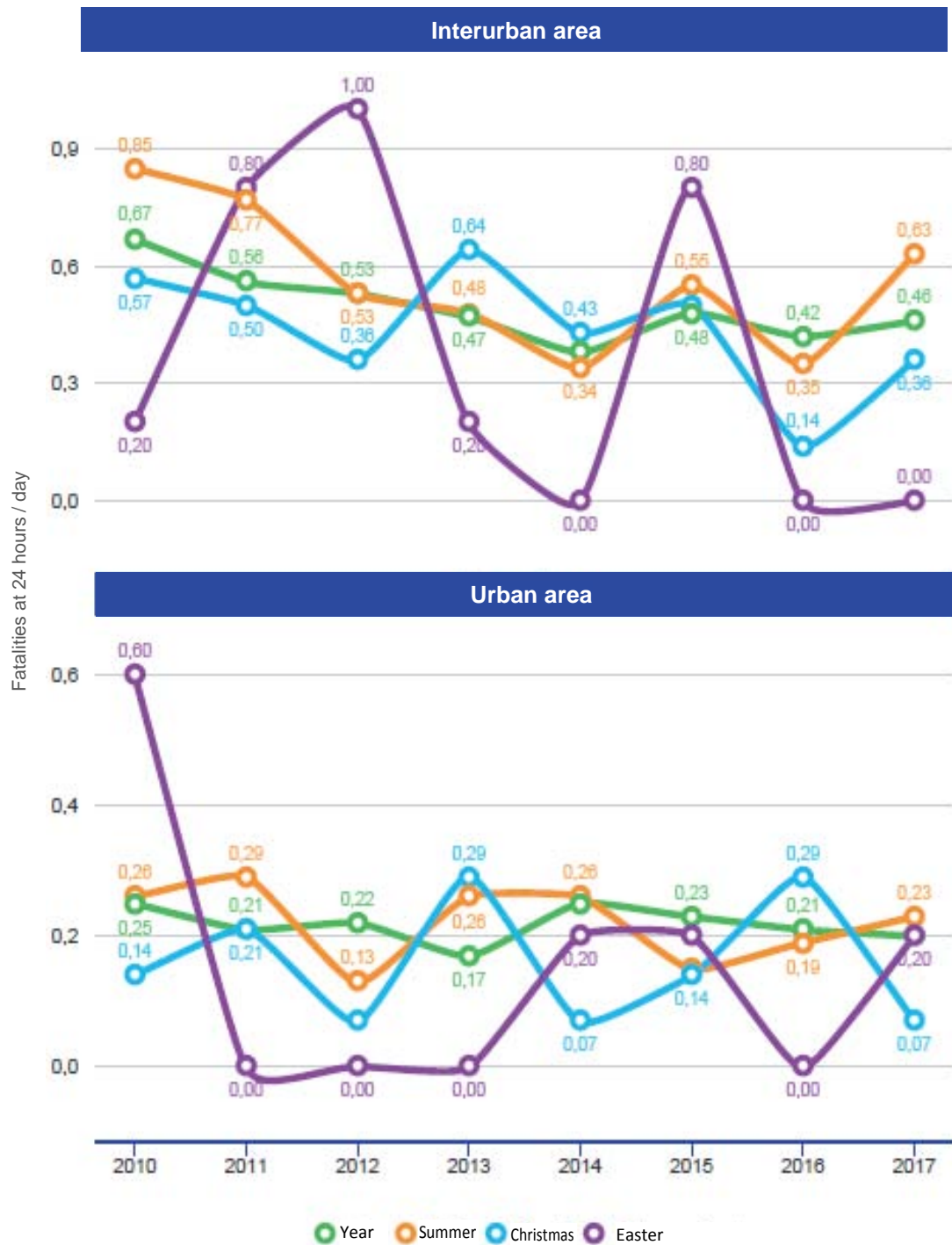


03

Evolution of fatalities at 24 hours in Catalonia

Temporary

Evolution of the number of fatalities at 24 hours per period of the year



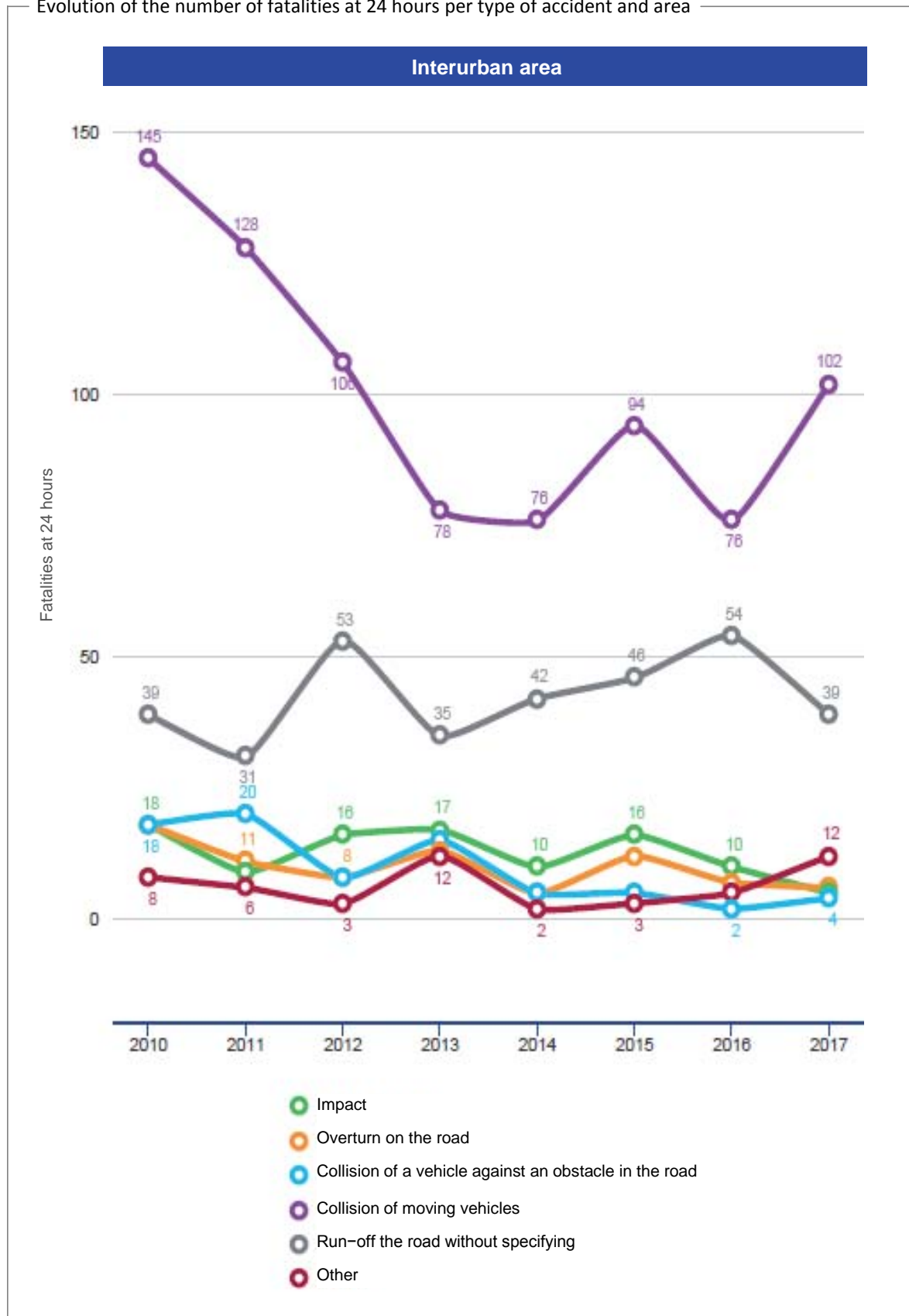
Easter: Thursday to Easter Monday / Summer: July and August / Christmas: 24 December to 6 January.

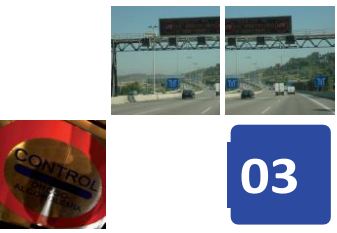
The Christmas series figures are calculated including accidents occurred at the beginning of January of the following year. The database for this year is not yet officially closed and there could be in changes in the Christmas series in the publication of next year's yearbook.



Types of accident

Evolution of the number of fatalities at 24 hours per type of accident and area



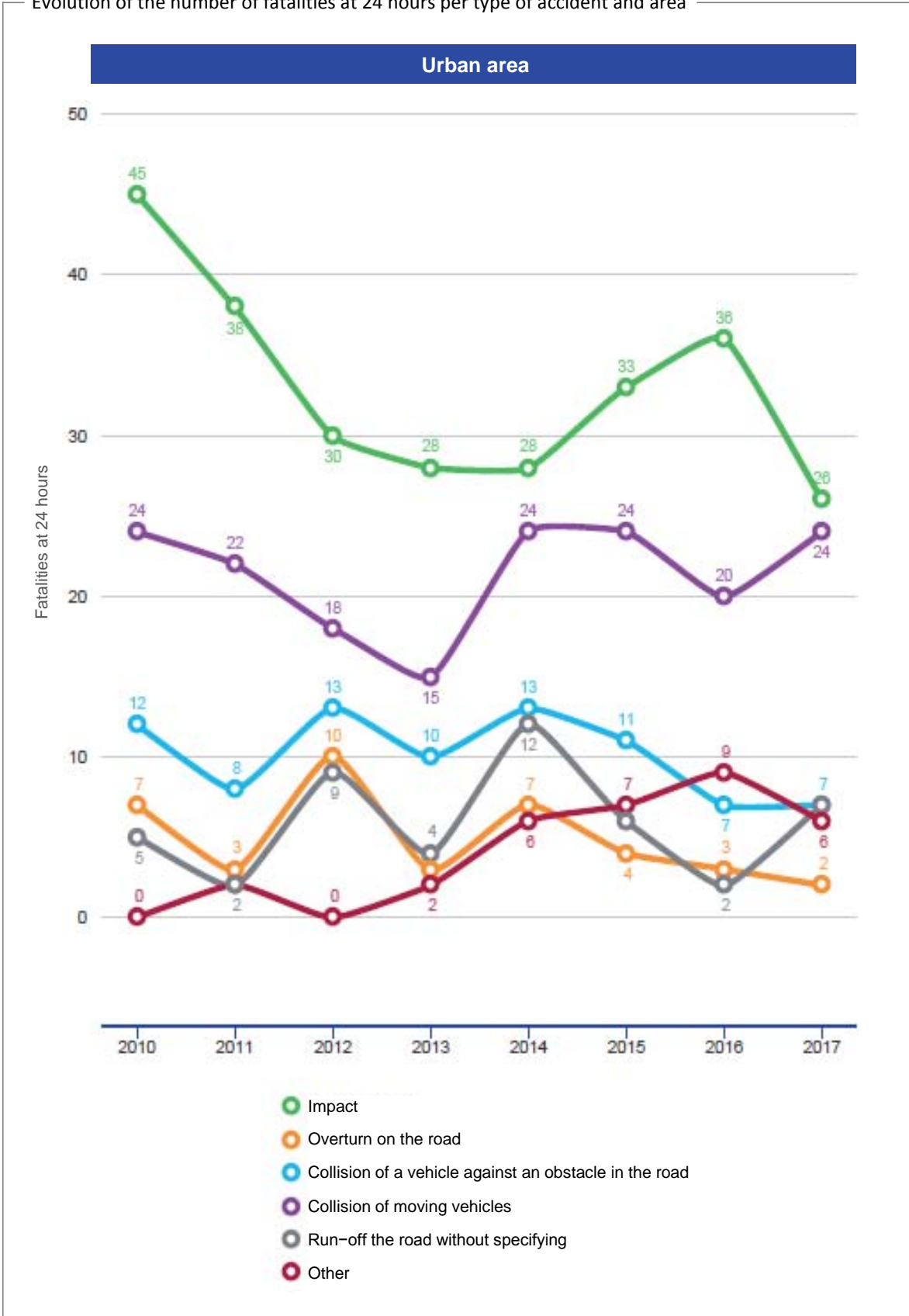


03

Evolution of fatalities at 24 hours in Catalonia

Types of accident

Evolution of the number of fatalities at 24 hours per type of accident and area

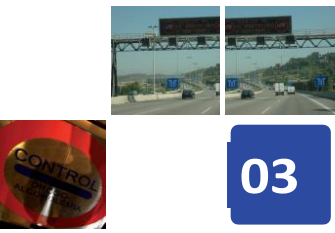




Location

Evolution of the number of fatalities at 24 hours inside intersection vs. outside intersection and area



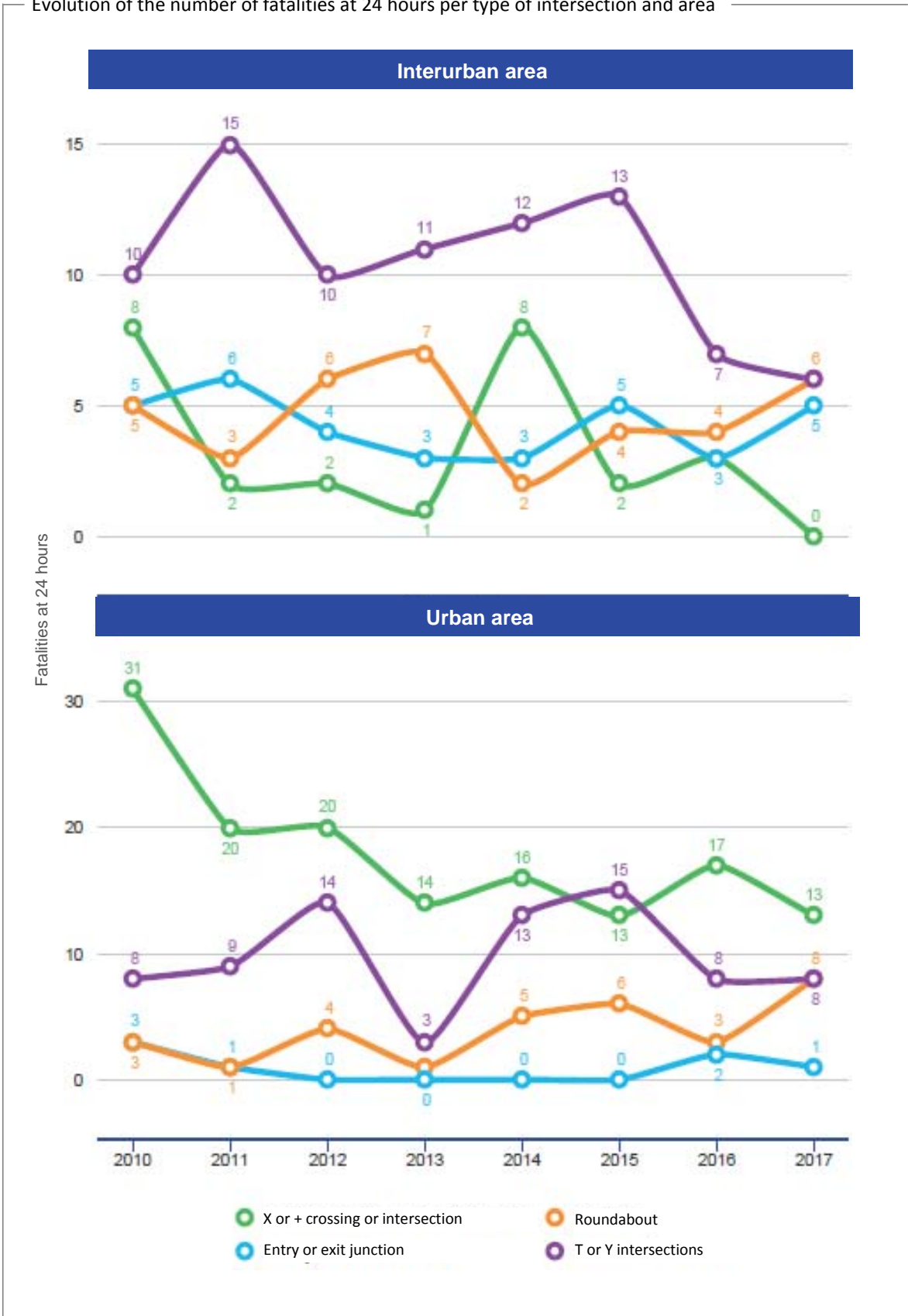


03

Evolution of fatalities at 24 hours in Catalonia

Location

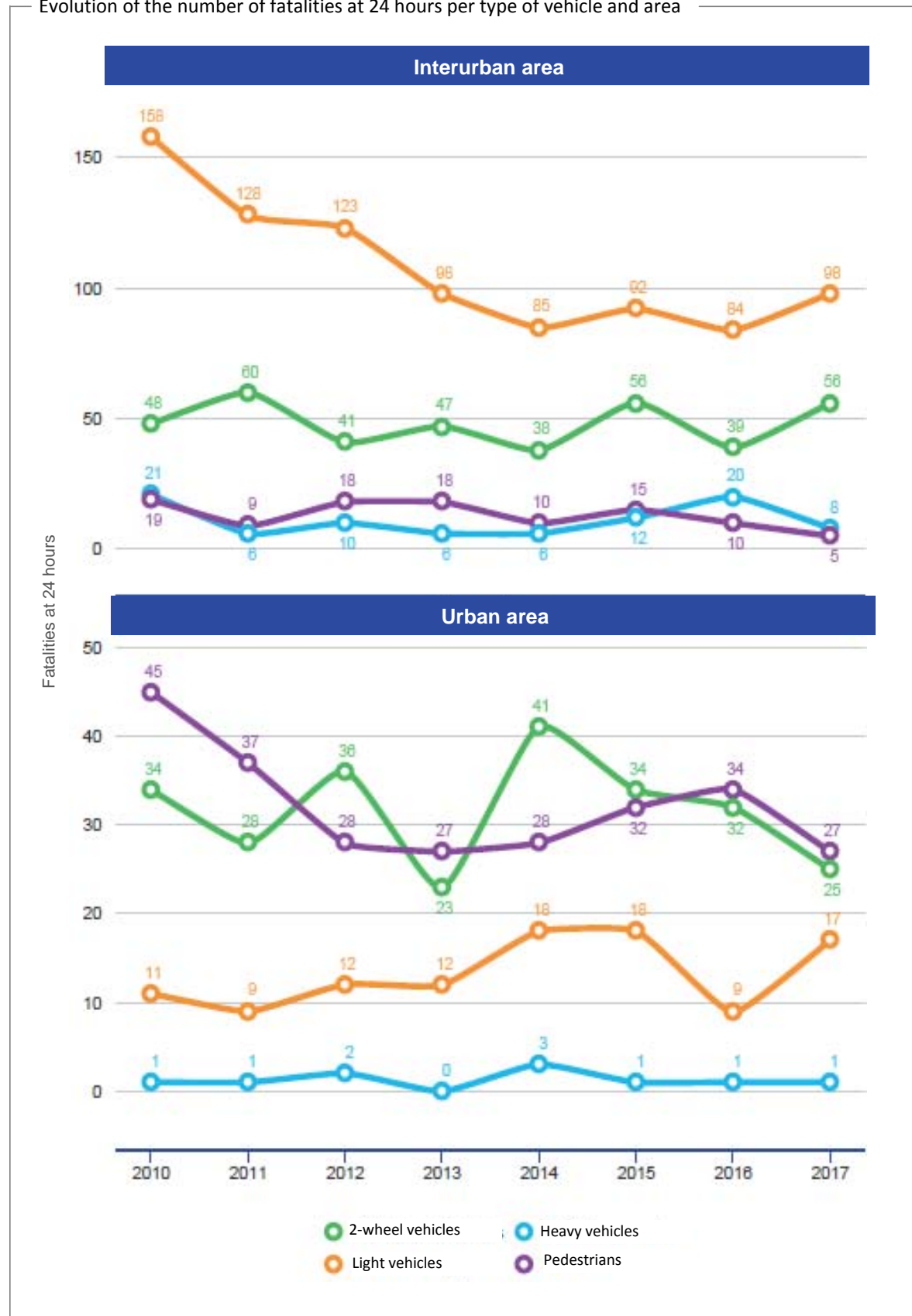
Evolution of the number of fatalities at 24 hours per type of intersection and area

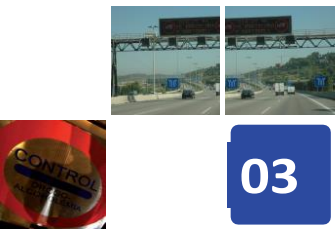




Transport mode

Evolution of the number of fatalities at 24 hours per type of vehicle and area





03

Evolution of fatalities at 24 hours in Catalonia

Transport mode

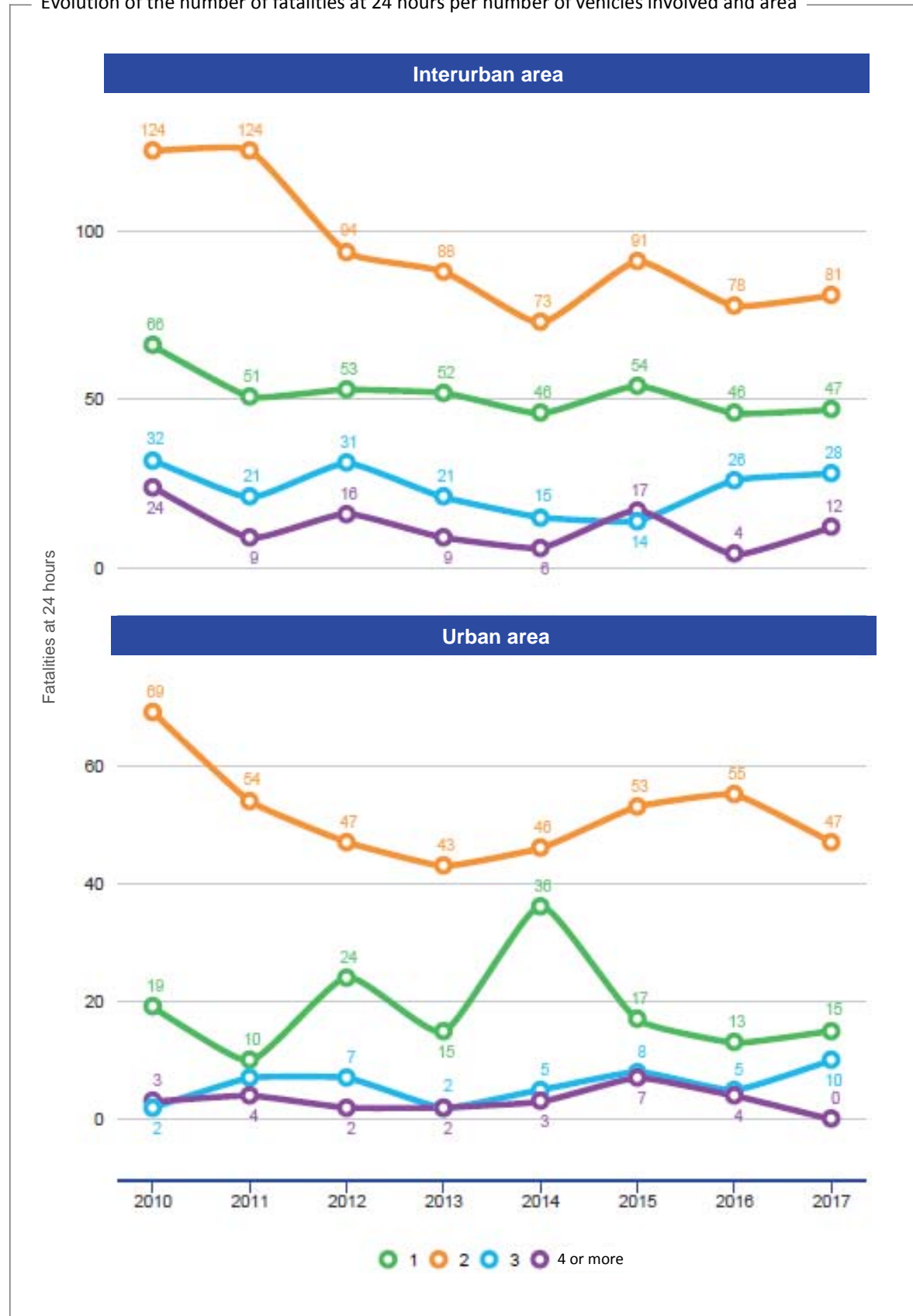
Evolution of the number of fatalities at 24 hours per 2-wheel vehicle and area

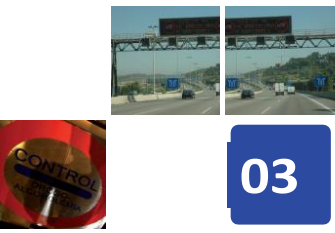




Transport mode

Evolution of the number of fatalities at 24 hours per number of vehicles involved and area





03

Evolution of fatalities at 24 hours in Catalonia

Profile of casualties

Evolution of the number of fatalities at 24 hours per gender of casualties and area



The graphs only record fatalities at 24 hours whose gender is known.

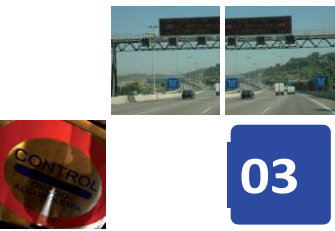


Profile of casualties

Evolution of the number of fatalities at 24 hours per age of casualties and area



The graphs only record fatalities at 24 hours whose age is known.



03

Evolution of fatalities at 24 hours in Catalonia

Profile of casualties

Evolution of the number of fatalities at 24 hours per age group – young people



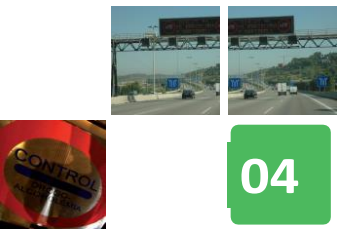
The graphs only record fatalities at 24 hours whose age is known.



Profile of casualties

Evolution of the number of fatalities at 24 hours per position of casualties and area





04

Evolution of dead and seriously injured in Catalonia

Territorial

Evolution of the number of fatalities and seriously injured per district and area

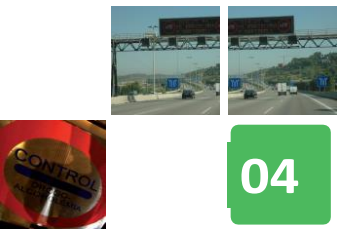




Territorial

Evolution of the number of fatalities and seriously injured per district and area (excluding Barcelona)





04

Evolution of dead and seriously injured in Catalonia

Temporary

Evolution of the number of fatalities and seriously injured per season and area

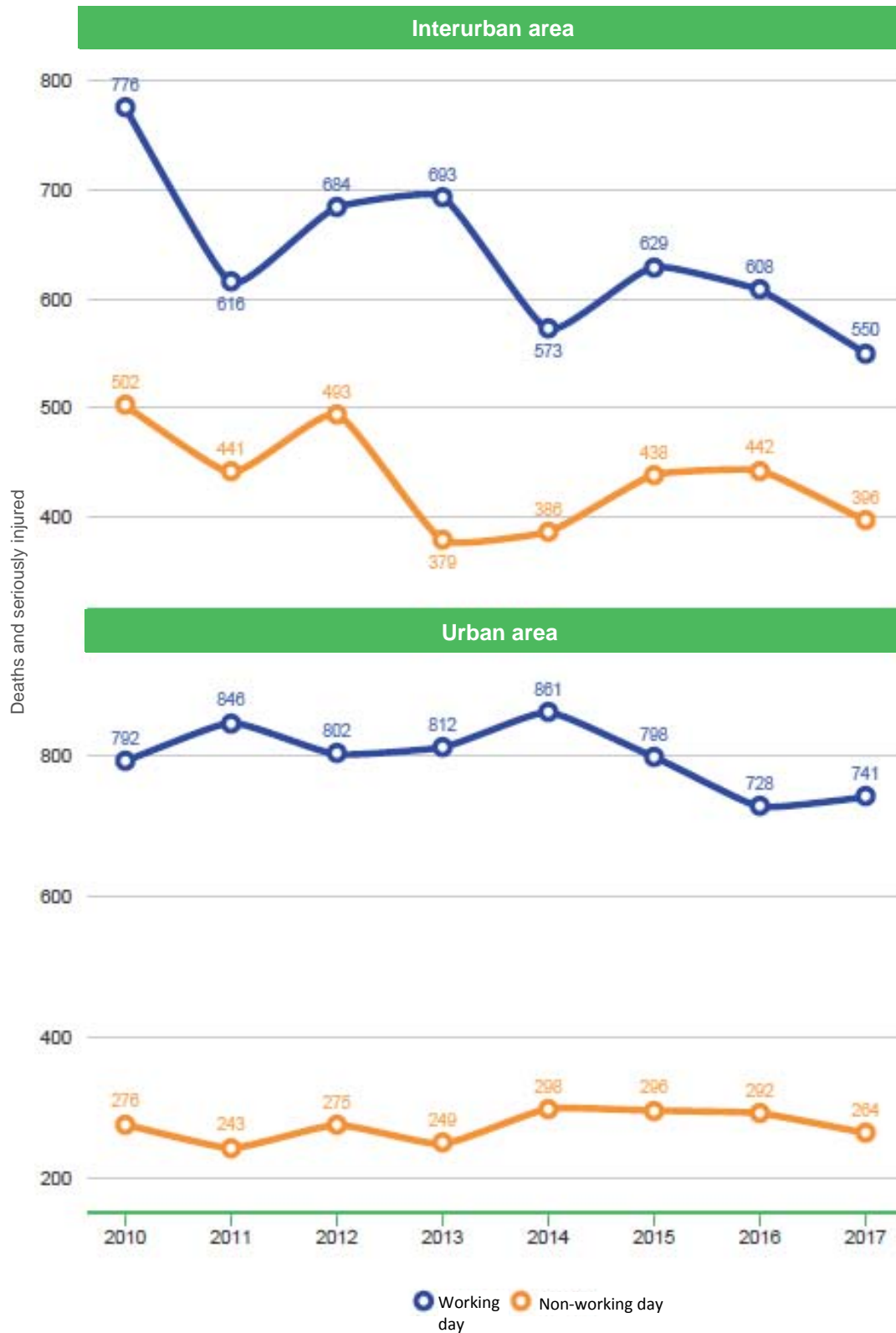


To define the seasons, calendar months are used. Summer includes the full months of June, July and August. Autumn includes the full months of September, October and November. The winter to December, January and February. And the spring to March, April and May.

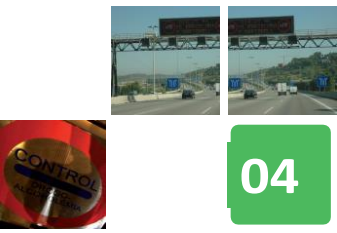


Temporary

Evolution of the number of fatalities and seriously injured per working day, weekend and area



Saturdays, Sundays and national holidays are considered non-working days.



04

Evolution of dead and seriously injured in Catalonia

Temporary

Evolution of the number of fatalities and seriously injured per day and area slot

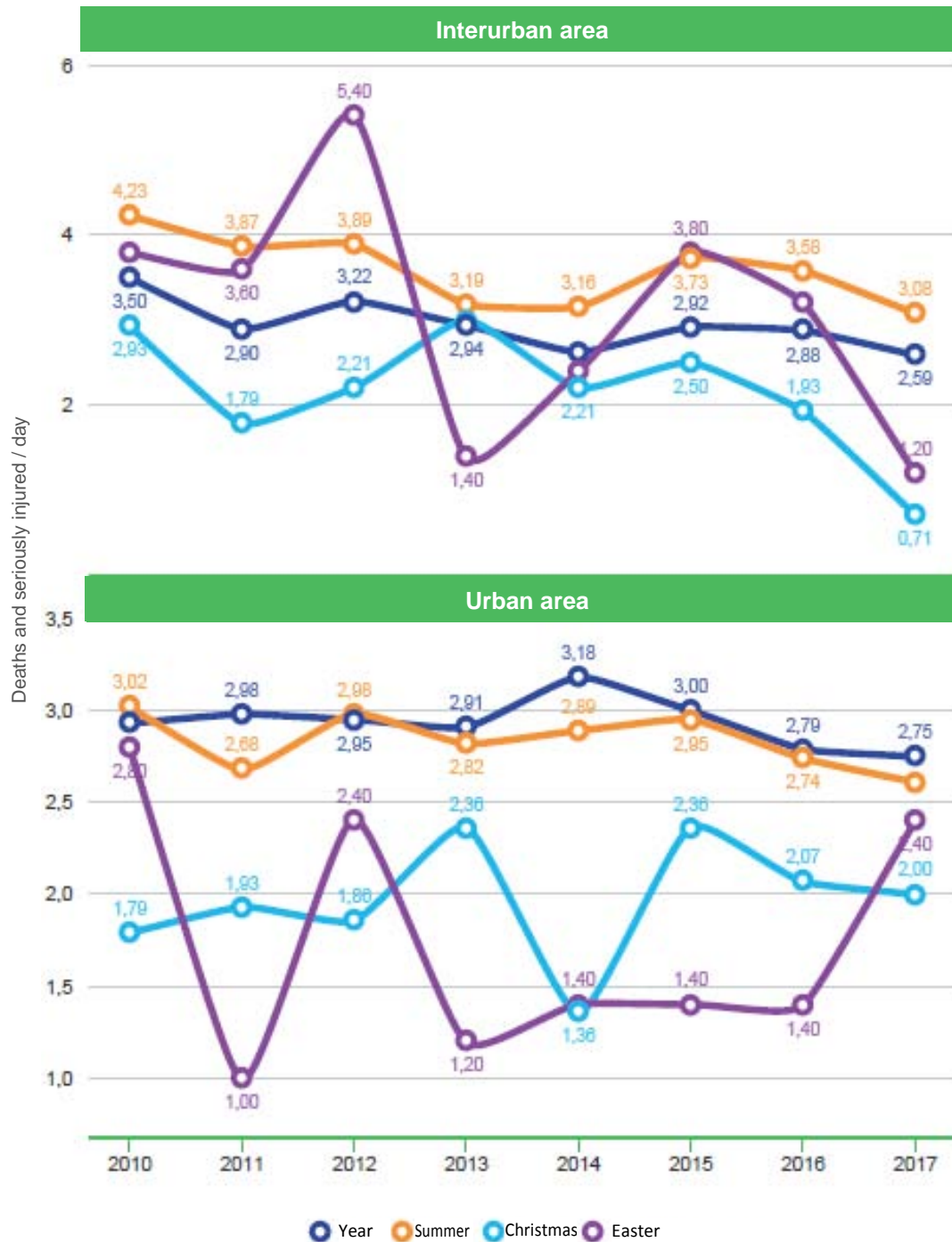


Morning is considered from 6:00h to 13:59h, afternoon from 14:00h to 21:59h, and night from 22:00h to 5:59h.



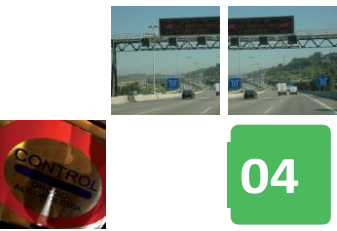
Temporary

Evolution of the number of fatalities and seriously injured per period of the year



Easter: Thursday to Easter Monday / Summer: July and August / Christmas: 24 December to 6 January.

The Christmas series figures are calculated including accidents occurred at the beginning of January of the following year. The database for this year is not yet officially closed and there could be in changes in the Christmas series in the publication of next year's yearbook.



04

Evolution of dead and seriously injured in Catalonia

Types of accident

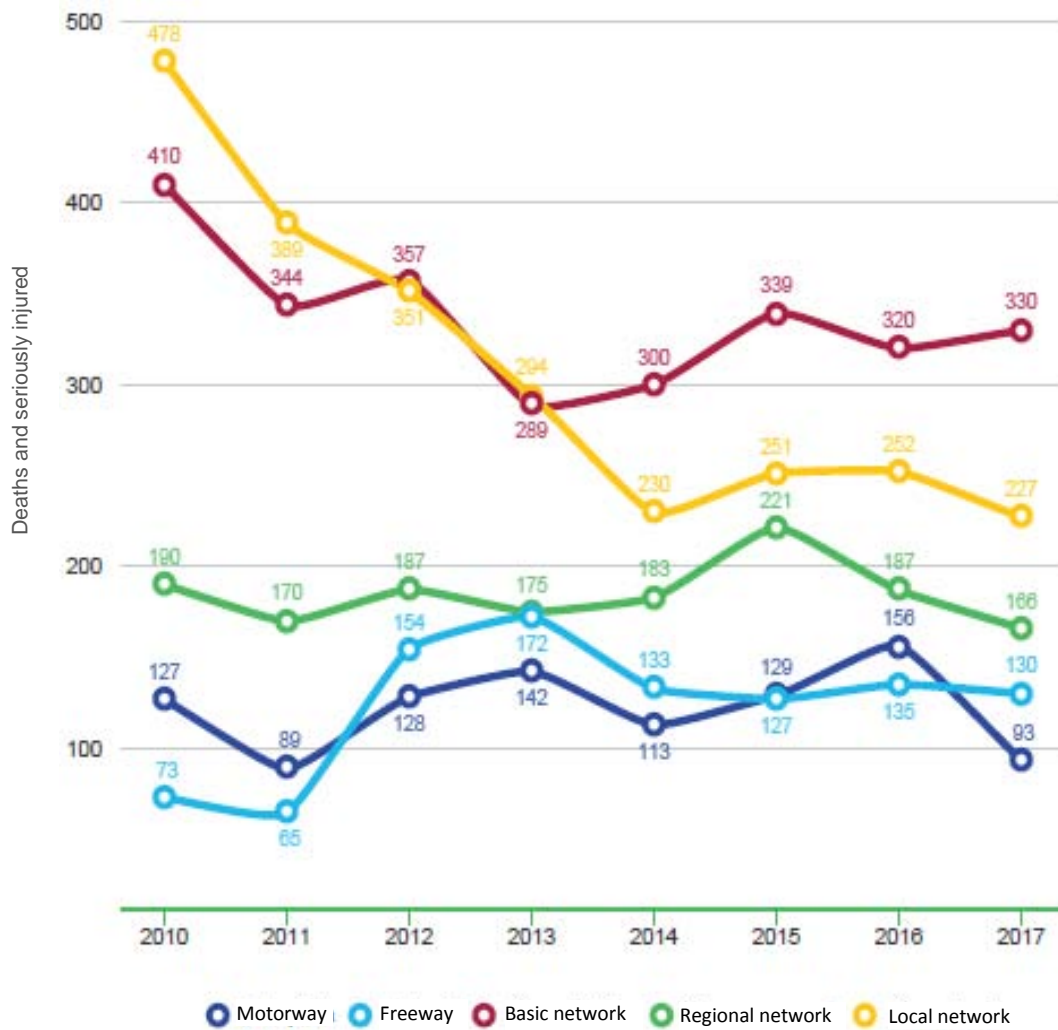
Evolution of the number of fatalities and seriously injured per type of accident and area

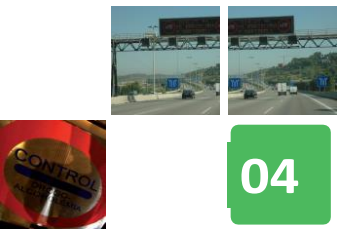




Location

Evolution of the number of fatalities and seriously injured in interurban areas per type of road



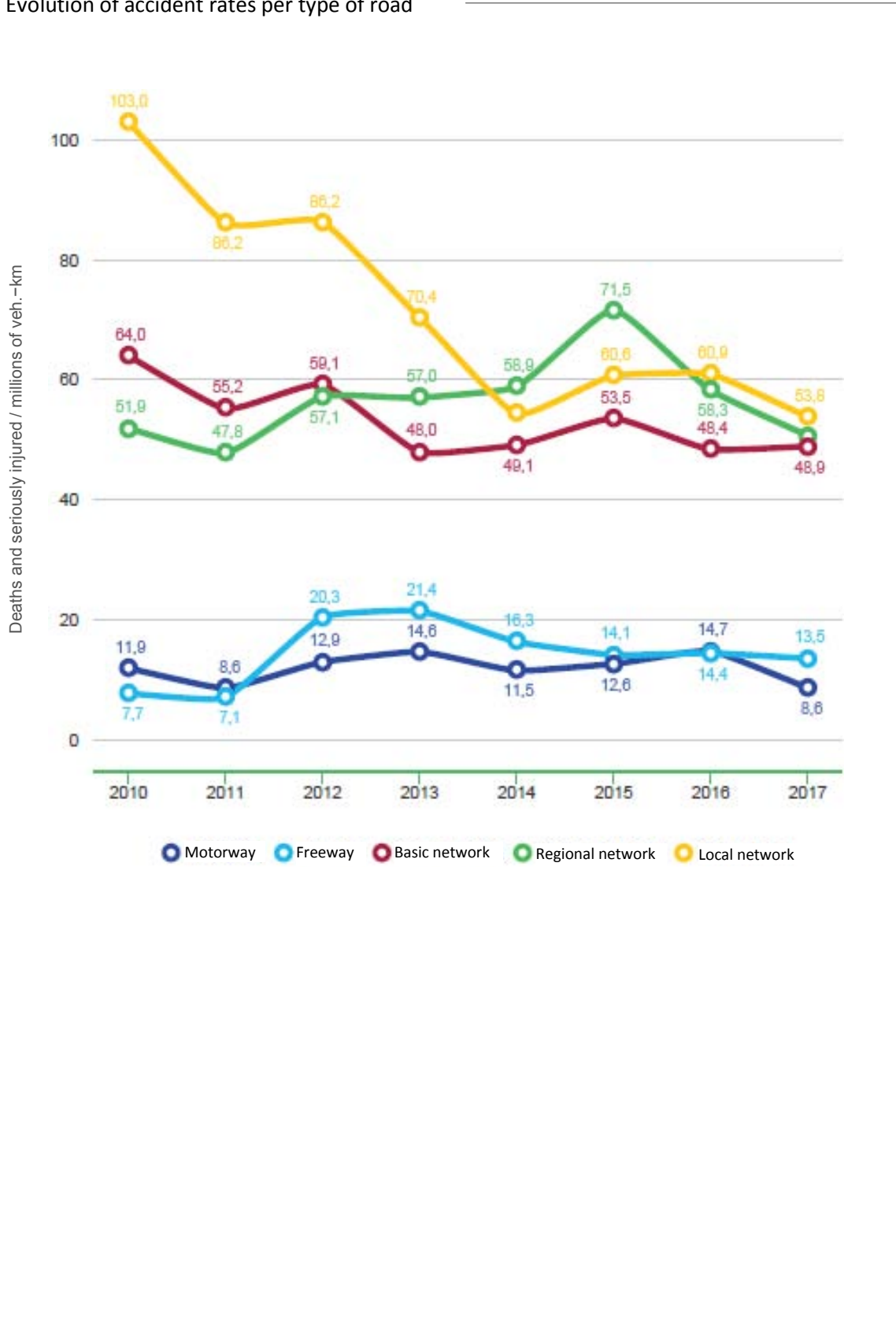


04

Evolution of dead and seriously injured in Catalonia

Location

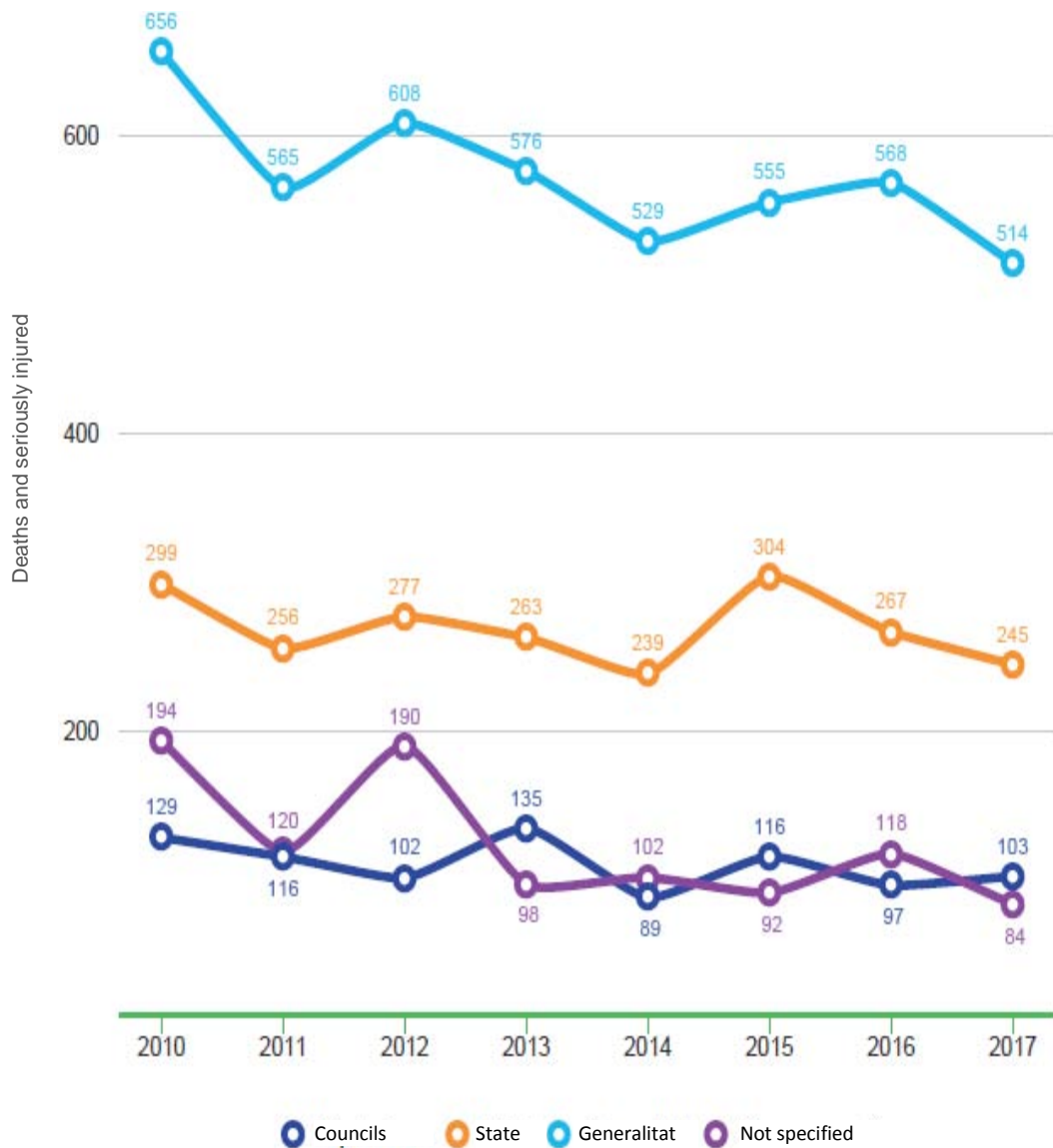
Evolution of accident rates per type of road

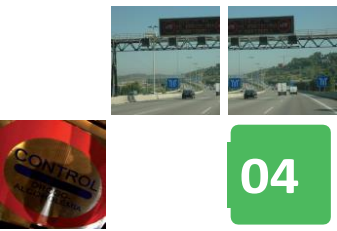




Location

Evolution of the number of fatalities and seriously injured in interurban areas per road owner



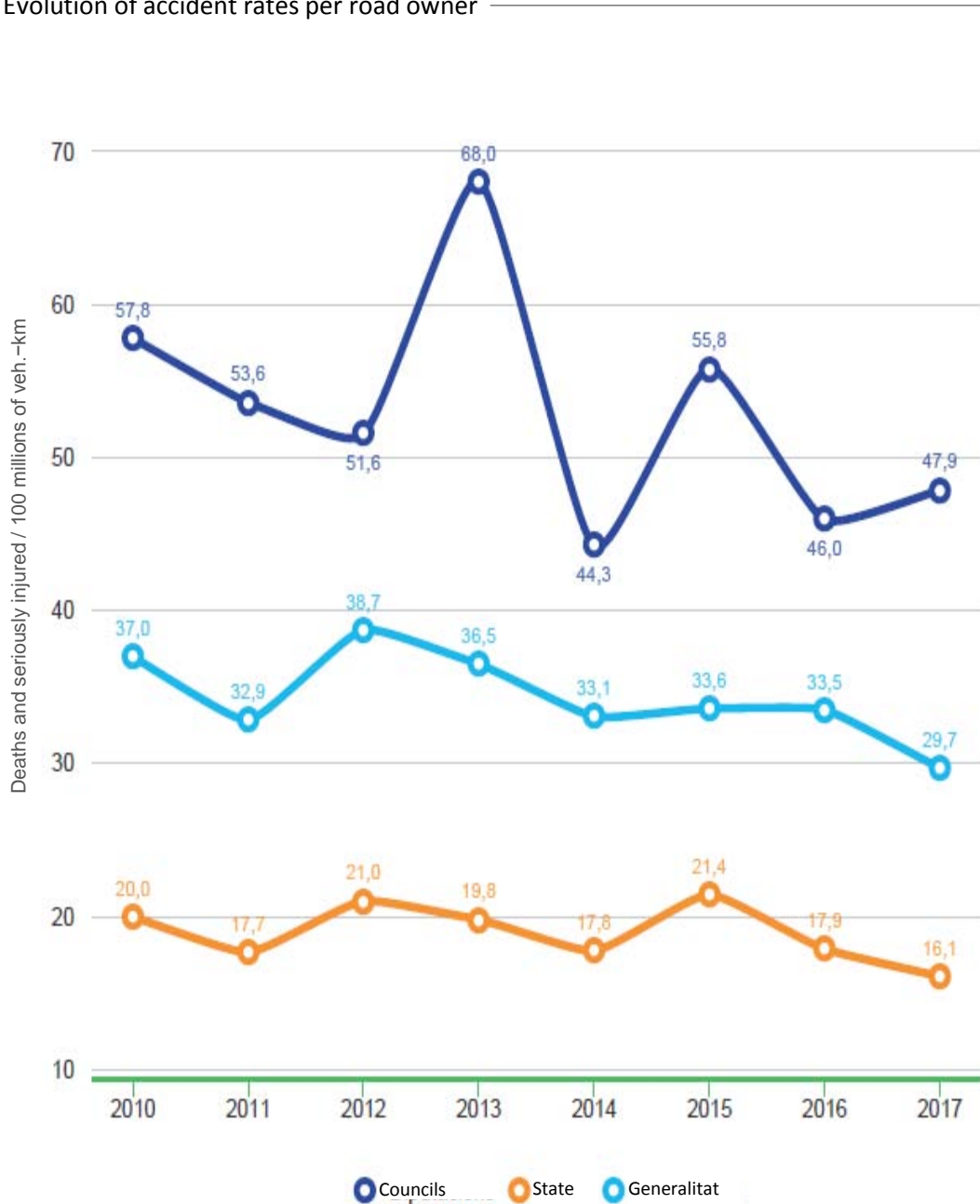


04

Evolution of dead and seriously injured in Catalonia

Location

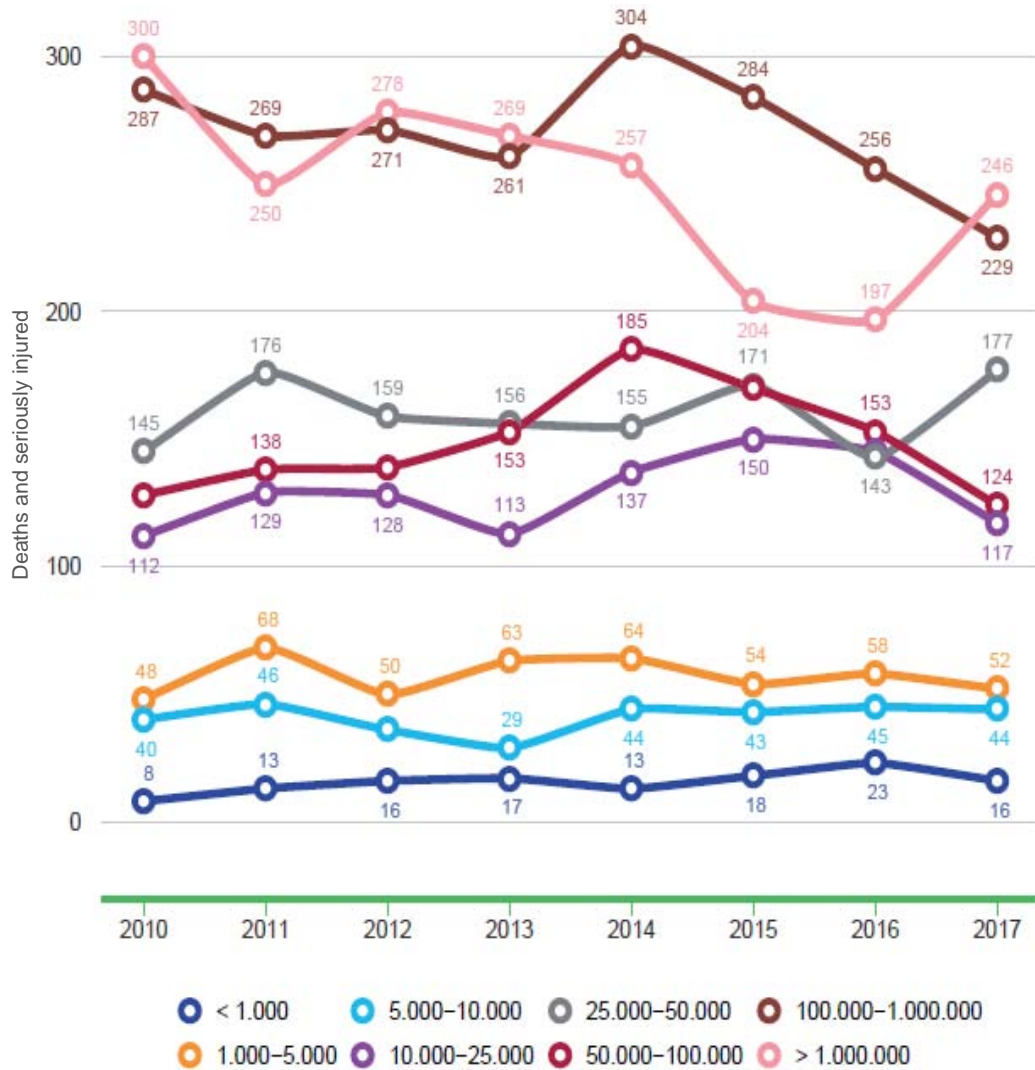
Evolution of accident rates per road owner

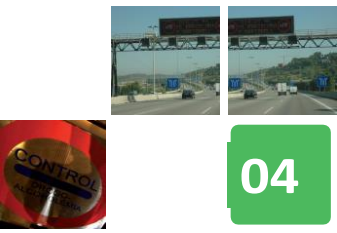




Location

Evolution of the number of fatalities and seriously injured in urban areas per town population



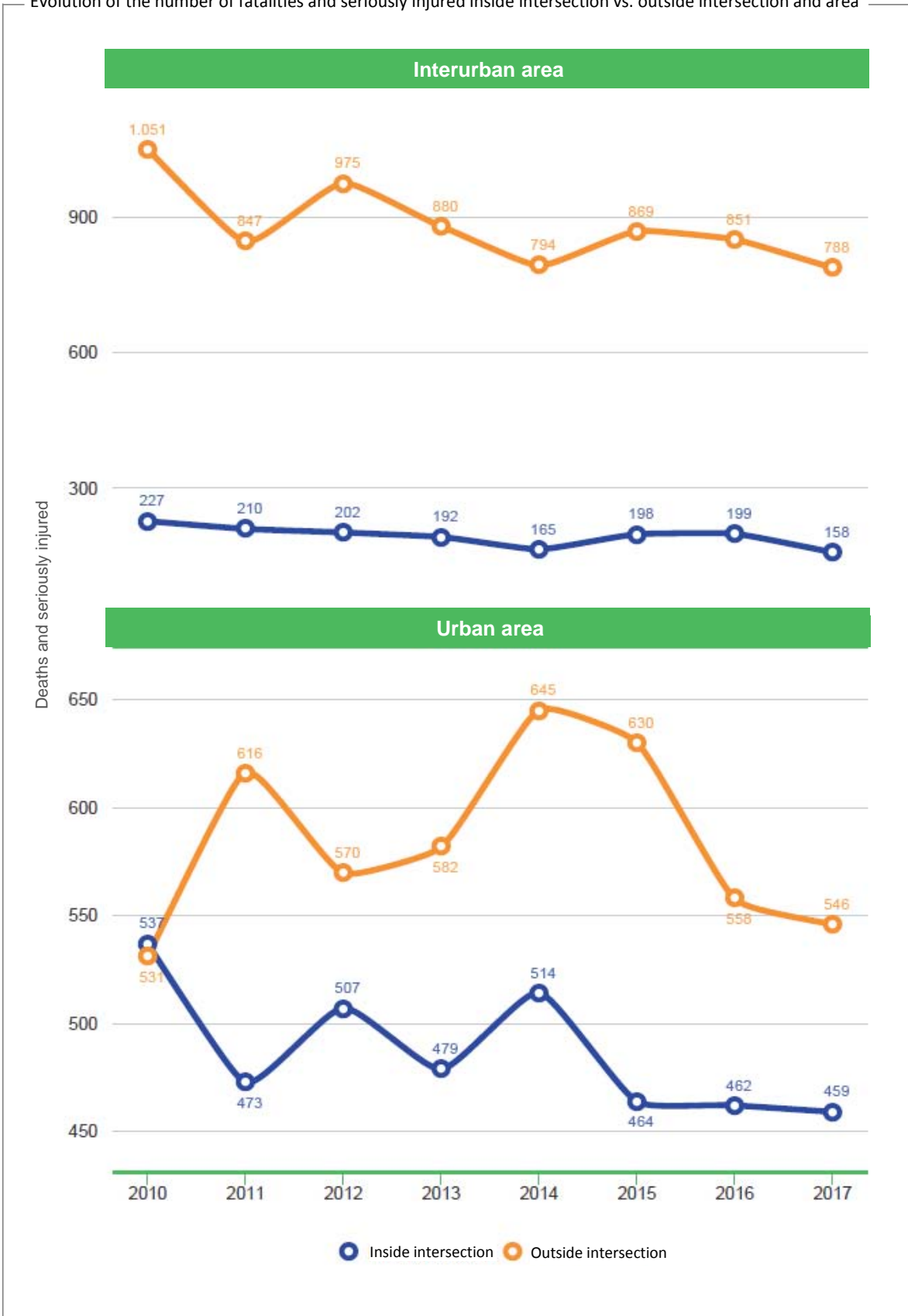


04

Evolution of dead and seriously injured in Catalonia

Location

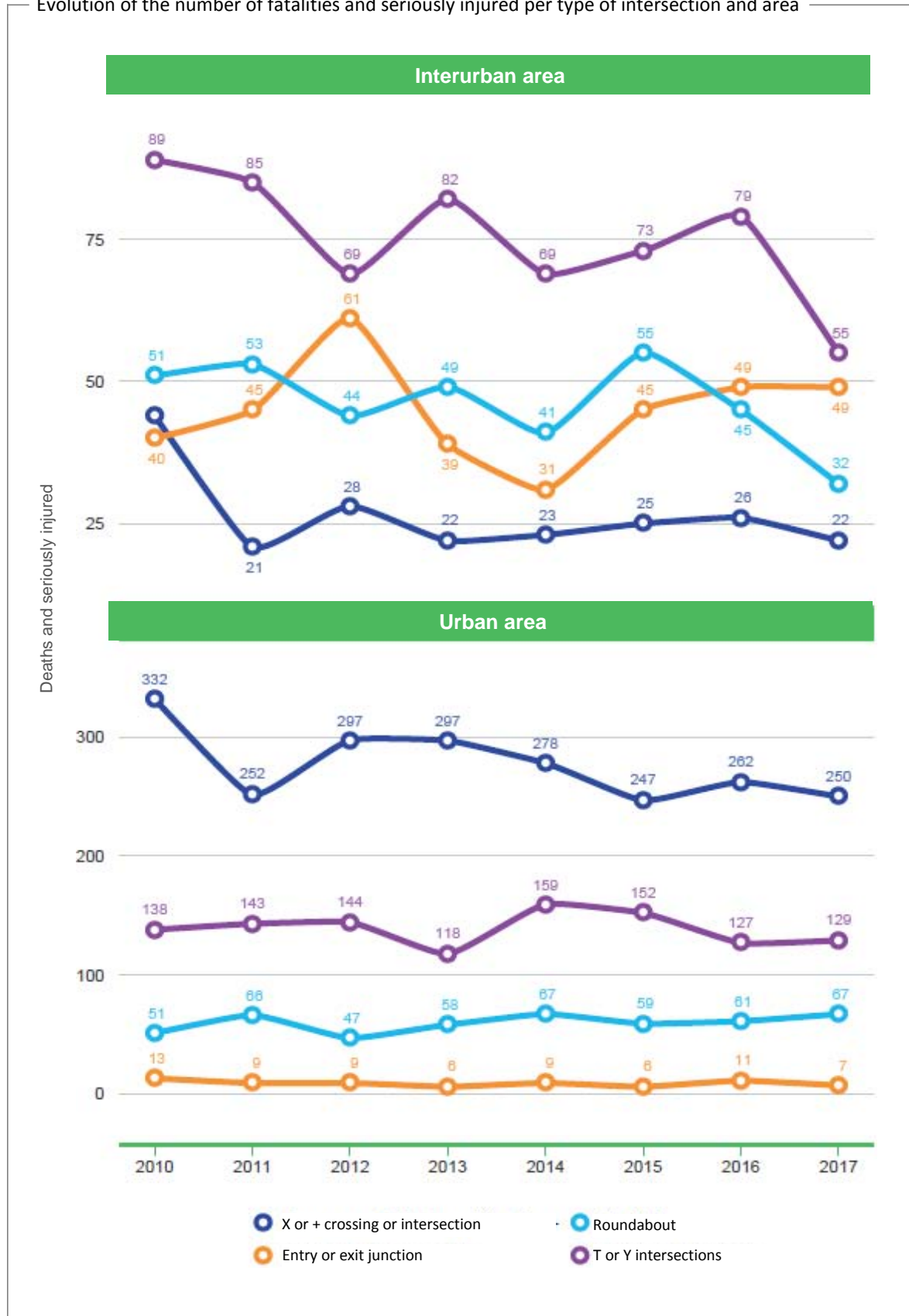
Evolution of the number of fatalities and seriously injured inside intersection vs. outside intersection and area

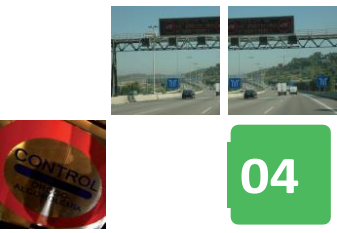




Location

Evolution of the number of fatalities and seriously injured per type of intersection and area





04

Evolution of dead and seriously injured in Catalonia

Transport mode

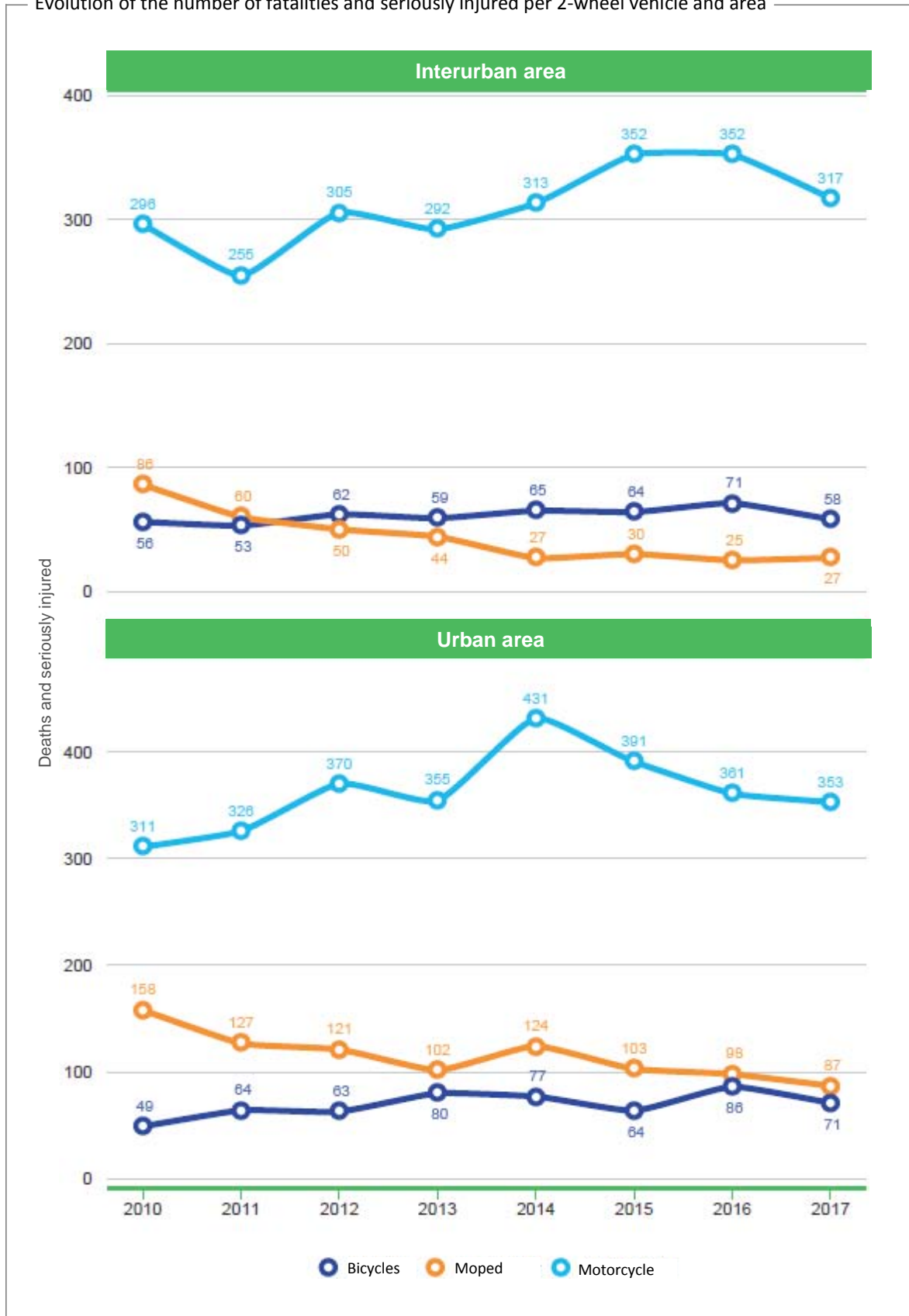
Evolution of the number of fatalities and seriously injured per type of vehicle and area

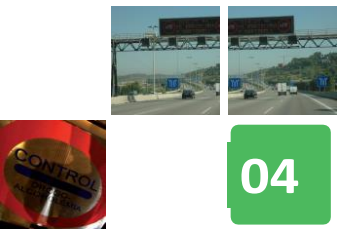




Transport mode

Evolution of the number of fatalities and seriously injured per 2-wheel vehicle and area



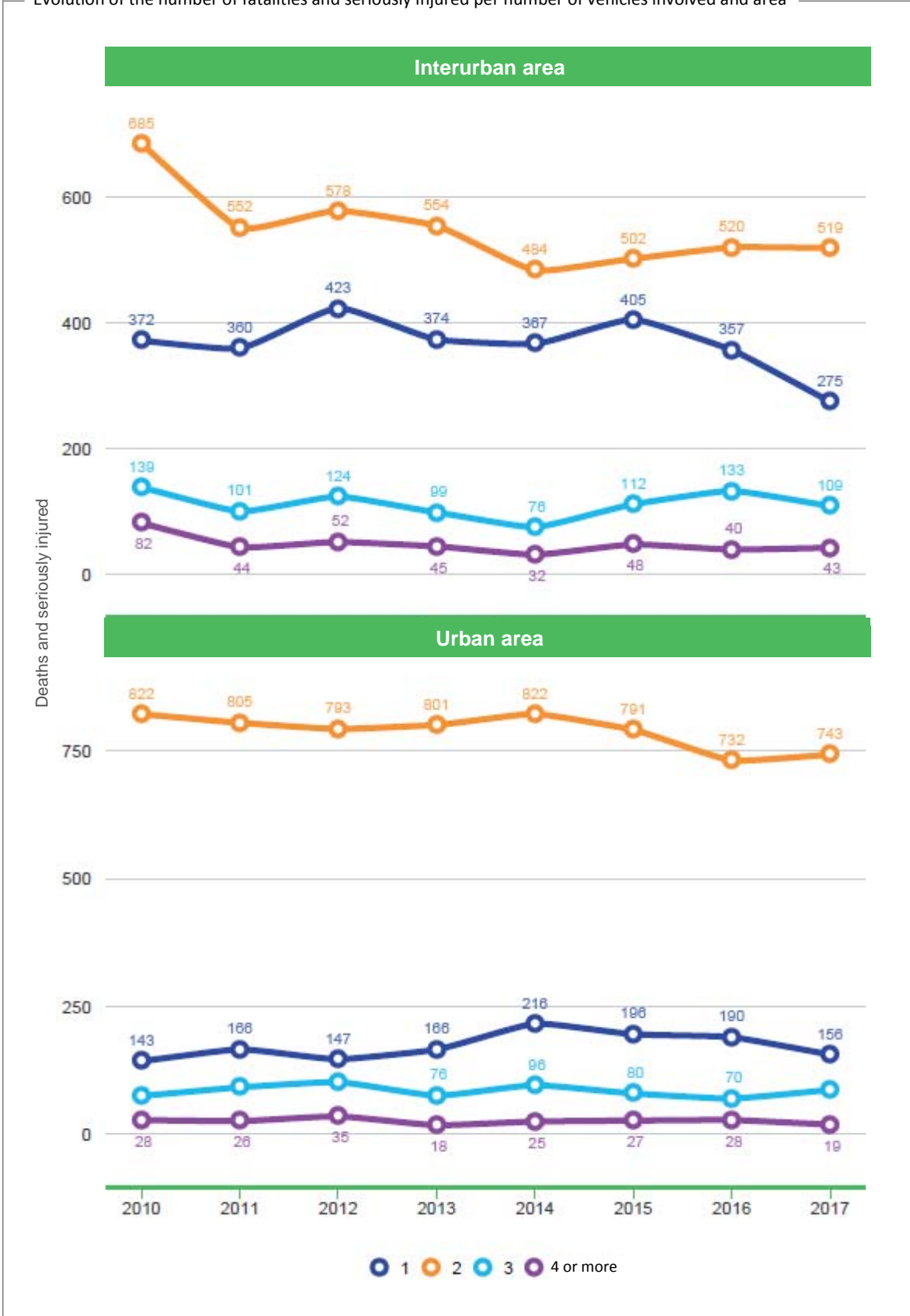


04

Evolution of dead and seriously injured in Catalonia

Transport mode

Evolution of the number of fatalities and seriously injured per number of vehicles involved and area



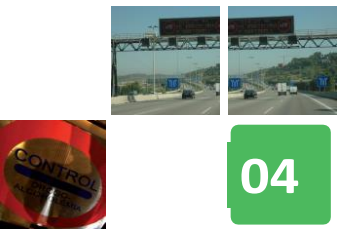


Profile of casualties

Evolution of the number of fatalities and seriously injured per gender of casualties and area



The graphs only record fatalities and seriously injured whose gender is known.

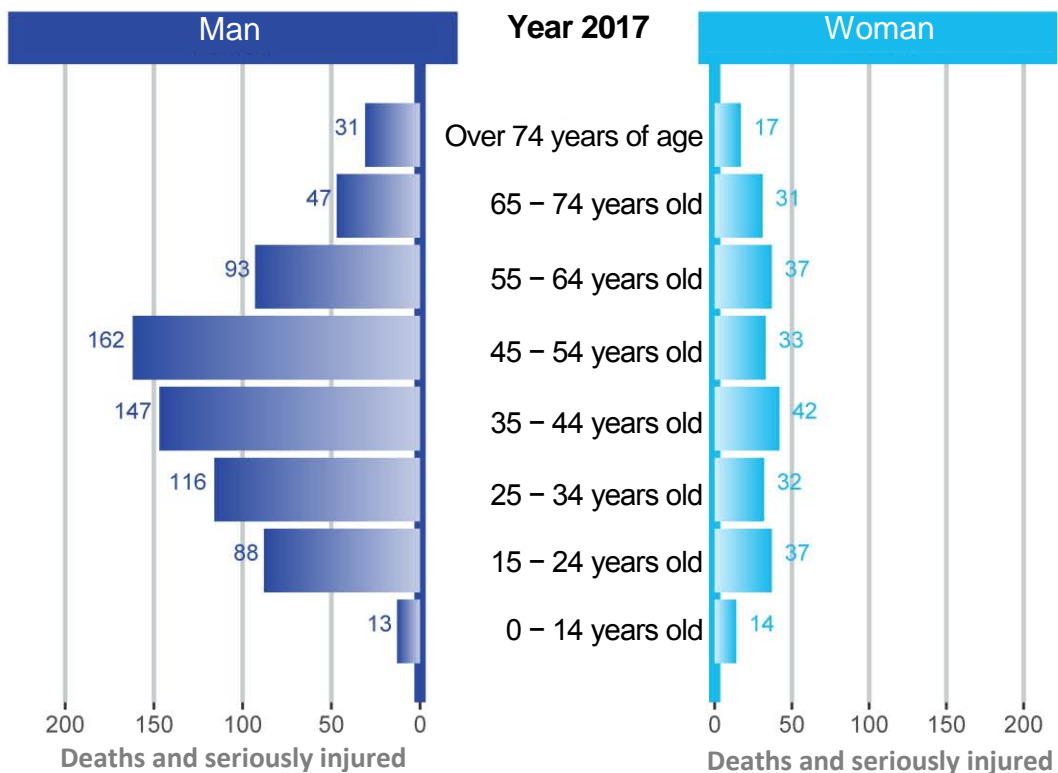
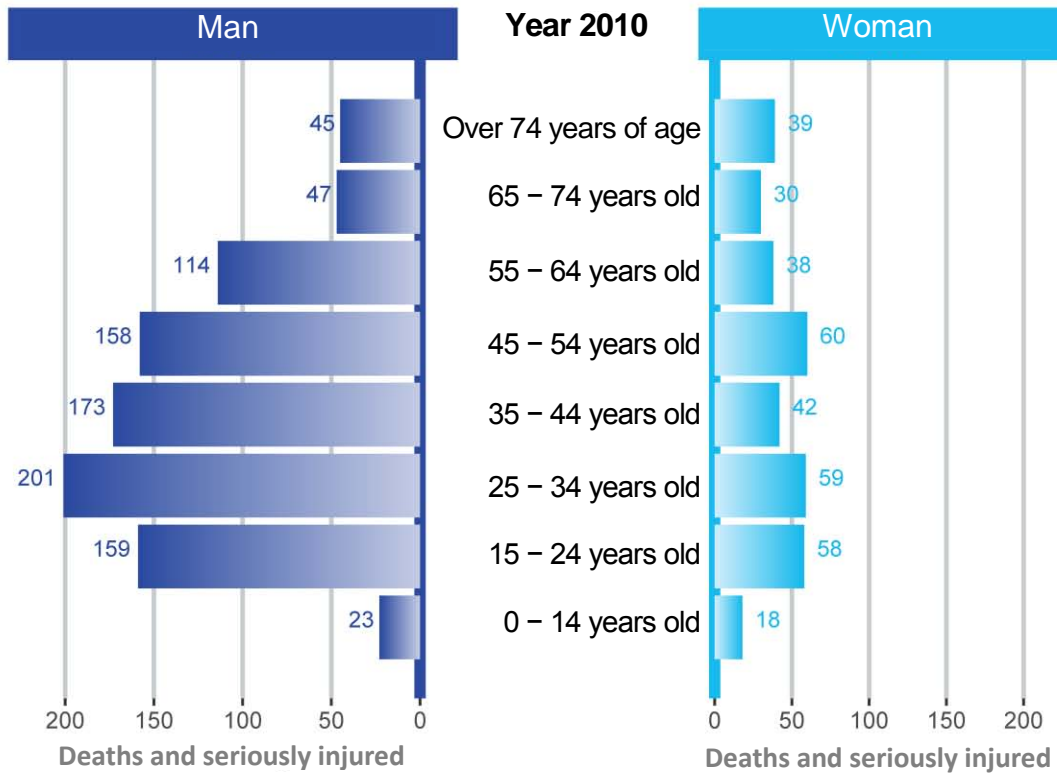


04

Evolution of dead and seriously injured in Catalonia

Profile of casualties

Deaths and seriously injured in interurban area, 2010 and 2017

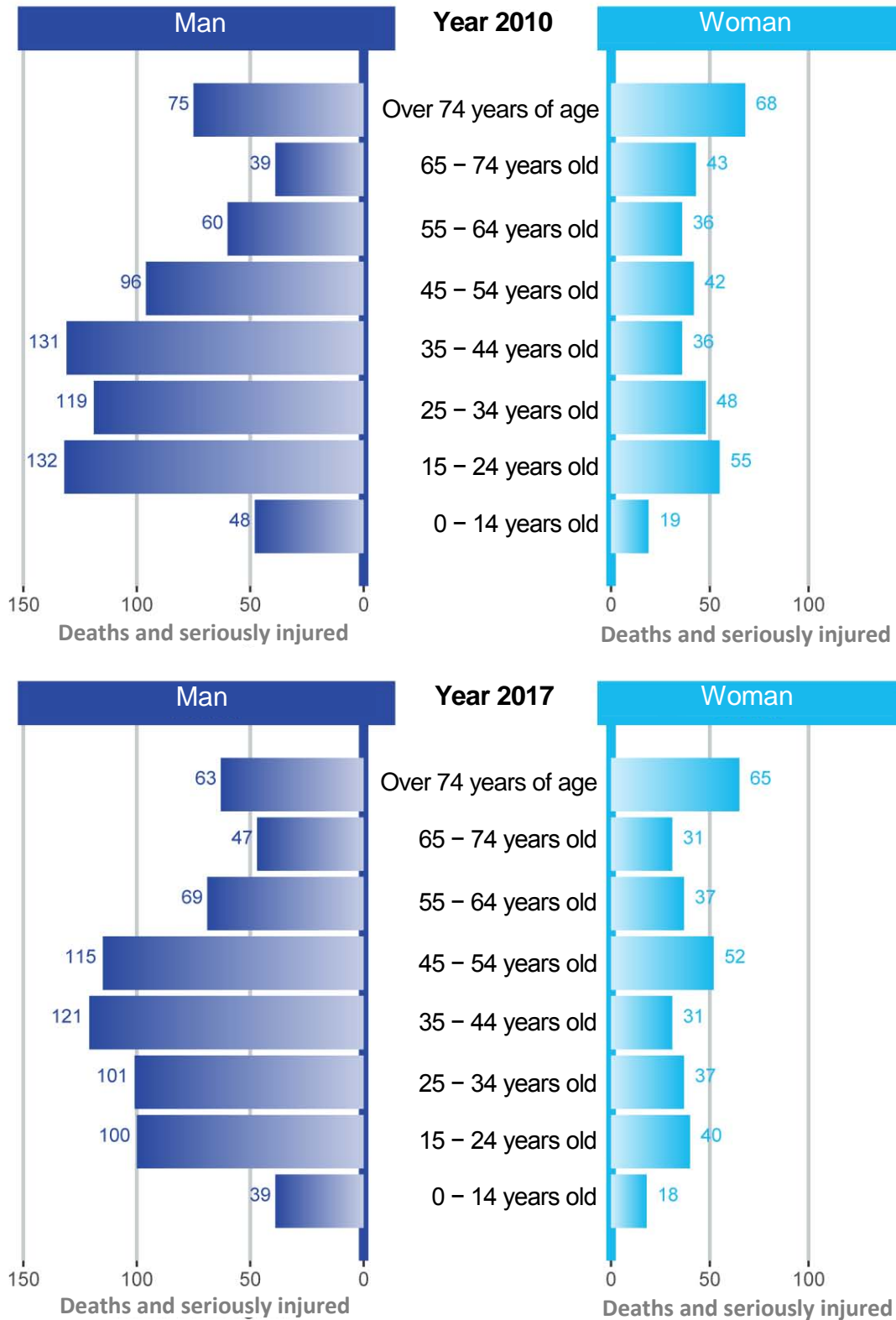


The graphs only record fatalities and seriously injured whose gender is known.

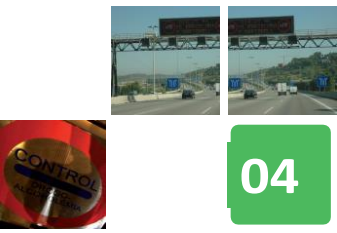


Profile of casualties

Deaths and seriously injured in urban area, 2010 and 2017



The graphs only record fatalities and seriously injured whose gender is known.

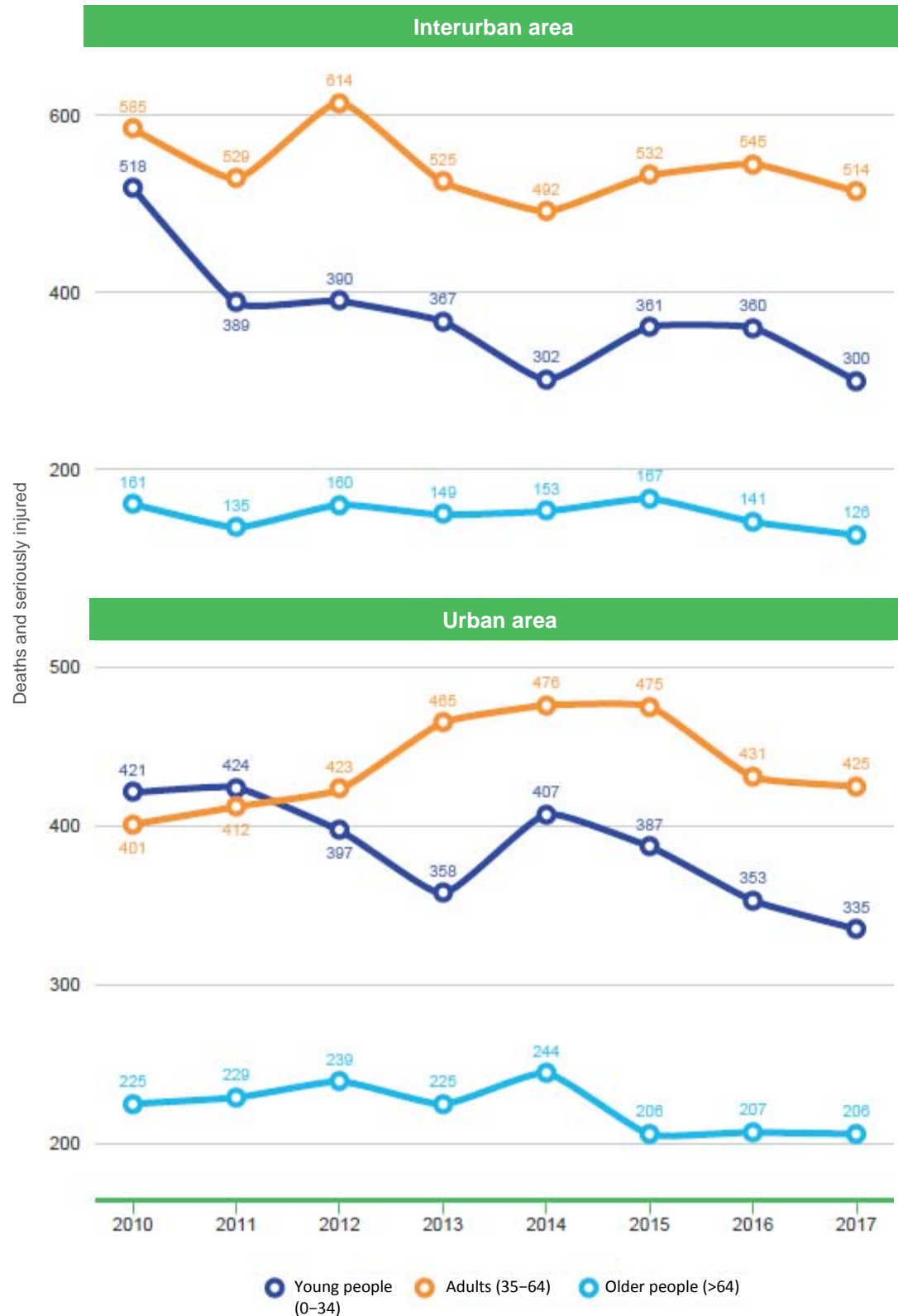


04

Evolution of dead and seriously injured in Catalonia

Profile of casualties

Evolution of the number of fatalities and seriously injured per age of casualties and area



The graphs only record fatalities and seriously injured whose age is known.

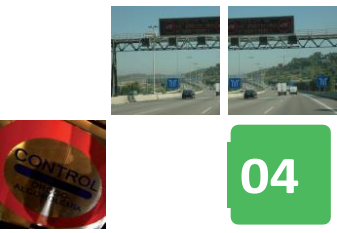


Profile of casualties

Evolution of the number of fatalities and seriously injured per age group – young people



The graphs only record fatalities and seriously injured whose age is known.

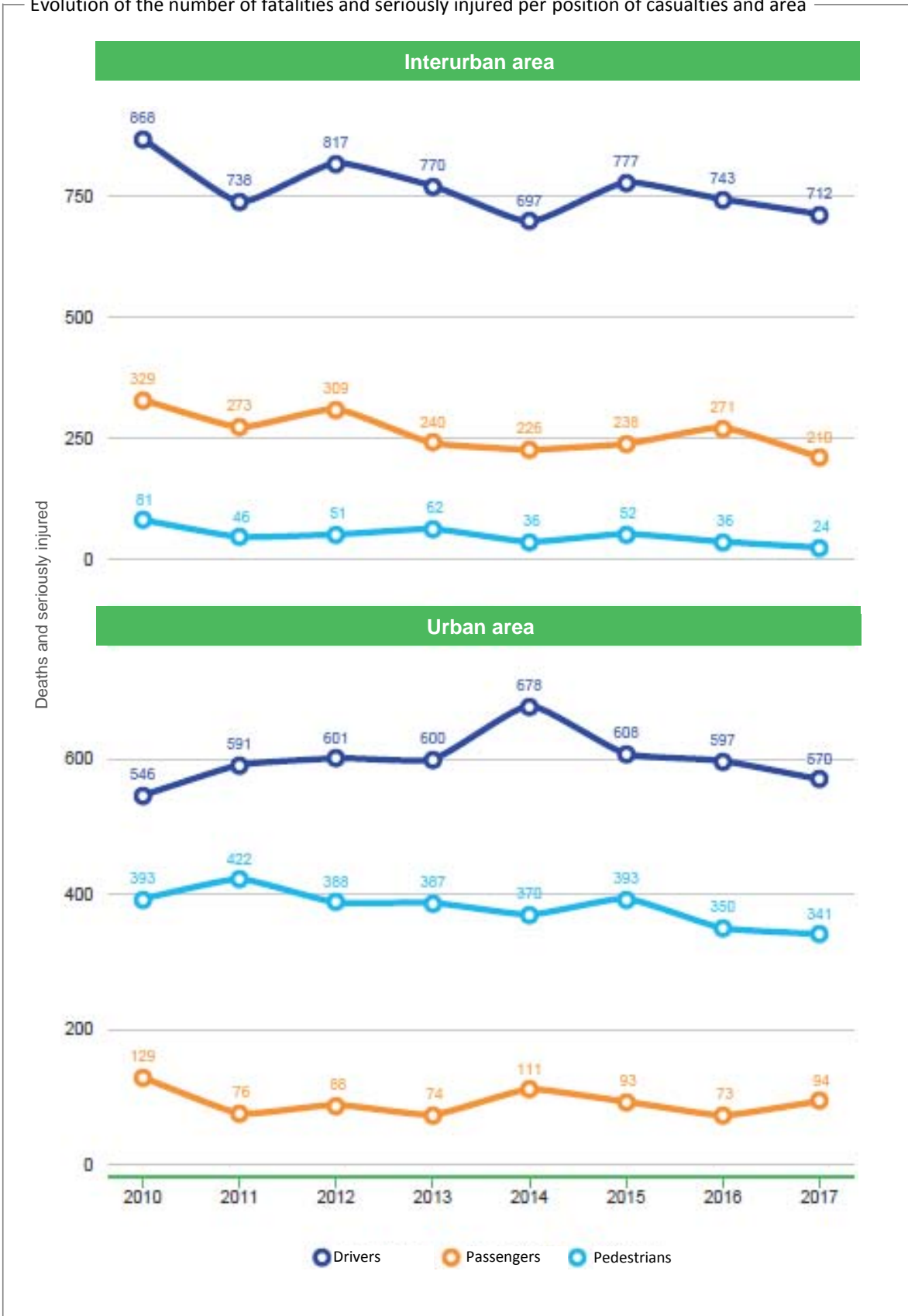


04

Evolution of dead and seriously injured in Catalonia

Profile of casualties

Evolution of the number of fatalities and seriously injured per position of casualties and area





— Accidents per region. Year 2017

Region	Urban area				Interurban area				Total			
	Accidents	Dead	Seriously injured	Slightly injured	Accidents	Dead	Seriously injured	Slightly injured	Accidents	Dead	Seriously injured	Slightly injured
Alt Camp	41	2	1	48	107	7	10	135	148	9	11	183
Alt Empordà	265	1	36	329	279	7	26	367	544	8	62	696
Alt Penedès	146	2	15	150	294	5	40	386	440	7	55	536
Alt Urgell	17	0	3	26	95	3	13	134	112	3	16	160
Alta Ribagorça	0	0	0	0	18	2	2	27	18	2	2	27
Anoia	134	1	6	163	215	5	22	322	349	6	28	485
Bages	289	1	28	365	339	5	33	491	628	6	61	856
Baix Camp	293	5	29	320	200	2	18	247	493	7	47	567
Baix Ebre	26	3	5	25	119	4	21	166	145	7	26	191
Baix Empordà	178	3	16	188	181	3	12	237	359	6	28	425
Baix Llobregat	1,559	9	73	1,783	1,078	10	49	1,582	2,637	19	122	3,365
Baix Penedès	146	1	18	174	135	1	10	190	281	2	28	364
Barcelonès	10,529	13	306	12,951	968	5	21	1,466	11,497	18	327	14,417
Berguedà	32	0	5	32	116	3	15	181	148	3	20	213
Cerdanya	5	0	0	6	53	1	13	74	58	1	13	80
Conca de Barberà	6	0	0	9	60	1	8	76	66	1	8	85
Garraf	220	1	14	250	158	2	17	205	378	3	31	455
Garrigues	9	1	5	10	47	3	6	56	56	4	11	66
Garrotxa	106	2	7	122	60	2	5	88	166	4	12	210
Gironès	653	1	32	776	250	10	20	354	903	11	52	1,130
Maresme	668	5	48	763	511	9	32	699	1,179	14	80	1,462
Moianès	10	0	3	11	50	0	3	62	60	0	6	73
Montsià	20	0	9	16	99	6	21	131	119	6	30	147
Noguera	11	0	1	12	139	7	23	190	150	7	24	202
Osona	205	2	20	236	227	7	35	311	432	9	55	547
Pallars Jussà	4	0	0	6	33	1	9	41	37	1	9	47
Pallars Sobirà	5	0	0	6	39	1	7	44	44	1	7	50
Pla d'Urgell	47	0	8	50	77	2	9	116	124	2	17	166
Pla de l'Estany	65	0	1	72	60	0	8	76	125	0	9	148
Priorat	3	0	0	3	35	1	0	40	38	1	0	43
Ribera d'Ebre	8	0	4	8	46	3	16	54	54	3	20	62
Ripollès	3	0	0	4	63	5	3	86	66	5	3	90
Segarra	7	0	2	8	69	2	4	91	76	2	6	99
Segrià	303	1	38	342	239	7	41	322	542	8	79	664
Selva	146	3	24	160	324	5	29	477	470	8	53	637
Solsonès	4	0	1	9	55	1	13	56	59	1	14	65
Tarragonès	316	5	30	366	310	3	17	420	626	8	47	786
Terra Alta	4	0	1	4	25	1	4	44	29	1	5	48
Urgell	40	0	4	47	87	4	8	123	127	4	12	170
Val d'Aran	2	0	0	6	32	1	4	54	34	1	4	60
Vallès Occidental	1,108	7	113	1,276	1,031	10	63	1,459	2,139	17	176	2,735
Vallès Oriental	464	3	27	510	632	11	68	894	1,096	14	95	1,404
TOTAL	18,097	72	933	21,642	8,955	168	778	12,574	27,052	240	1,711	34,216

Contributing factors. Year 2017

Factor	Urban area	Interurban area	Total	UA %	IA %	Total %
Violation of traffic rules	6,277	2,374	8,651	46.30	25.58	37.88
Driver error	3,855	1,750	5,605	28.44	18.86	24.54
Distraction	1,552	2,335	3,887	11.45	25.16	17.02
Inappropriate speed	629	1,345	1,974	4.64	14.49	8.64
Alcohol or drugs	354	504	858	2.61	5.43	3.76
State or condition of the road	418	407	825	3.08	4.39	3.61
Other factors	254	164	418	1.87	1.77	1.83
Poor condition of the vehicle	76	233	309	0.56	2.51	1.35
Bad weather	122	167	289	0.90	1.80	1.27
Illness, fatigue or drowsiness	17	1	18	0.13	0.01	0.08
Stretch in road works	2	1	3	0.01	0.01	0.01
Total contributing factors	13,556	9,281	22,837	100.00	100.00	100.00
Total accidents	18,097	8,955	27,052			

Transport mode. Year 2017

Average	Urban area	Interurban area	Total	UA %	IA %	Total %
Car	16,749	10,247	26,996	46.76	62.84	51.79
Motorcycle	8,343	2,393	10,736	23.29	14.67	20.60
Pedestrian	3,482	104	3,586	9.72	0.64	6.88
Van (cargo and passengers)	1,930	1,238	3,168	5.39	7.59	6.08
Bicycles	1,686	522	2,208	4.71	3.20	4.24
Moped	1,893	179	2,072	5.29	1.10	3.98
Bus	716	47	763	2.00	0.29	1.46
SUV	292	379	671	0.82	2.32	1.29
Rigid Truck <= 3.5 tons	336	250	586	0.94	1.53	1.12
Rigid Truck >= 3.5 tons	143	362	505	0.40	2.22	0.97
Tractor Truck	50	455	505	0.14	2.79	0.97
Other motor vehicles	54	31	85	0.15	0.19	0.16
Farming machinery	6	62	68	0.02	0.38	0.13
Quadricycle < 75 cc	28	13	41	0.08	0.08	0.08
Other non-motor vehicles	34	2	36	0.09	0.01	0.07
Train or tram	32	0	32	0.09	0.00	0.06
Machinery for public works and services	20	3	23	0.06	0.02	0.04
Quadricycle > 75 cc	14	9	23	0.04	0.06	0.04
Camper	7	11	18	0.02	0.07	0.03
Minibus <= 17	3	0	3	0.01	0.00	0.01
Total	35,818	16,307	52,125	100.00	100.00	100.00



— Status of victim. Year 2017

Region	Urban area			Interurban area		
	Driver	Passenger	Pedestrian	Driver	Passenger	Pedestrian
Alt Camp	31	9	11	116	34	2
Alt Empordà	219	84	63	280	114	6
Alt Penedès	104	19	44	310	119	2
Alt Urgell	15	9	5	81	65	4
Alta Ribagorça	0	0	0	15	15	1
Anoia	111	27	32	234	115	0
Bages	229	99	66	352	173	4
Baix Camp	202	68	84	201	60	6
Baix Ebre	20	6	7	115	76	0
Baix Empordà	135	27	45	177	71	4
Baix Llobregat	1,228	305	332	1,130	499	12
Baix Penedès	118	36	39	123	76	2
Barcelonès	9,151	2,545	1,574	1,078	412	2
Berguedà	22	5	10	128	69	2
Cerdanya	4	1	1	50	38	0
Conca de Barberà	6	1	2	64	21	0
Garraf	194	39	32	153	70	1
Garrigues	8	6	2	46	19	0
Garrotxa	98	16	17	65	28	2
Gironès	568	149	92	268	112	4
Maresme	524	128	164	534	195	11
Moianès	10	3	1	50	15	0
Montsià	12	5	8	106	51	1
Noguera	8	5	0	136	83	1
Osona	157	46	55	254	98	1
Pallars Jussà	3	2	1	29	20	2
Pallars Sobirà	4	2	0	38	13	1
Pla d'Urgell	31	10	17	90	37	0
Pla de l'Estany	56	9	8	56	27	1
Priorat	2	0	1	34	6	1
Ribera d'Ebre	4	5	3	50	23	0
Ripollès	3	1	0	64	29	1
Segarra	7	3	0	66	31	0
Segrià	235	65	81	246	119	5
Selva	131	28	28	326	180	5
Solsonès	4	6	0	54	16	0
Tarragonès	231	79	91	282	152	6
Terra Alta	3	1	1	24	25	0
Urgell	32	13	6	89	46	0
Val d'Aran	3	3	0	35	23	1
Vallès Occidental	894	260	242	1,100	426	6
Vallès Oriental	359	78	103	665	303	5
Total	15,176	4,203	3,268	9,314	4,104	102

— Age of victim. Year 2017

Age	Urban area	Interurban area	Total	UA %	IA %	Total %
0 to 4	269	171	440	1.19	1.26	1.22
5 to 9	365	226	591	1.61	1.67	1.63
10 to 14	416	233	649	1.84	1.72	1.79
15 to 19	1,227	858	2,085	5.42	6.35	5.76
20 to 24	2,457	1,638	4,095	10.85	12.12	11.32
25 to 29	2,589	1,394	3,983	11.43	10.31	11.01
30 to 34	2,390	1,239	3,629	10.55	9.16	10.03
35 to 39	2,279	1,454	3,733	10.06	10.75	10.32
40 to 44	2,135	1,434	3,569	9.43	10.61	9.87
45 to 49	1,816	1,203	3,019	8.02	8.90	8.35
50 to 54	1,542	979	2,521	6.81	7.24	6.97
55 to 59	1,141	764	1,905	5.04	5.65	5.27
60 to 64	741	585	1,326	3.27	4.33	3.67
65 to 69	557	396	953	2.46	2.93	2.63
70 to 74	427	309	736	1.89	2.29	2.04
Over 74	919	471	1,390	4.06	3.48	3.84
100 to 104	0	1	1	0.00	0.01	0.00
Ignored	1,377	165	1,542	6.08	1.22	4.26
Total	22,647	13,520	36,167	100.00	100.00	100.00

— Gender of victim. Year 2017

Sex	Urban area	Interurban area	Total	UA %	IA %	Total %
Woman	8,676	5,138	13,814	38.31	38.00	38.20
Man	13,491	8,335	21,826	59.57	61.65	60.35
Not specified	480	47	527	2.12	0.35	1.46
Total	22,647	13,520	36,167	100.00	100.00	100.00



Definitions

According to an order from the Ministry of Parliament Relations and the Secretary of Government, dated February 18, 1993, amending traffic accident statistics (Official State Gazette No. 47, February 24, 1993).

TRAFFIC ACCIDENTS

That meet the following conditions are the subject of this statistic:

- 1.1 When occurring or caused on one of the roads or grounds included in the legislation on traffic, motor vehicle traffic and road safety.
- 1.2 Resulting in: one or more people killed or injured.
- 1.3 When at least one moving vehicle is involved.

VEHICLE INVOLVED

It is considered that a vehicle is involved in a traffic accident when one or more of the following circumstances concur:

- 2.1 If the vehicle collides with:
 - a) One or more vehicles, moving or stopped or parked
 - b) Pedestrians
 - c) Animals
 - d) Another obstacle
- 2.2 Without a collision, as a result of the accident, if the driver and/or an occupant of the vehicle have been killed or injured.
- 2.3 Without a collision with the vehicle, being stationary or parked in a dangerous manner, in such a way that this would constitute one of the accident factors.
- 2.4 Without the vehicle having directly suffered the consequences of the accident, if the behaviour of the driver and/or any of the occupants has constituted one of the factors that have caused it.
- 2.5 If the driver and/or any occupant of a vehicle has been knocked down by another vehicle when getting in or out of the vehicle; in such a case both vehicles will be considered involved in the accident.

EXCEPTIONS

- 3.1 When the driver and/or any occupant of a vehicle has been knocked down by another vehicle when already moving away from the vehicle; in this case, only the vehicle that hit the driver and/or occupant will be considered involved in the accident.
- 3.2 When a pedestrian appearing on the road unexpectedly and hidden by a stationary or moving vehicle is knocked down; in this case, the vehicle is not considered involved in the accident, unless it is in one of the situations described in section 2.



Specific definitions

This statistic considers:

- 4.1 Accident with victims: that in which one or more people are killed or injured.
- 4.2 Fatal accident: that in which one or more people are killed within the first 24 hours.
- 4.3 Victim: any person who is killed or injured as a result of a traffic accident.
- 4.4 Dead within 30 days*: any person who as a result of the accident, dies at the time of the accident or within 30 days.
- 4.5 Dead*: any person who as a result of the accident, dies at the time of the accident or within 24 hours.
- 4.6 Seriously injured: any person who as a result of the accident, is hospitalized for a period exceeding 24 hours.
- 4.7 Slightly injured: any person who as a result of the accident, receives medical assistance at the scene of the accident or is hospitalized for a period less than 24 hours.
- 4.8 Driver: any person who is driving the vehicle, guiding draft, pack or saddle animals, or driving a herd, along the roads or grounds mentioned in section 1.1.
- 4.9 Passenger: any person who, without being a driver, is in or on a vehicle.
- 4.10 Pedestrian: any person who, without being a driver, is walking along the roads or the grounds mentioned in section 1.1.

*The number of deaths during the first 24 hours is determined by following up all the cases; the follow-up of deaths within 30 days is determined, until the time in which the actual follow-up of all the injured during this period is fully guaranteed, applying to the figure of dead within 24 hours the correction factor that is deducted from the actual monitoring of a representative sample of seriously injured that the Catalan Traffic Service must conduct at least every four years, together with the Directorate General of Traffic. These correction factors were first applied in 1993. They were reviewed in accordance with the provision of the Order of the Ministry of Parliament Relations and the Secretary of Government mentioned; in 2001, new factors were applied.

The following will also be considered pedestrians: anyone pushing a pram, anyone with a pram for people with reduced mobility or any other non-motorized vehicle (of small size), anyone walking with a two-wheel moped, and people with reduced mobility in a wheelchair with two wheels, motorized or not, and people on skates or other similar devices, who are on the roads or the grounds mentioned above.

Pedestrians are also people who are fixing the engine, changing a tire or carrying out anything else similar.

OTHER PARAMETERS

- 4.11 Average speed (aS): median speed of vehicles crossing the control section.
- 4.12 Vehicles-kilometer: expressed in number of vehicles x per year kilometer, defining the total number of kilometres travelled on roads within the boundaries of a specific area.

Contents: Sub-Directorate General for Road Safety
in collaboration with Ingeniería de Tráfico, S.L. (INTRA)
