

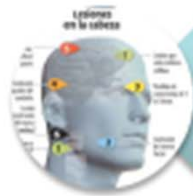
Strategic Planning Directorate General of Traffic

VI International Conference of European Traffic Policies
Barcelona, 16 May 2014

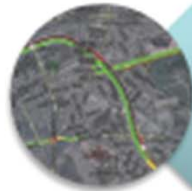
Script

- Objective
- Context: Present and Evolution. Assessments
- Strategy
 - Areas for improvement: short, medium and long-term
 - DPO

Safe Mobility and Government: Objectives Spain 2020-2050



0 Injured



0 Congestion



0 Pollution



0 Debt and more
competitiveness



Road Safety Indicators 2011-2020

Indicators	Baseline figure 2009	Objective 2020
1. Lower death rate to 37 per million inhabitants	59	Less than 37
2. Reduce number of serious injuries by 35%	13,923	9,050
3. Zero children fatalities without child restraint system ¹	12	0
4. 25% less fatalities and injuries in the 18-24 age group at weekends	730	548
5. 10% less drivers killed over 64.	203	183
6. 30% reduction in run-over fatalities	459	321
7. 1 million more cyclists without increasing death rate	1,2	1,2
8. Zero passenger car fatalities in urban areas	101	0
9. 20% motorcycle riders killed or seriously injured	3,473	2,778
10. 30% less fatalities from run-off accidents on conventional roads	520	364
11. 30% less fatalities in commutes	170	119
12. Less than 1% positives in exhaled air in random preventive alcohol controls. DRUID, 0.05 mg/l ² cutoff.	6.7%	Inferior al 1%
13. 50% reduction on % of light vehicles exceeding speed limit by more than 20 km/h	12.3% (highway) 6.9% (expressway) 15.8% (conv.90) 16.4% (conv.100)	6.2% (highway) 3.5% (expressway) 7.9% (conv.90) 8.2% (conv. 100)

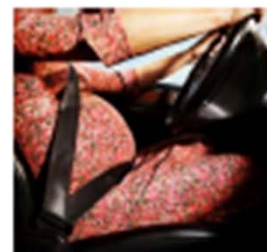
Present: DGT figures, 2012



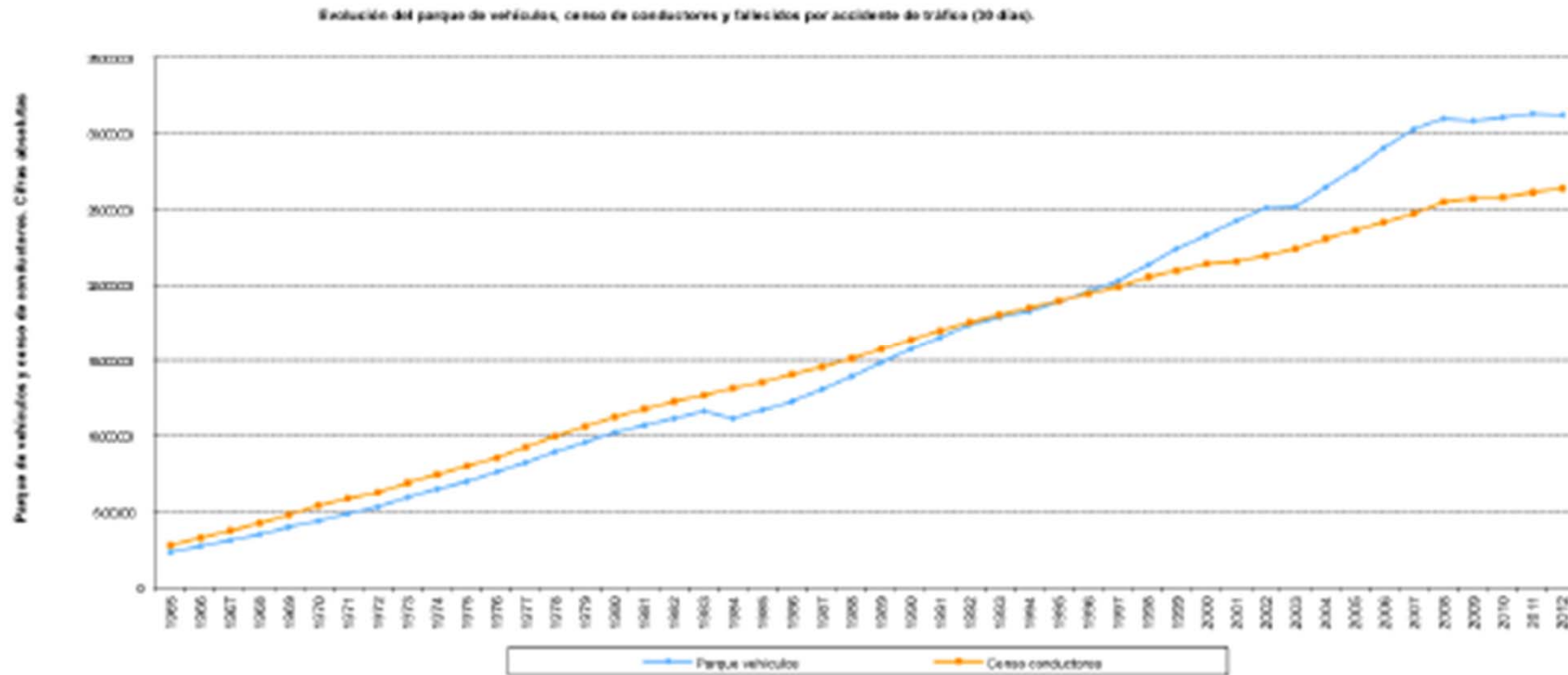
Population: 46,163,116
Tourists: (Prov.): 57,700,713
Public roads: > 660,000 km
Commutes on high capacity public roads: 365 M
Commutes (2007): 42,000 M

New driving licenses: 424,152
Licenses renewed: 3 M
New vehicles: 924,310
Vehicles transferred: 2,891,722
Vehicles withdrawn: 894 490

Penalties: 4,136,888 (ex. C&PV)



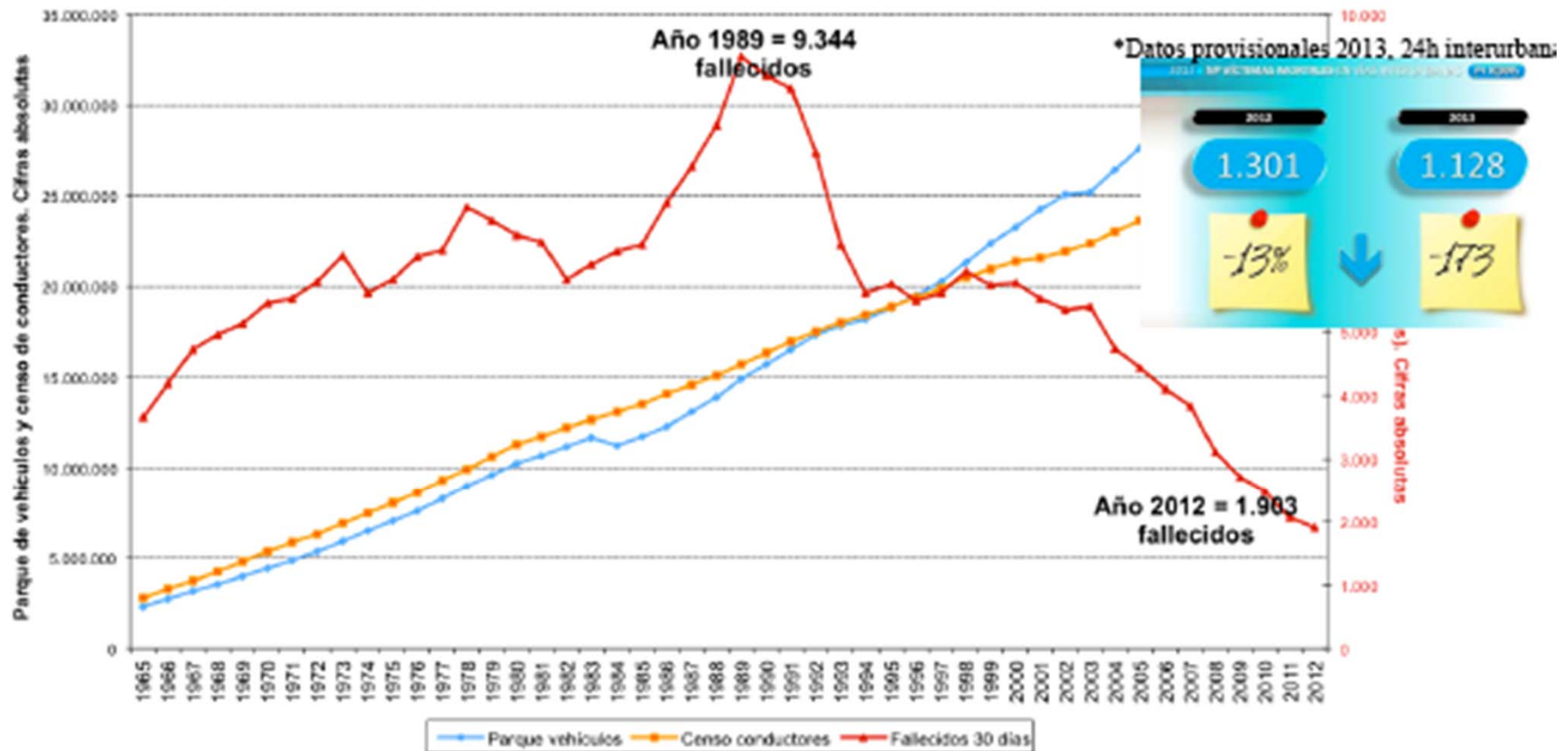
Historical Evolution 1965-2012



	2012	Difference from 2011
Km of inter-urban roads	165,595	-0,2% (-290 km)
Km on selected road commutes (10 ⁶)	224,285	-4%

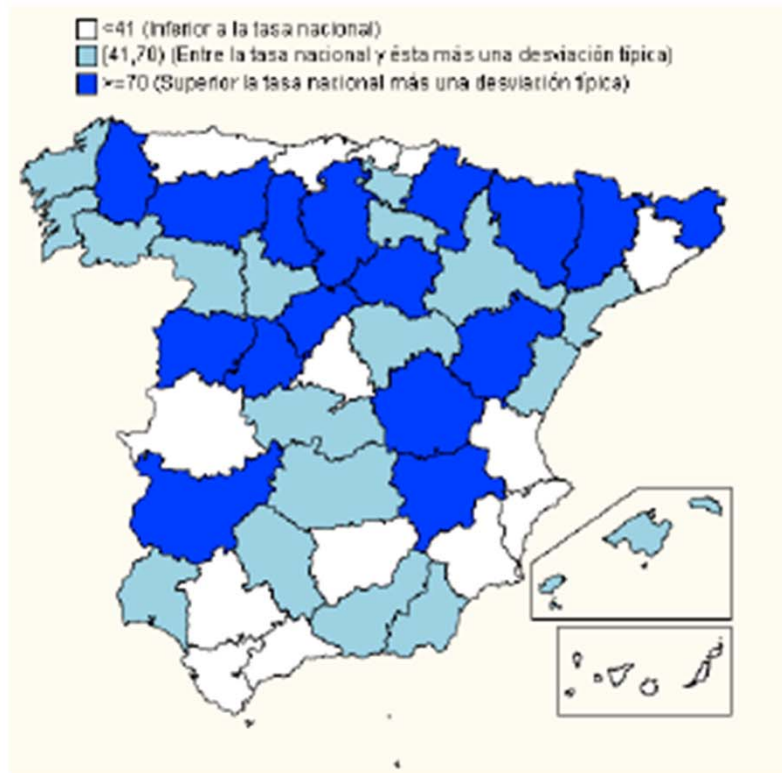
Historical Evolution, Spain 1965-2012 (2013*)

Evolución del parque de vehículos, censo de conductores y fallecidos por accidente de tráfico (30 días).

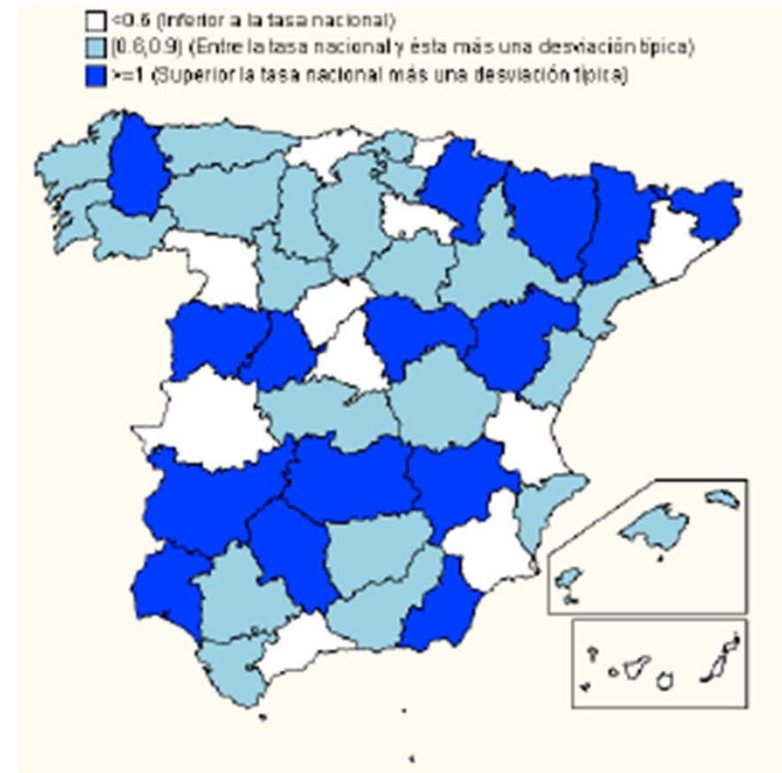


Fatality rates from traffic injuries per province (where accident occurs), Spain 2012 (30 days, urban and inter-urban)

Per 1,000,000 inhab.




Per 100 million veh./km



Fatalities per type of road

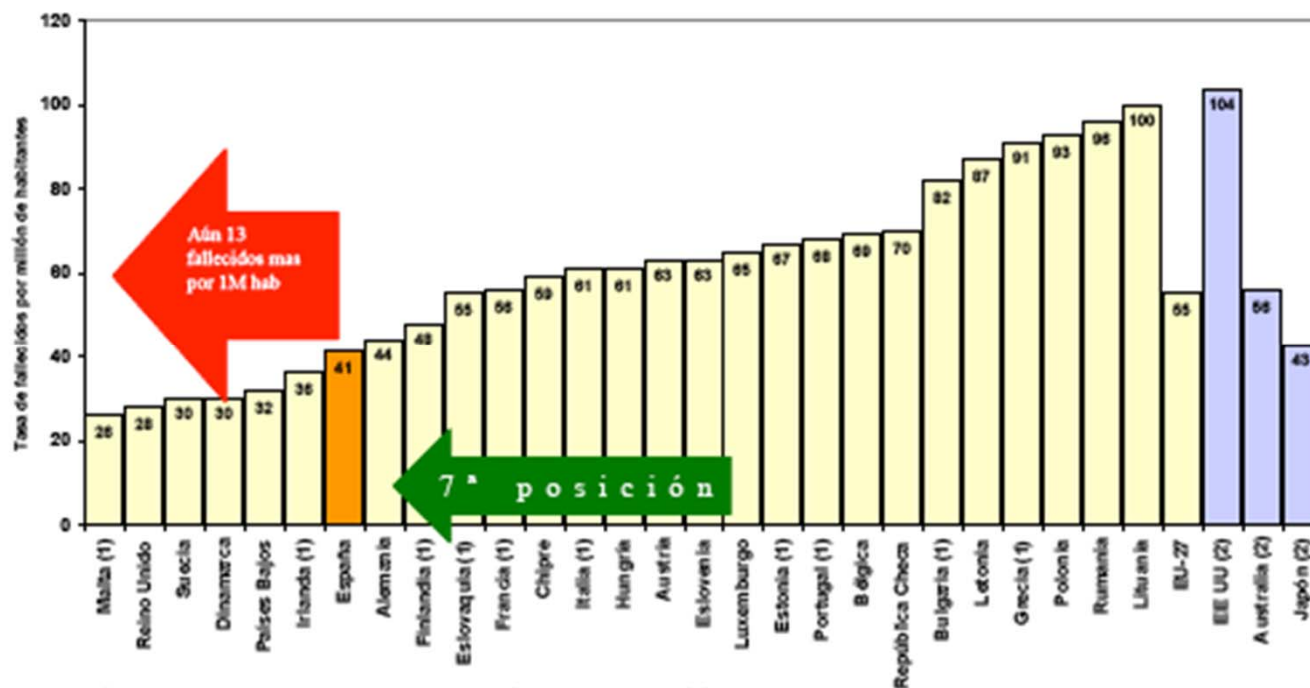
	2012	Difference compared to 2011
Inter-urban	1,442 (76%)	-10%
Highway and expressway	298 (16%)	-11%
Conventional road	1,144 (60%)	-10%
Urban	461 (24%)	1%
Through road	37 (2%)	+1%
Streets	424 (22%)	1%



Size of location	2011	2012	Dist. 2012	No. of municipalities 2012	Population distribution 2012
< 5,000 inhabitants	49	48	10%	6,802	13%
5,000 to 20,000 inhabitants	49	47	10%	915	19%
20,001 to 60,000 inhabitants	55	65	14%	274	18%
60,001 to 100,000 inhabitants	43	54	12%	62	10%
100,001 to 500,000 inhabitants	121	110	24%	57	24%
500,001 to 1,000,000 inhabitants	50	32	7%	4	6%
> 1,000,000 inhabitants	85	102	22%	2	10%
TOTAL	457	461	100%	8,116	100%

Present (2012) and future: a gift for society and a wish

Fatalities per milion inhabitants



Sources EU countries: European Commission, CARE and Eurostat databases.

(1) 2012. Provisional data

(2) Data from 2011. Source: IRTAD

Present: Spain in WHO Report, 2013

SPAIN



Population: 46,074,800
Income group: High
Gross national income per capita: USD 37,191

INSTITUTIONAL FRAMEWORK	
Lead agency	Directorate General of Traffic
Is there a national strategy	Yes
National road safety authority	Yes
Is there a comprehensive strategy	Yes
Priority legislation target year	Year 2017-2020
Priority legislation target	1. Road safety and 2. Professionalism

SAFER ROADS AND MOBILITY	
Physical audits required for new road construction	Yes
Regular inspections of existing road infrastructure	Yes
Provision of parking facilities at road junctions	Yes
Check for accessibility to road junctions	Yes
Publicly accessible road users' contact VMS	Yes

SAFER VEHICLES	
Total registered motor vehicles	27,000,000
Cars and four-wheel light vehicles	24,000,000
Motorcycles and mopeds	3,000,000
Trucks	1,000,000
Other	600,000
UN/ECE standards applied	Yes
UN/ECE level on implementation of vehicle standards	Yes
Recall or repair programme	Yes
Vehicle type approval	Yes
Front and rear seat belts mandatory for new cars	Yes
Front and rear seat belts mandatory for trucks	Yes

DATA	
Reported road traffic fatalities (RTF)	2,434 (2012) (2,517)
Reported RTF per 100,000 road traffic deaths	5.3



SAFER ROAD USERS	
Priority legislation target year	2017-2020
Priority legislation target	1. Road safety and 2. Professionalism
UN/ECE standards applied	Yes
UN/ECE level on implementation of vehicle standards	Yes
Recall or repair programme	Yes
Vehicle type approval	Yes
Front and rear seat belts mandatory for new cars	Yes
Front and rear seat belts mandatory for trucks	Yes

POST-CRASH CARE	
UN/ECE standards applied	Yes
UN/ECE level on implementation of vehicle standards	Yes
Recall or repair programme	Yes
Vehicle type approval	Yes
Front and rear seat belts mandatory for new cars	Yes
Front and rear seat belts mandatory for trucks	Yes



- Spanish death rates are in the top 20 out of 180 countries studied
- Spain, 1 of the 28 countries that regulates (through the DGT):
 - Speed
 - Use of safety belt
 - Use of child restraint seats
 - Use of helmet
 - Alcohol
- Law compliance to be improved (6/7 out of 10)

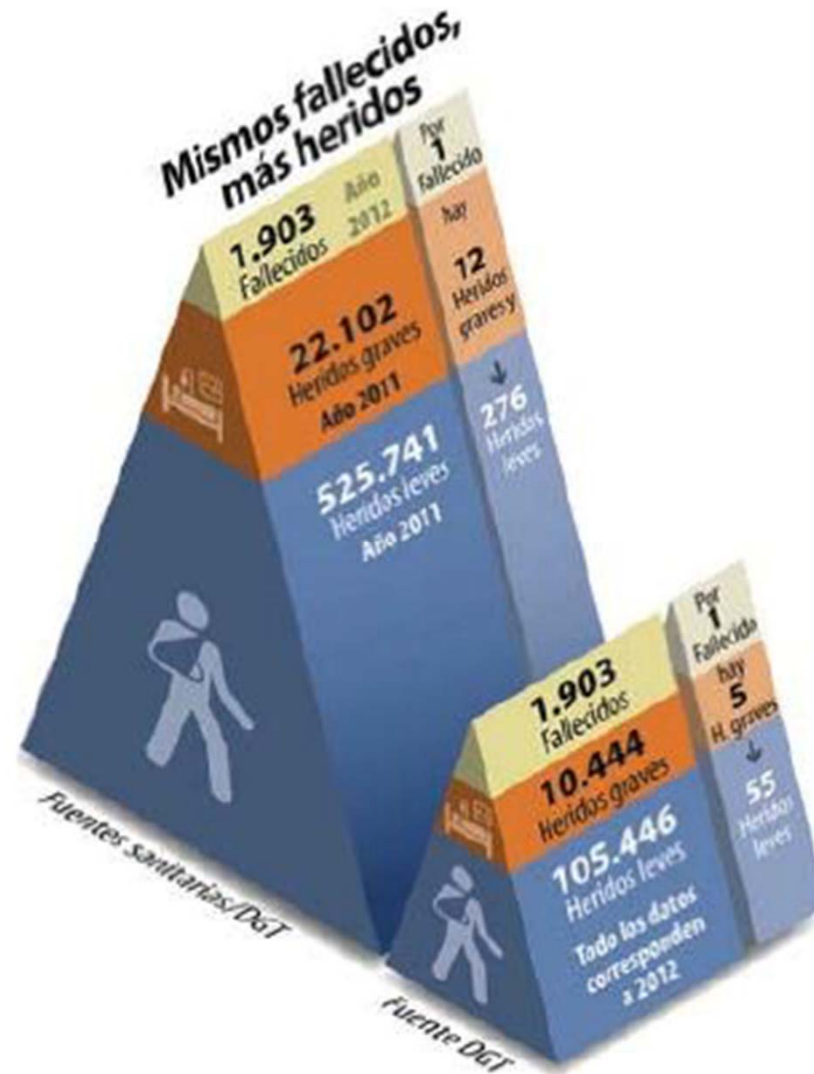
For information on the methodology used in the WHO report, please refer to the WHO report on road traffic injuries and deaths.

Beyond fatalities... Spain 2012



Report on road accidents; 2012 and 2011 data for Spain.

Or further, Spain 2012



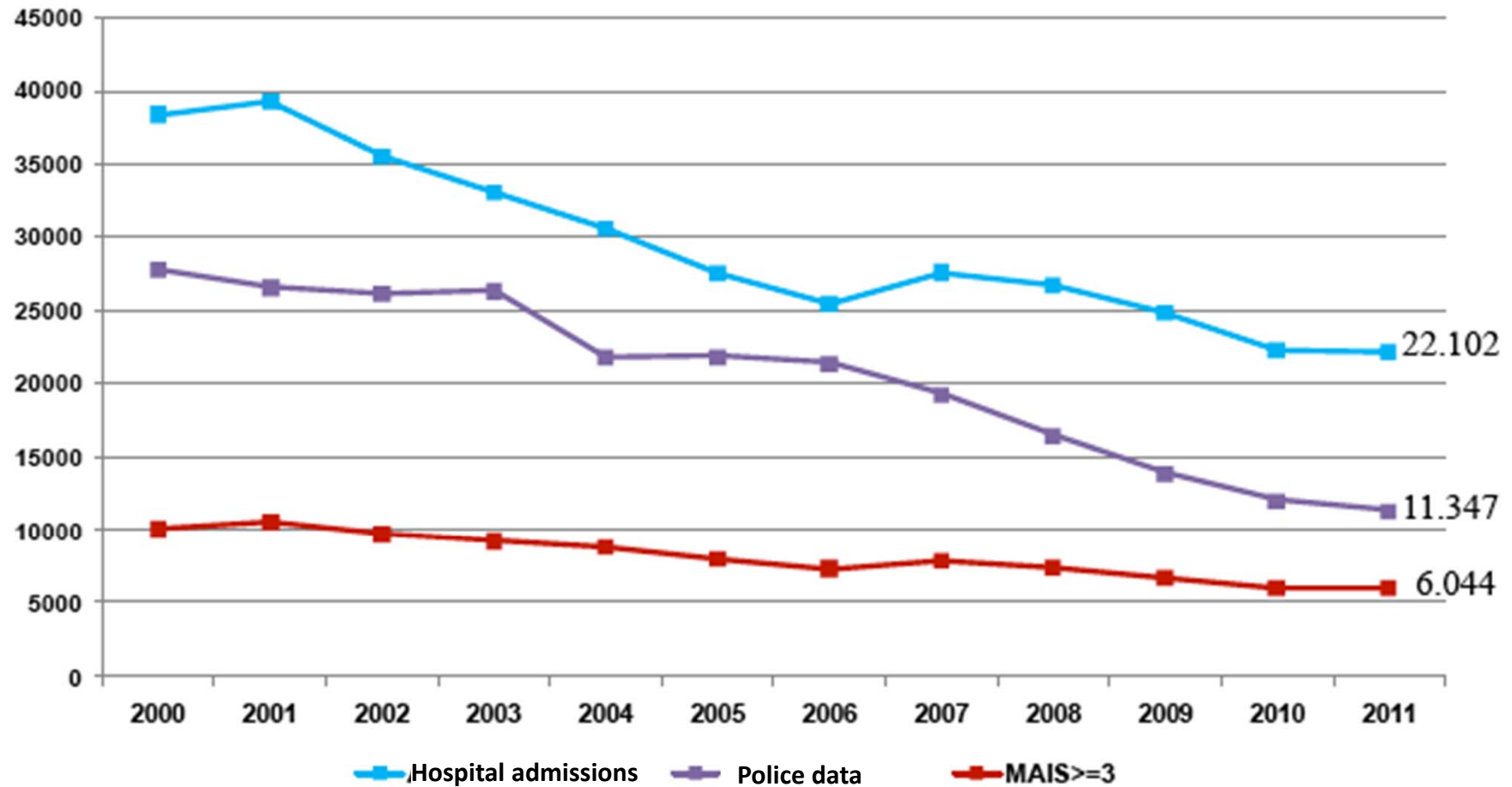
Report on road accidents; 2012 and 2011 data for Spain.

Barell Matrix (22,102 entries and 40,678 injuries)

		Fracturas	Dislocación	Esguince y torceduras	Interno	Herida	Amputaciones	Vieco sangüineo	Contusión superficial	Aplastamiento	Quemaduras	Nervios	NE	Total	
Cabeza y cuello	Lesión cerebral	Tipo 1	2,28%	0	0	4,57%	0	0	0	0	0	0	0	0	6,84%
		Tipo 2	0,61%	0	0	3,73%	0	0	0	0	0	0	0	0	4,34%
		Tipo 3	0,32%	0	0	0	0	0	0	0	0	0	0	0	0,32%
	Otros cabeza, cara y cuello	Cabeza	0	0	0	0	0,61%	0	0	0	0	0	0,05%	0,36%	0
		Cara	3,92%	0,01%	0,00%	0	1,67%	0	0	0	0	0	0	0	5,79%
		Ojo	0	0	0	0	0,34%	0	0	0,23%	0	0	0,01%	0	0,58%
Cuello		0,02%	0	0,00%	0	0,05%	0	0	0	0	0,00%	0,00%	0	0,08%	
	Cabeza, cara y cuello NE	0	0	0	0	0	0	0,02%	0,91%	0	0,01%	0	0,23%	1,18%	
Médula espinal y espaldas	Médula espinal	Cervical	0,18%	0	0	0,10%	0	0	0	0	0	0	0	0	0,28%
		Tóraco/dorsal	0,18%	0	0	0,02%	0	0	0	0	0	0	0	0	0,20%
		Lumbar VCI	0,13%	0	0	0,00%	0	0	0	0	0	0	0	0	0,13%
		Sacro coccigeo	0,01%	0	0	0,00%	0	0	0	0	0	0	0	0	0,01%
		Médula/espaldas NE	0	0	0	0,01%	0	0	0	0	0	0	0	0	0,01%
	Columna vertebral	Cervical	1,48%	0,17%	1,08%	0	0	0	0	0	0	0	0	0	2,70%
		Tóraco/dorsal	1,66%	0,01%	0,07%	0	0	0	0	0	0	0	0	0	1,74%
		Lumbar VCI	2,37%	0,01%	0,08%	0	0	0	0	0	0	0	0	0	2,46%
		Sacro coccigeo	0,49%	0,04%	0,00%	0	0	0	0	0	0	0	0	0	0,53%
		Médula/espaldas NE	0,01%	0	0	0	0	0	0	0	0	0	0	0	0,01%
Tórax	Tórax	Pecho (tórax)	7,64%	0,02%	0,01%	4,77%	0,02%	0	0,09%	0,67%	0	0,00%	0	0	13,19%
		Abdomen	0	0	0	3,83%	0,11%	0	0,05%	0,36%	0	0,00%	0,01%	0	4,36%
		Pelvis / urogenital	3,52%	0,07%	0,00%	0,14%	0,10%	0	0,01%	0,06%	0	0,00%	0,00%	0	3,93%
		Tronco	0,00%	0	0	0	0,03%	0	0	0,14%	0	0,01%	0	0,56%	1,17%
		Espalda y nalgas	0	0	0,00%	0	0,02%	0	0	0,26%	0,01%	0,02%	0	0	0,31%
Extremidades	Superior	Hombro y brazo	6,79%	0,89%	0,15%	0	0,13%	0	0,27%	0,00%	0,01%	0,00%	0,10%	0	8,36%
		Antebrazo y codo	5,59%	0,17%	0,05%	0	0,49%	0,01%	0	0,07%	0,00%	0,02%	0	0	6,39%
		Carpó, manos y dedos	2,44%	0,39%	0,12%	0	0,71%	0,09%	0	0,18%	0,03%	0,02%	0	0,02%	4,00%
		Otros NE	0,01%	0	0	0	0,07%	0,03%	0,05%	0,20%	0,00%	0,03%	0,26%	0,05%	0,68%
	Inferior	Cadera	2,08%	0,29%	0,04%	0	0	0	0	0,12%	0	0	0	0	2,52%
		Muslo	2,67%	0	0	0	0	0	0	0,14%	0,01%	0,00%	0	0	2,83%
		Rodilla	0,83%	0,20%	0,25%	0	0	0	0	0,21%	0,00%	0,01%	0	0	1,50%
		Pierna y tobillo	11,02%	0,12%	0,33%	0	0	0	0	0,13%	0,03%	0,01%	0	0	11,67%
		Pie y dedos del pie	2,13%	0,18%	0,00%	0	0,31%	0,03%	0	0,10%	0,05%	0,01%	0	0	2,83%
		Otros NE	0,02%	0	0,18%	0	1,56%	0,00%	0,14%	0,41%	0,02%	0,03%	0	0,20%	2,57%
Indefinible por localización	Otros / NE	Otros / múltiple	0,04%	0	0	0	0	0	0,01%	0	0	0,00%	0	0,14%	
		Localización NE	0,00%	0,01%	0,02%	0,02%	0,08%	0	0,00%	3,42%	0,00%	0,04%	0,00%	0,87%	4,45%
		Todo el sistema y efectos tardíos	0	0	0	0	0	0	0	0	0	0	0	0	0,57%
	TOTAL	56,47%	2,57%	2,40%	17,20%	6,67%	0,21%	0,35%	7,92%	0,18%	0,28%	0,42%	2,81%	100%	

Report on road accidents; 2012 and 2011 data for Spain.

New definition of severely wounded - EU requirement 2015+





Evolution of Road Safety Indicators, 2011-2020

Indicators	2009 baseline figures	2012 figures	2020 target
1. Lower death rate to 37 per million inhabitants	59	41	Less than 37
2. Reduce number of serious injuries by 35%	13,923	10,444	9,050
3. Zero children fatalities without child restraint system ¹	12	9	0
4. 25% less fatalities and injuries in 18-24 age group on weekends	730	406	548
5. 10% less drivers killed over age 64	203	202	183
6. 30% reduction in run-over deaths	459	355	321
7. 1 million more cyclists without increasing death rate	1,2	1.6	1,2
8. Zero killed in passenger cars in urban areas	101	71	0
9. 20% motorcycle riders killed and seriously injured	3,473	2,760	2,778
10. 30% less fatalities from run-off accidents on conventional roads	520	369	364
11. 30% less fatalities in commutes	170	--	119
12. Less than 1% positives in exhaled air in random preventive alcohol controls. DRUID, 0.05 mg/l ² cutoff	6.7%	Regular study Not available	Less than 1%
13. 50% reduction on % of light vehicles exceeding speed limit by more than 20 km/h	12.3% (highway) 6.9% (expressway) 15.8% (conv.90) 16.4% (conv.100)	8.0% (highway) 4.3% (expressway) 14.0% (conv.90) 10.8% (conv.100)	6,2% (highway) 3,5% (expressw) 7.9% (conv.90) 8.2% (conv. 100)

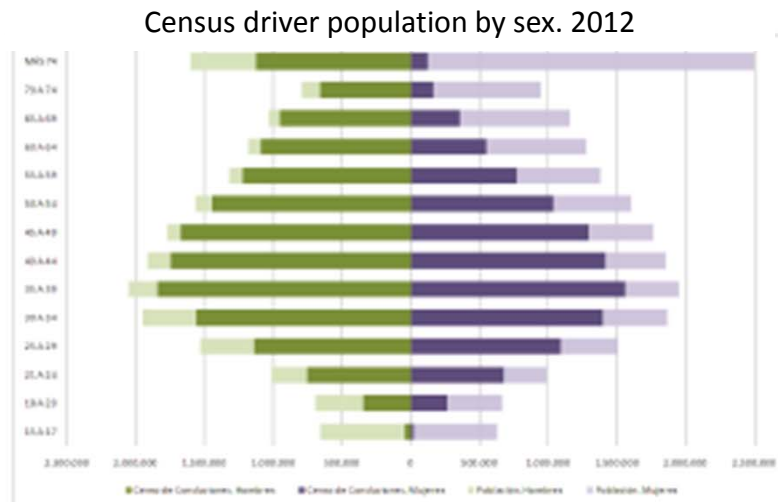
Characteristics of fatalities 2012 (30 days, urban and interurban)

FEATURING:

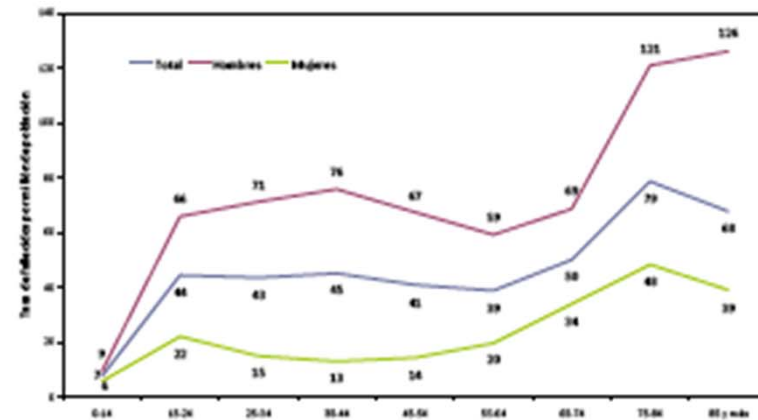
- Ages 3% < 14; 51% ≥ 45; mean age 46 years
- Gender 76% men
- Time, date, month 63% 8am-8pm; 66% Monday-Friday; 82% September-June
- Type of user 61% drivers; 20% pedestrians
- Type of vehicle; 46% cars, 16% motorcycles; 3% mopeds; 4% bikes, 8% goods vehicles; average age of crashed vehicles 9.6 years
- Type of road 76% inter-urban roads; 60% conventional roads; 26% urban roads
- Type of collision 35% road run-off

Age (2012): Population (N=46,163,116); Drivers (N=26,323,971)

Pyramid (Population vs. Drivers)

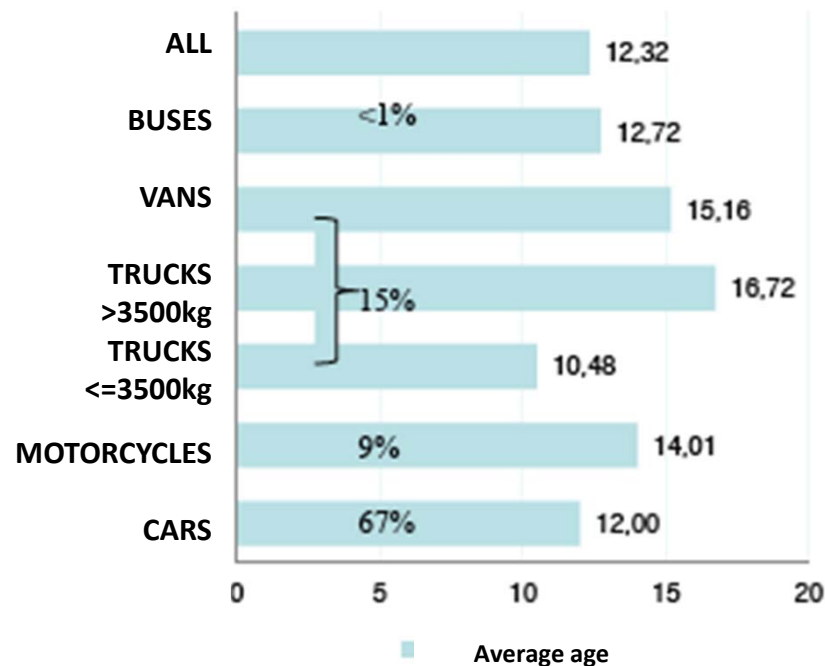


Risk by age population (Fatality rate per 1 M inhabitants)



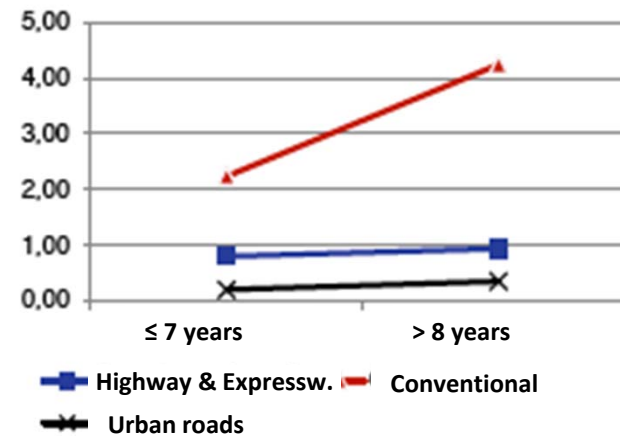
Age (2012): Motor vehicles (N=32,962,502)

Average age of vehicles



Fatality rate according to age of car

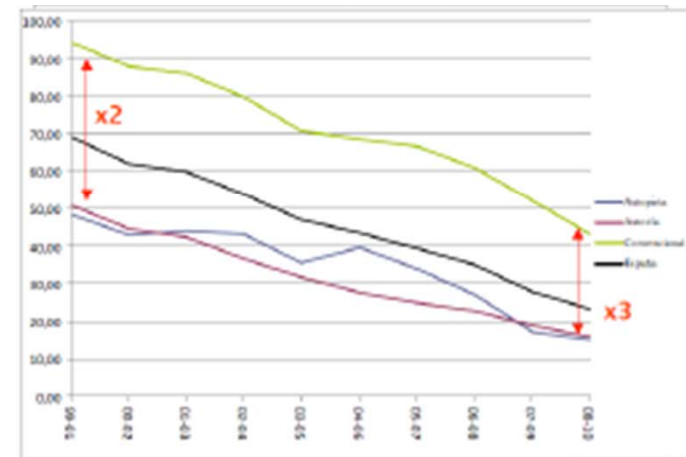
Rate of fatalities per 100.000 cars



Roads (2012): > 660,000 km (166,000 inter-urban)



Evolution of the risk rate by type of road, 2000-2010



Source: RACC

(+ Canary Islands)

General population and specific population

Low risk x Many people

- Rational use of commutes
- Rational use of private motor vehicles
- Use of restraints (belts, seats, helmets)
- Alcohol
- Distractions
- Speed on conventional roads

High risk x “few” people

- Repeat infringers
 - Speed on highways and expressways
 - Alcohol
- Drugs
- Aging of population

Priority challenges

- Consistent application of legal measures
 - Conventional roads and urban roads (i.e., speed, alcohol, drugs, use of retention systems)
- Improve laws (recent amendment of road safety act, immediate modification of regulations, i.e. traffic, vehicles)
- Educate/train/retrain
 - young and novice drivers
 - the general population, we are all different types of users
 - How to approach this population? Work environment, among others
- Determine psychophysical skills in more complex environment
- Maintenance/Renewal of vehicle fleet
 - Introduction of new mobility models
- Effort and collective enthusiasm: doing one's best

Defining: Choosing priority areas in 2012

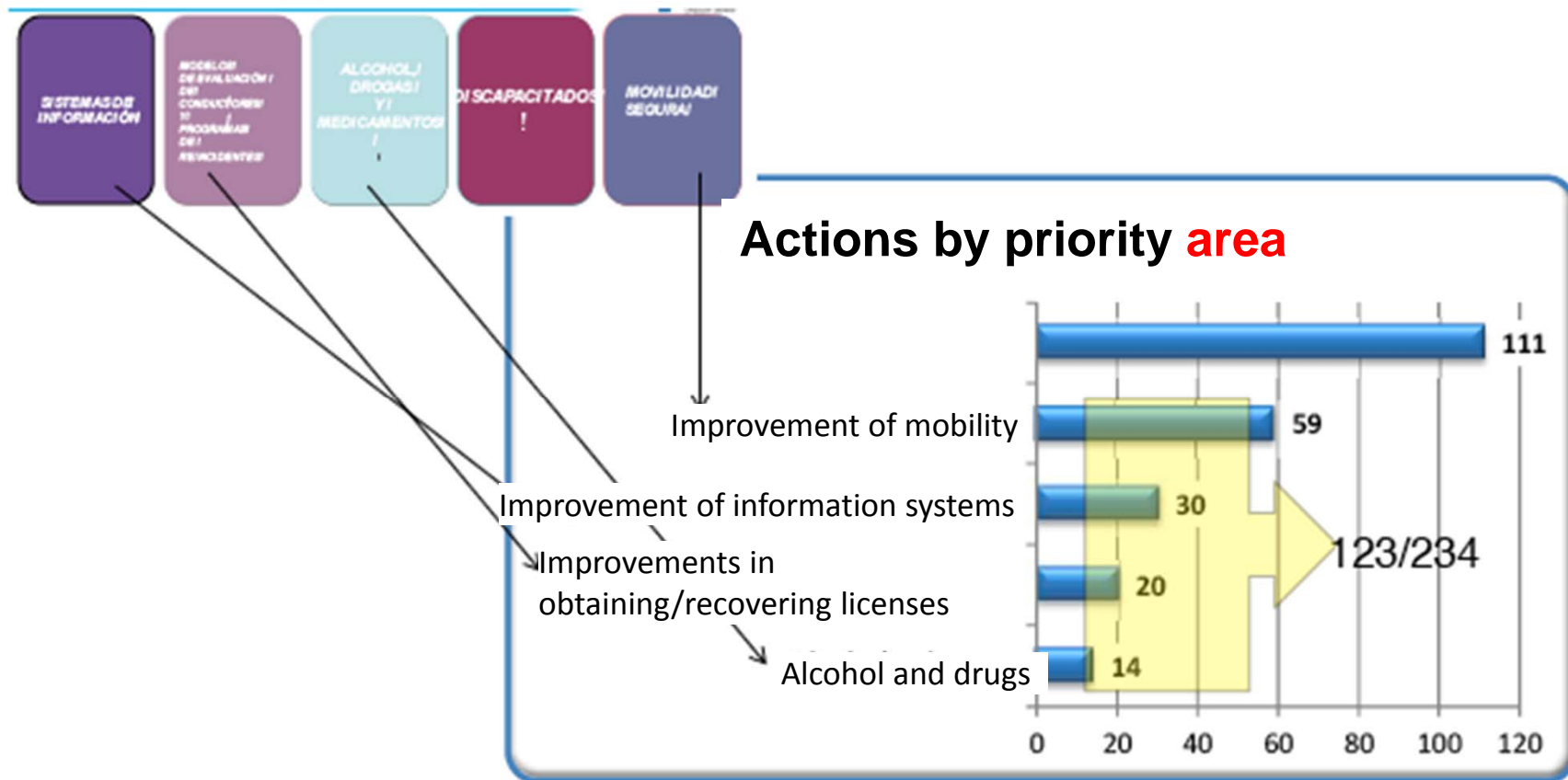


**And defining some more -- DPO DGT 2014:
27 goals, 234 actions, 957 activities**

Priority Areas 2012-2016

Interventions and Road Policies

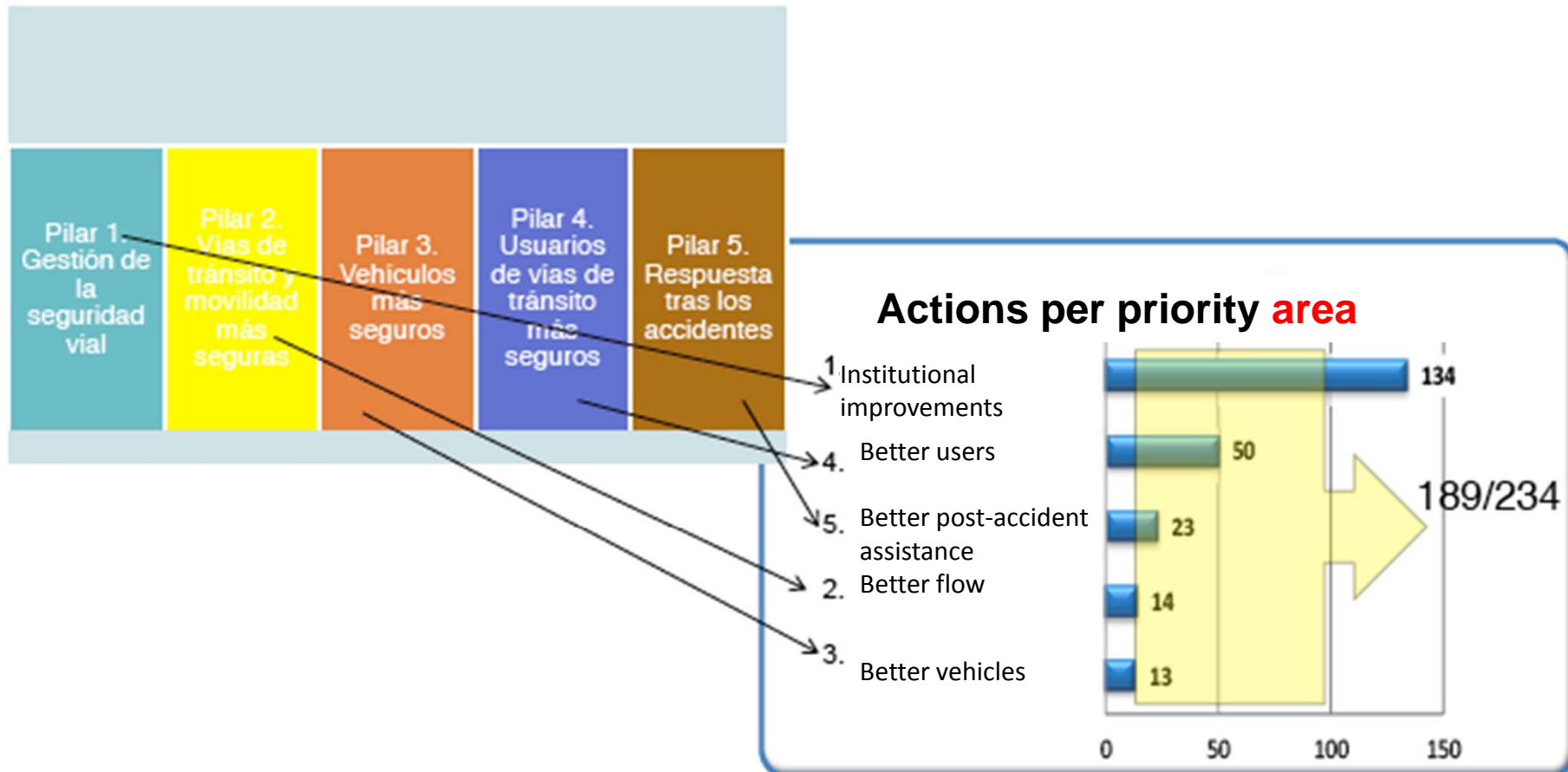
DGT 2014



Areas of Action – Decade of Action (2011-2020)

World Health Organization

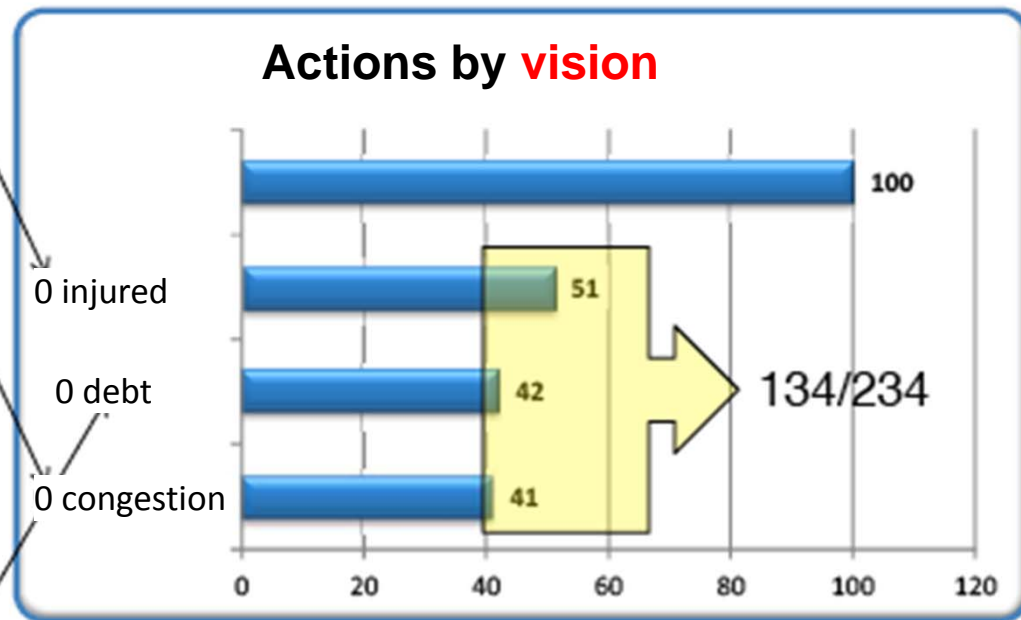
DGT 2014



Vision 0 (a look at the results)

Goals for Spain 2020-2050

DGT 2014

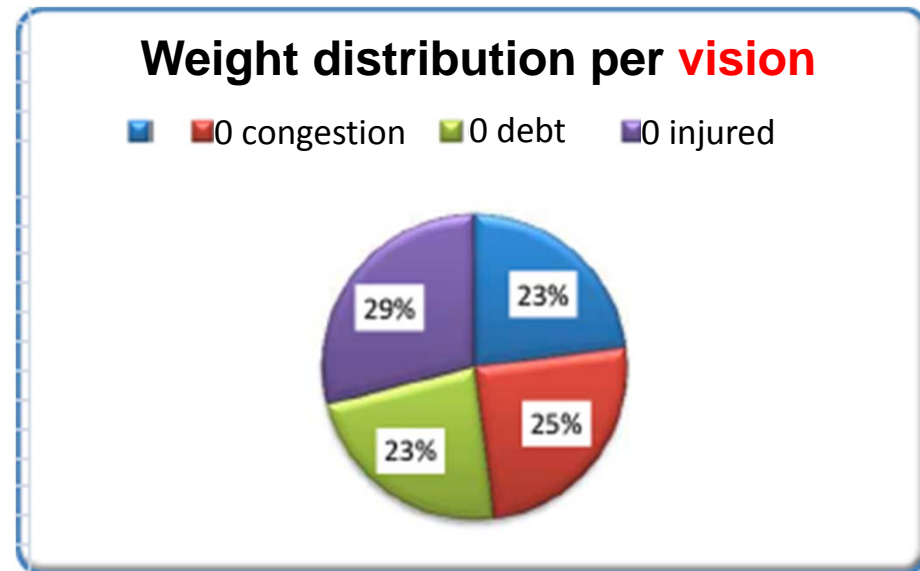


... and everything adds up

Weight of each goal (N=27)

Goals	Weight
Improve compliance with traffic rules	14
Enlarge measures of attention and assistance to citizens in relation to mobility and its consequences	12
Improve diagnosis and prediction of congestion	7
Improve diagnosis and prediction of road accidents	7
Reduce dependence on income from sanctions	7
Strengthen the credibility of the organism	7
Develop preventive regulations	5
Improve efficiency	5
Be a reference in safe mobility information for professional/government associations	5
Consolidation of DGT as an example of good management	4
Provide decision-making on road policies and interventions	4
Ensure compliance with the single List of Services	3
Be a leader in ongoing training on safe mobility	3
Optimize budget execution	3
Spending cuts	2
Adapt price-cost of services	1
Automation of administrative processes	1
Development of preventive computing	1
Assessment of needs in ICT	1
Design of non-administrative job profiles	1
Provide implementation of intervene actions in safe mobility	1
Provide processing of services through ICTs	1
Encourage the entry of new recruits	1
Improve quality of life at work	1
Improve quality in work processes	1
Talent retention plan	1
Transparency in management	1
Total	100

Weight distribution by viewing goals (Weight x action/goal)



And when choosing...

- Be objective (data not perceptions)
- Be honest (everything can be improved)
- Be humble (what do you know)
- Be ambitious (it's about the life and quality of life of the population!)
- Be efficient (opportunity cost)
- Be persistent (internal and external resistance)

www.dgt.es

