ROAD SAFETY IN TURKEY

Conference on Improving Road Traffic Safety
in South-Eastern Europe

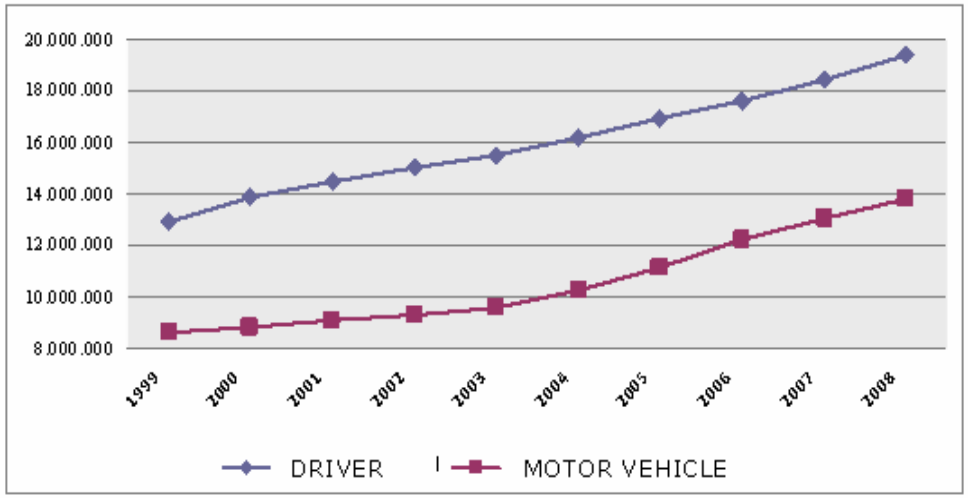
UN Economic Commission for Europe
25-26 June 2009 Halkida / Greece

Hüseyin Şimşek / Mo Interior / Turkish National Police
Fazıl İnan & Bora Kayser / Mo Health / Emergency and Disaster Health Care

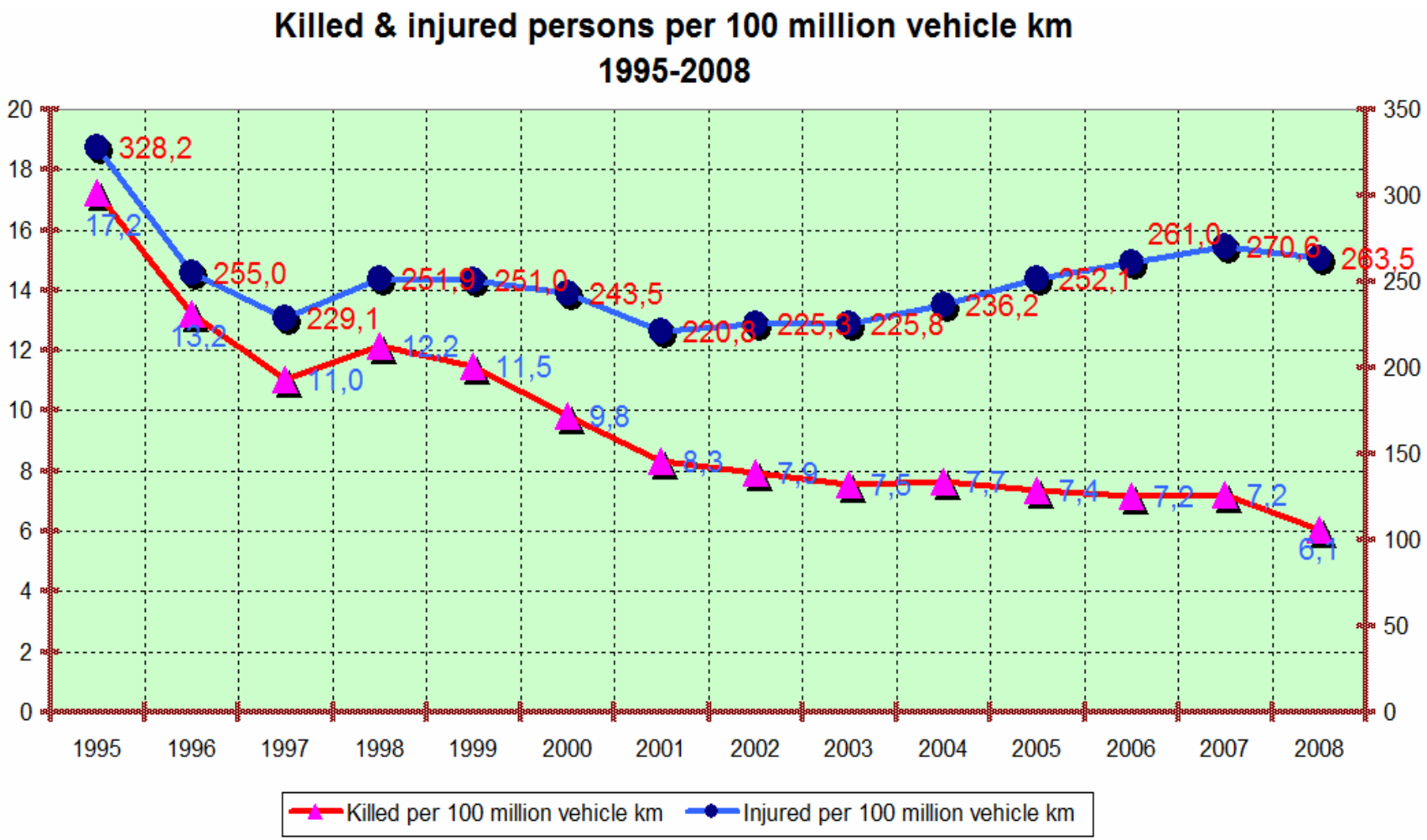
General Information

- **71.5 million** Population (%75 in cities)
- **10.436 US$** Gross National Product per Capita
- **10 billion US$** Socio economic cost of road crashes
- **64.000 km** State Roads
- **%90** Freight Transportation by Road
- **69.8** billion vehicle-km
- **882.259** annually registrated motor vehicles (average)
- **806.541** annually certificated drivers (average)
- **%16,6** female drivers
- **22.154** traffic police

INCREASE ON NR. OF DRIVERS& MOTOR VEHICLES



Road Traffic Crash Statistics

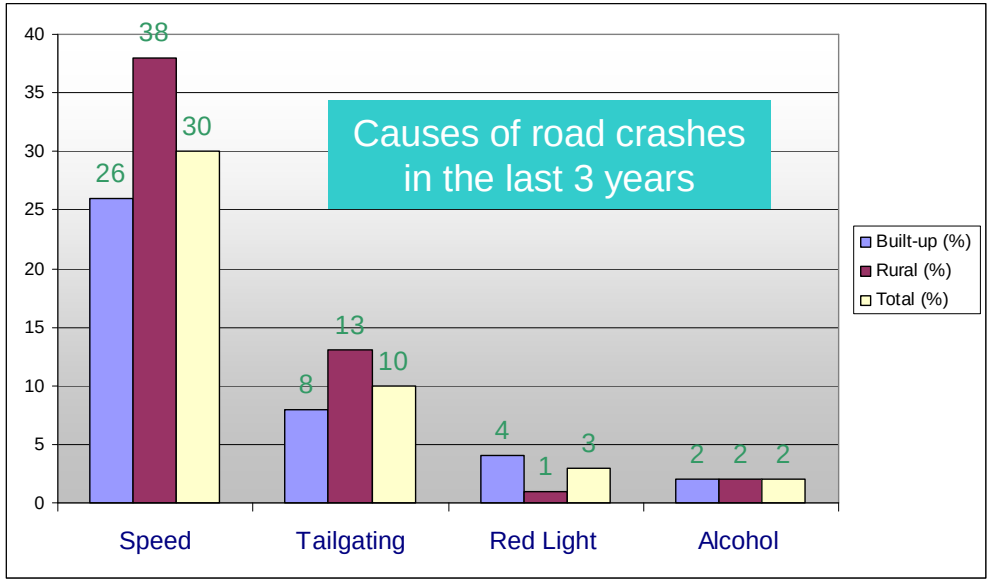


Setting National Road Traffic Casualty Reduction Targets

- "ATTENTION ON ROAD TRAFFIC: 10 THOUSAND LIVES"
  - Estimated 10.000 deaths a year on roads / 30.000 death in three years
  - An umbrella project of all sub-projects executed by relevant authorities and NGO's
  - Project's objective: to reduce road casualties by raising the awareness
  - Partners: The Presidency; Ministries of Interior, Transport, Education; Universities, Bridgestone, Doğuş Automotive, Petrol Industry Association, Renault, Temsa, ToyotaSa and Volvo

Setting National Targets to Reduce Road Casualties Through ENFORCEMENT Activities

- "NEW APPROACHES, TARGETS AND SOLUTIONS ON ROAD TRAFFIC SAFETY" PROJECT
  - Coordinated by Turkish National Police, executed by relevant authorities
  - Objective: Improving road safety by strengthening traffic law enforcement in coordination with infrastructure, emergency care and education activities (4E)



Case Analysis on Violations 2005-2007

- Speed violations
  - 30% of all road crashes' causes
  - 1 km/h decrease equals %4 decrease of nr. crashes

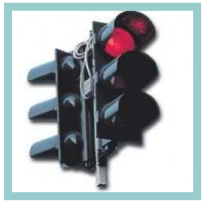
- Safety Belt
  - 12 killed / 1000 drivers fastened SB
  - 62 killed / 1000 drivers unfastened SB
  - Compliance makes the fatality risk decrease 43%-65% (WHO)

- Driving under the influence of alcohol
  - 2% of all road crashes' causes
  - 20% (1/5) of all drivers are controlled annually

- Motorcyclists / Helmets
  - 15,4% of all vehicle types
  - 12% of all road crashes in built-up areas
  - 88% killed or injured motorists were without helmets

- Heavy Vehicles (HV)
  - 7,1% of all vehicle types
  - 13% Involved of all road crashes
  - 35% of all fatalities occurred in HV involved crashes

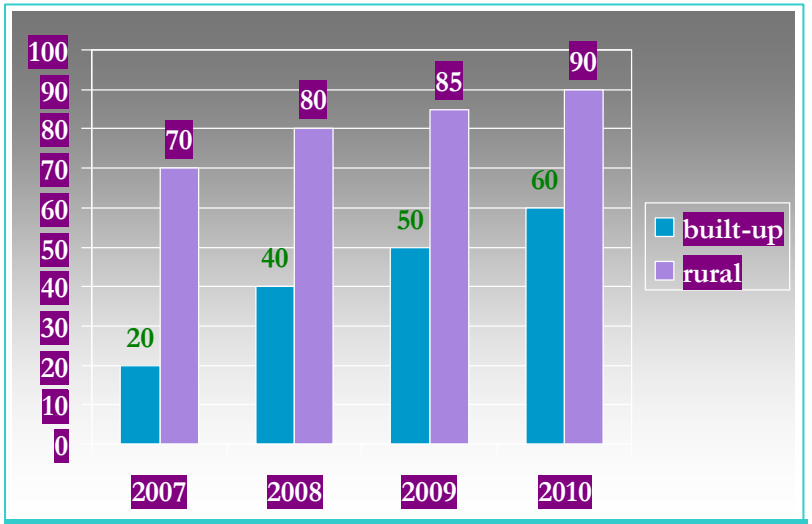
- Red light violations
  - 4 % built-up road crashes occurred because of red light violations
  - 20 % built-up road crashes occurred in junctions



Targets / ENFORCEMENT

- Speed enforcement
  - Increasing the ratio of random checks among all traffic police controls from 25% to 35%
  - Increasing nr of video-camera radar equipped vehicle from 450 to 650

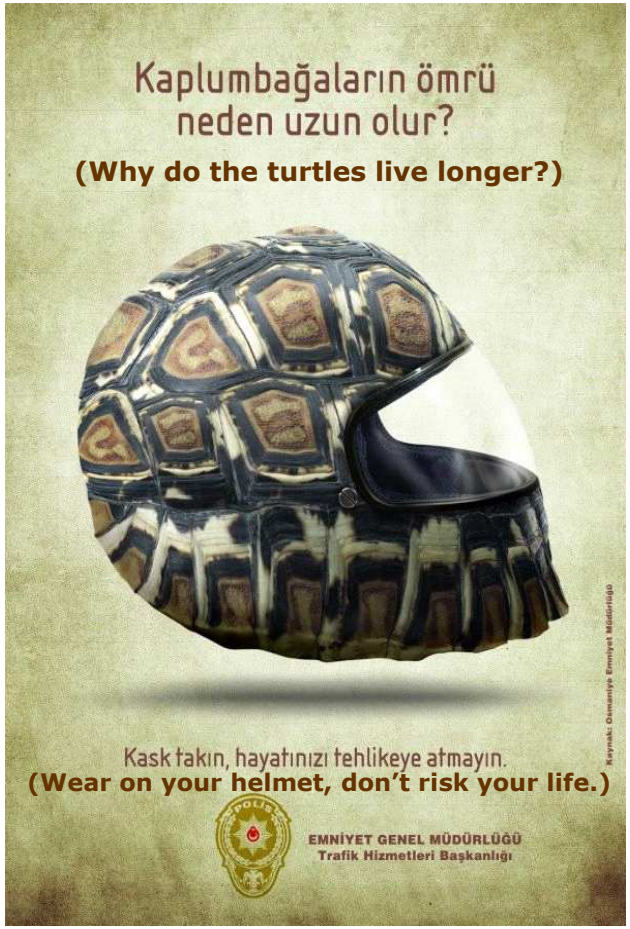
- Safety Belt Enforcement
  - Increase compliance rate from 20% to 60% by 2010 on inter-city roads
  - Increase compliance rate from 70% to 90% by 2010 in built-up areas



Safety Belt Compliance Target (%)

Targets / ENFORCEMENT

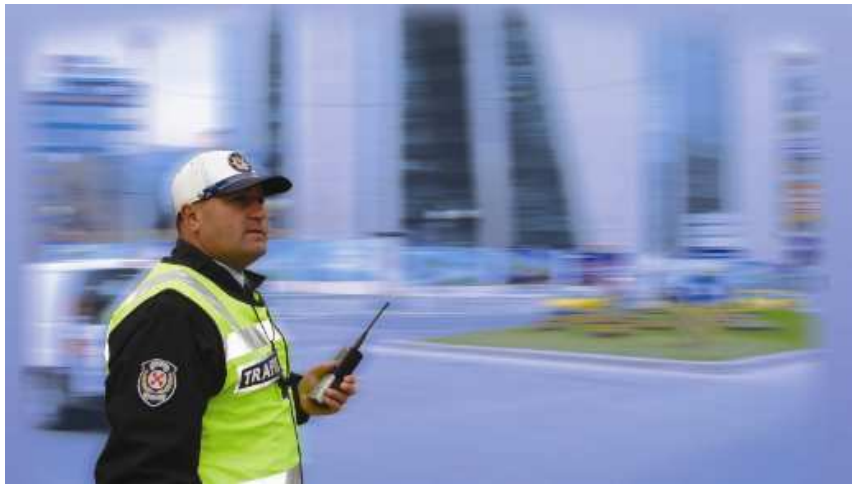
- Driving under the influence of alcohol
  - 1 per each 3 drivers to be controlled
- Motorcyclists / Helmets
  - More strict controls& campaigns
- Heavy Vehicles (HV)
  - Nr each HV's checks to be increased from 2,7 to 5,4 times a year by 2010
- Red light violations
  - More strict controls& campaigns



ENFORCEMENT Project Outputs
The first year - 2008

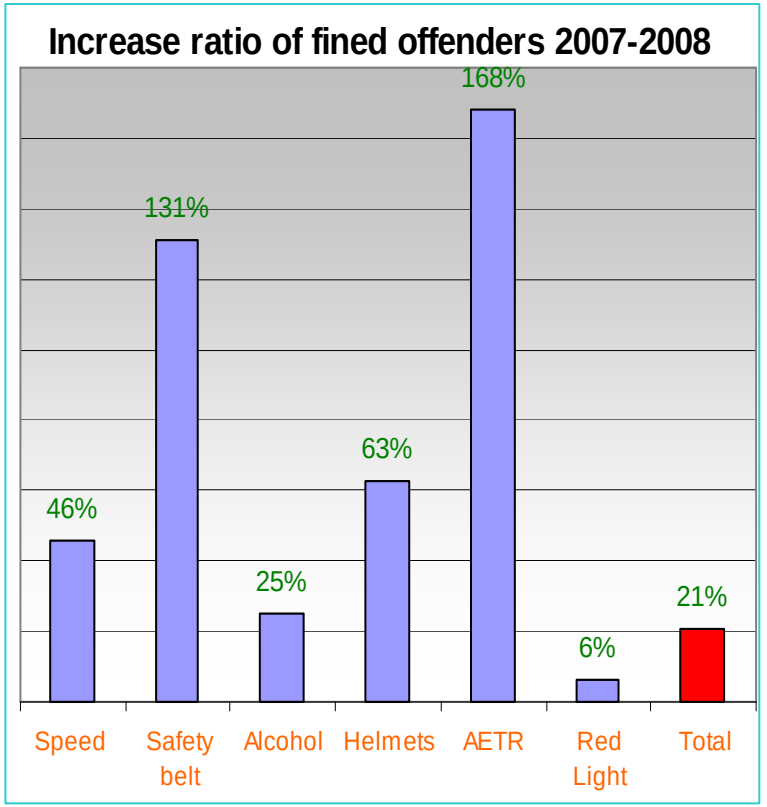
- Speed enforcement
  - Random checks ratio increased from 25% to 35%
  - Nr. VCR equipped vehicle increased from 450 to 800
  - Nr. fined offender drivers increased by 46%

- Safety belt enforcement
  - Nr. Controlled driver increased by 48,6%
  - Compliance ratio increased from;
    - 20% to 33% on inter-city roads
    - 70% to 74% in built-up areas



ENFORCEMENT Project Outputs
The first year - 2008

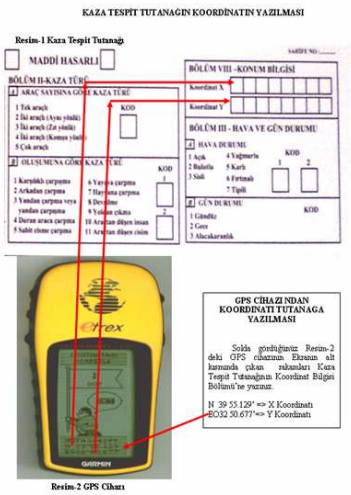
- Drinking & Driving Enforcement
  - 24,9 % increase on nr fines
  - ½ of all drivers controlled
- Motorcyclists / Helmet control
  - 62% increase on fined offenders
- Heavy vehicle (Fatigue / AETR)
  - 168% increase on fined violators
  - Nr each HV's checks is increased from 2,7 to 3,7 times a year
- Red Light
  - 6,4% increase on fined offender road users

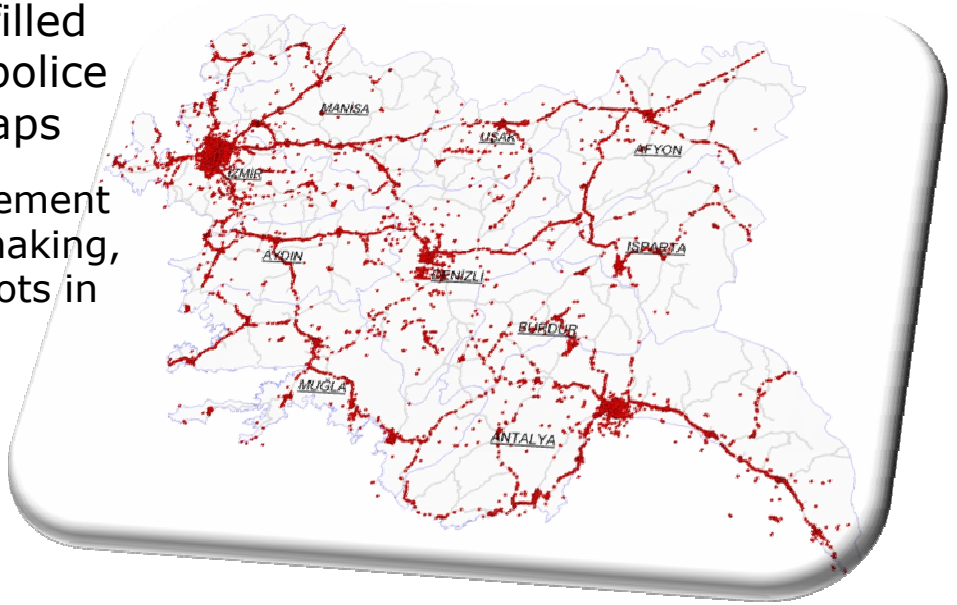


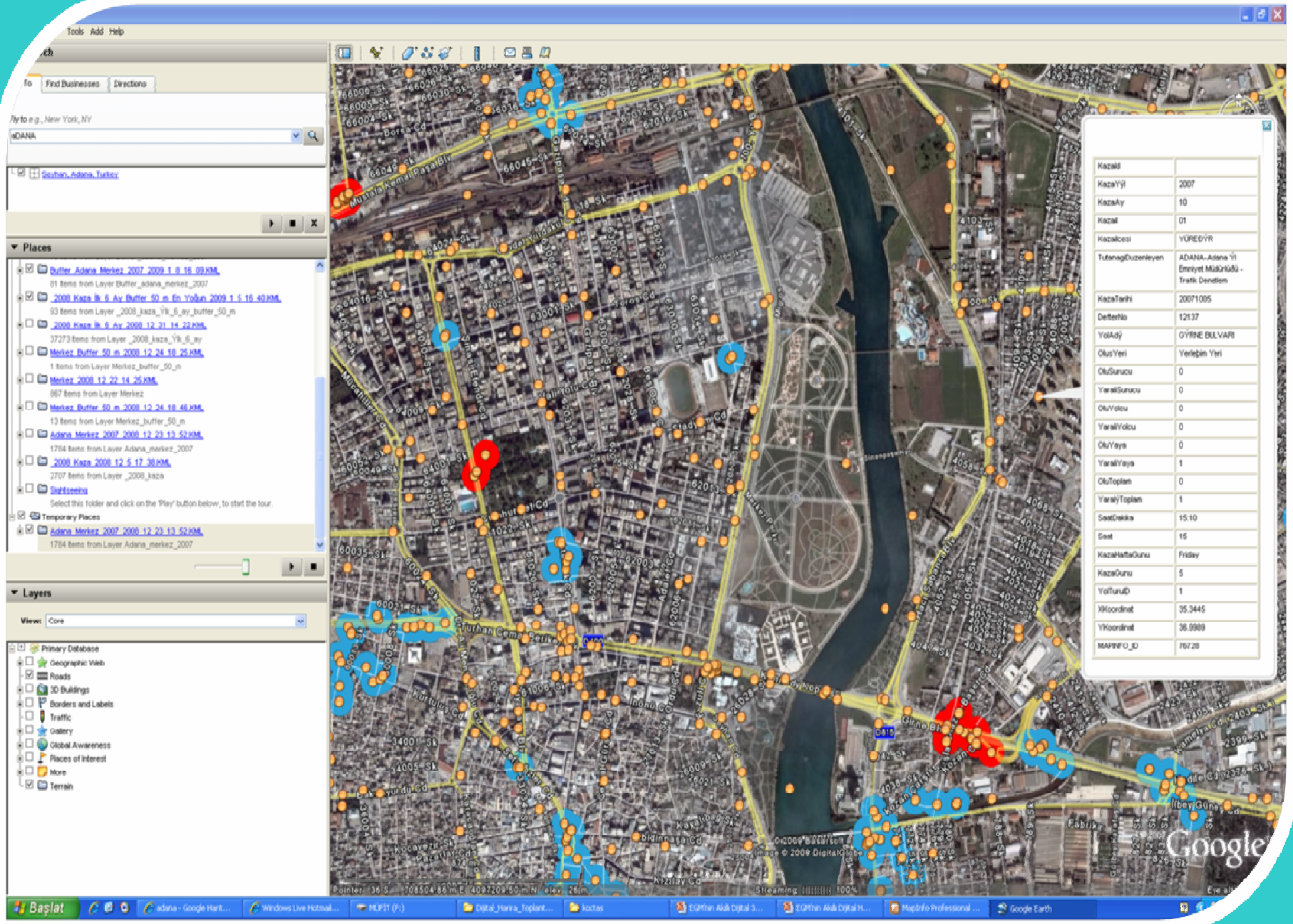
Digitalized Enforcement and Analyzing Spatial Road Traffic Crash Data by Using Geographical Information System (GIS)

- Police enforcement applications are digitalized and directly transferred to Enforcement Database
  - Enables to have a knowledge and control on enforcement activities, road user behaviors and decision making/planning

- Crash spot coordinates are filled on "traffic crash report" by police and transferred to digital maps
  - Enables to focus law enforcement on hot spots and decision making, also to rehabilitate black spots in coordination with relevant authorities





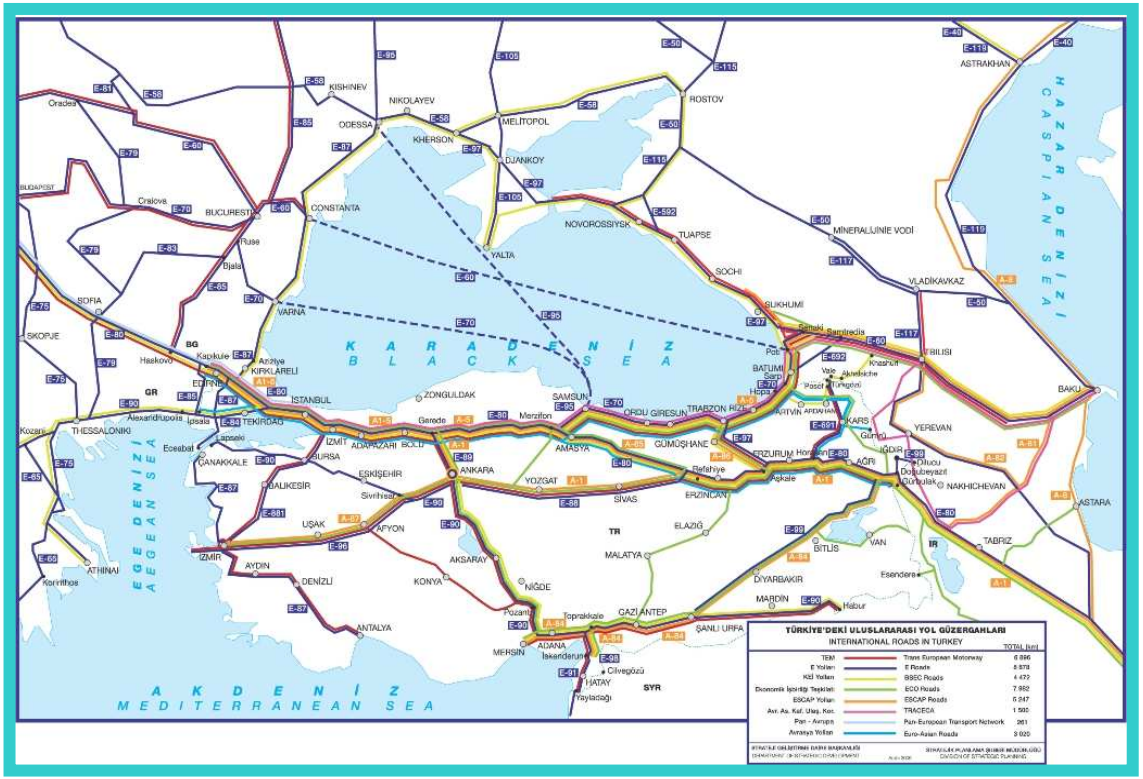

Tools Add Help
Find Businesses
Directions
Places
Layers
View: Core
Primary Database
Geographic Web
Roads
3D Buildings
Borders and Labels
Traffic
Gallery
Global Awareness
Places of Interest
More
Terrain
Temporary Places
Sightseeing
Başlat
Google

Setting National Targets to Reduce Road Casualties Through ROAD INFRASTRUCTURE Projects, MoT

- HIGHWAY UPGRADING PROGRAM
  - Executed by DG Highways, MoT
  - Project objective:
    - to prevent head on collisions
    - Extension of dual carriageway (divided multilane highway) length to from 6.000 km to 22.500 km by 2012
      - 9.500 km constructed and opened by now (within 5 years)
      - Target: 22.500 km(2012); reached 15.500(2009)
  - DG Highway Strategic Plan's objectives& measures
    - to reduce the number of road fatalities and injuries by %40 within 5 years
    - Accepted road safety impact assessments as a part of the road design
    - Road safety audits& inspections to be carried out at planning, design and operational phases
    - Black spot eradication to be facilitated
    - Comprehensive road maintenance works to be carried out

Black Spot Eradication Activities

	Eradicated Black spot	Constructed Level crossing
2005	90	14
2006	62	10
2007	78	3
2008	74	-



Safety Aspects / Road Infrastructure

- 16 million m^2 horizontal road markings constructed
- 136.255 standard traffic signs renewed
- 24.885 m^2 information signs renewed
- 11.054 m^2 direction signs constructed
- 111 signalization complex established
- 550 km barriers constructed
- %20 of road signs and markings to be renewed annually

Min. Of Health
Improving POST CRASH CARE

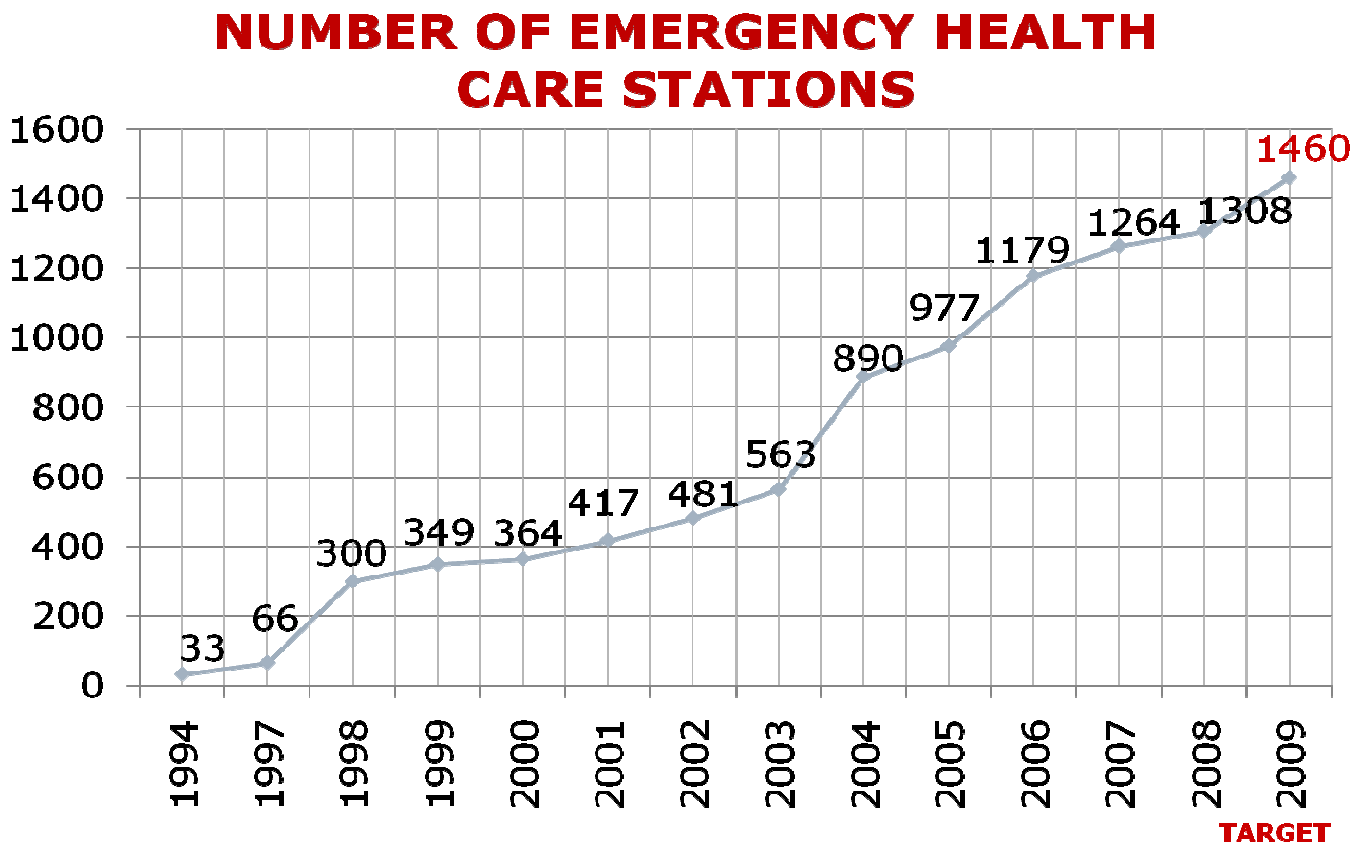
- As motorization increases road traffic injuries are predicted to rise to become the eighth leading cause of death by 2030
- Ministry of Health's strategic plan:
  - To reduce 30% the deaths and injuries pertaining to road traffic crashes by 2030
  - strengthening the emergency health care
  - increase the first aid trained people as 1% of population

2002				2030	
Disease or injury	% deaths	RANK		% deaths	Disease or injury
Ischaemic heart disease	12.6	1	1	13.1	Ischaemic heart disease
Cerebrovascular disease	9.7	2	2	10.3	Cerebrovascular disease
Lower respiratory infections	6.9	3	3	8.7	HIV/AIDS
HIV/AIDS	4.8	4	4	7.9	Chronic obstructive pulmonary disease
Chronic obstructive pulmonary disease	4.8	5	5	3.5	Lower respiratory infections
Perinatal conditions	4.3	6	6	3.1	Diabetes mellitus
Diarrhoeal diseases	3.3	7	7	3.0	Trachea, bronchus, lung cancers
Tuberculosis	2.7	8	**8**	2.8	Road traffic injuries
Trachea, bronchus, lung cancers	2.2	9	9	2.4	Tuberculosis
Road traffic injuries	2.1	**10**	10	2.1	Perinatal conditions
Diabetes mellitus	1.7	11	11	1.8	Stomach cancer
Malaria	1.6	12	12	1.8	Hypertensive heart disease
Hypertensive heart disease	1.6	13	**13**	1.5	Self-inflicted injuries
Self-inflicted injuries	1.5	**14**	14	1.3	Nephritis and nephrosis
Stomach cancer	1.5	15	15	1.3	Liver cancer
Cirrhosis of the liver	1.4	16	16	1.2	Diarrhoeal diseases
Nephritis and nephrosis	1.2	17	17	1.2	Colon and rectum cancers
Colon and rectum cancers	1.1	18	18	1.1	Cirrhosis of the liver
Liver cancer	1.1	19	**19**	1.1	Interpersonal violence
Measles	1.1	20	20	1.0	Oesophagus
Interpersonal violence	1.0	**21**	23	23.0	Malaria
Oesophagus	0.8	24	42	42.0	Measles

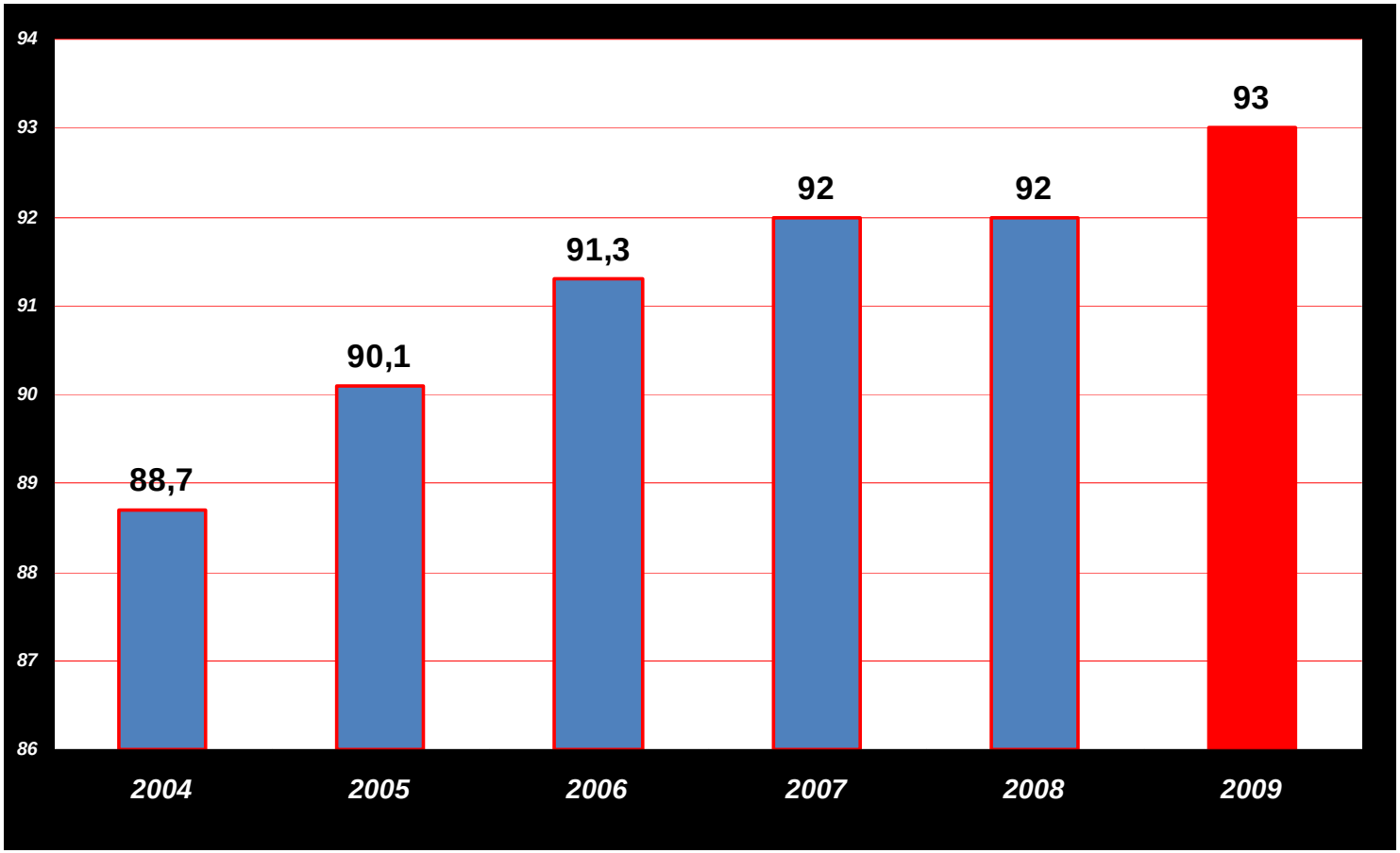
Source: Mathers C, Loncar D. Updated projections of global mortality and burden of disease, 2002–2030: data sources, methods and results, World Health Organization, October 2005.

Improving POST CRASH CARE

- Increasing of the number of emergency health care stations decreases the population per station to 50.000 people as a target

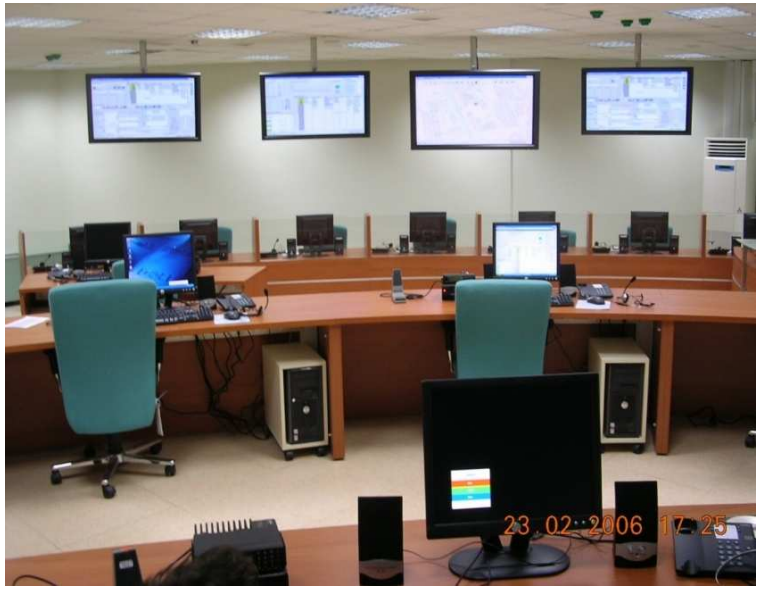


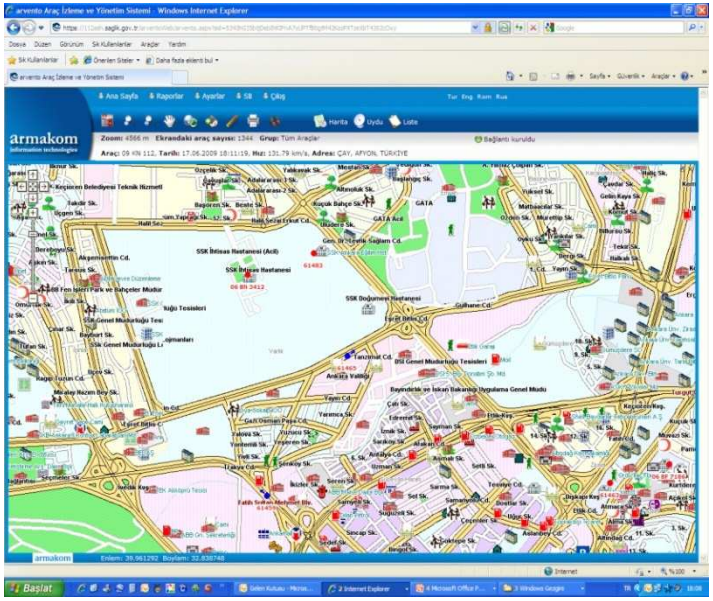
Reaching in 10 minutes to the emergency cases (%)



Emergency Health Care Services 112 Command and Control Centers

- At the beginning of 2008 Digital Take Calls and Operation Management System are established and activated under the Ministry of Health Crisis Center in 81 provinces.



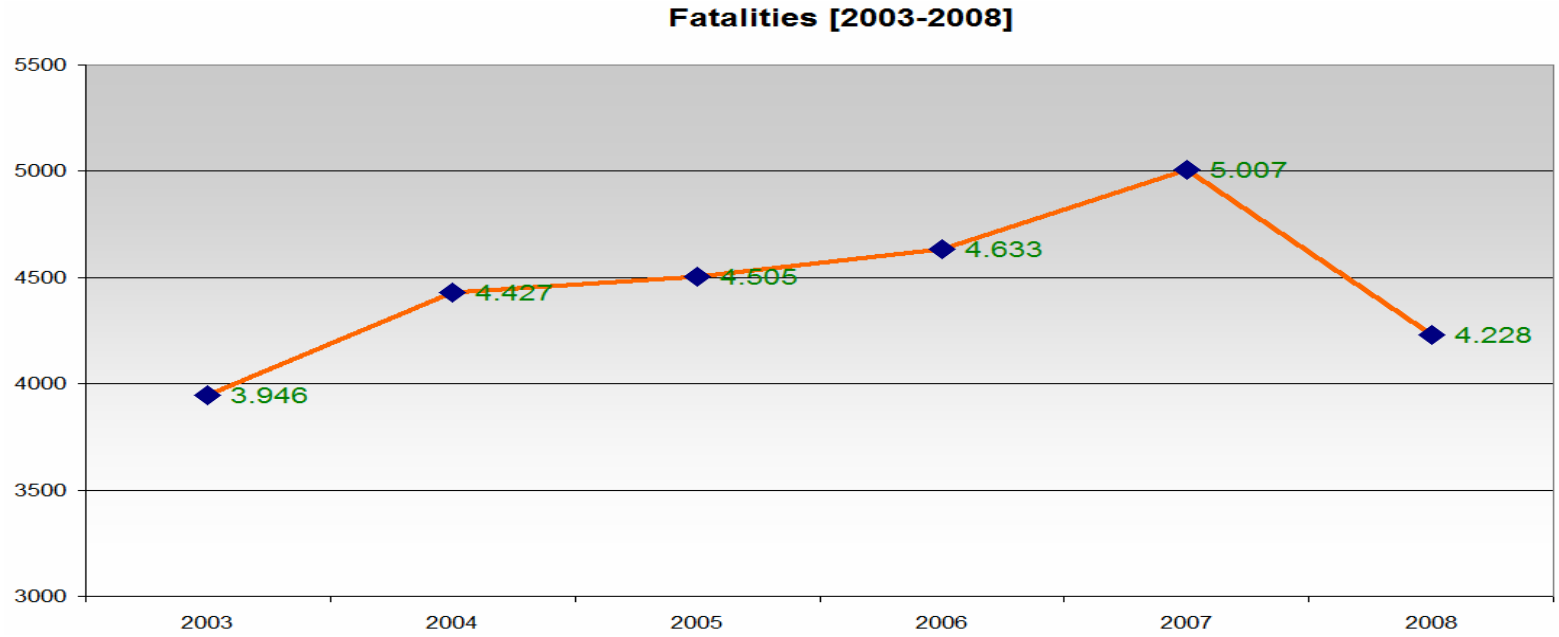


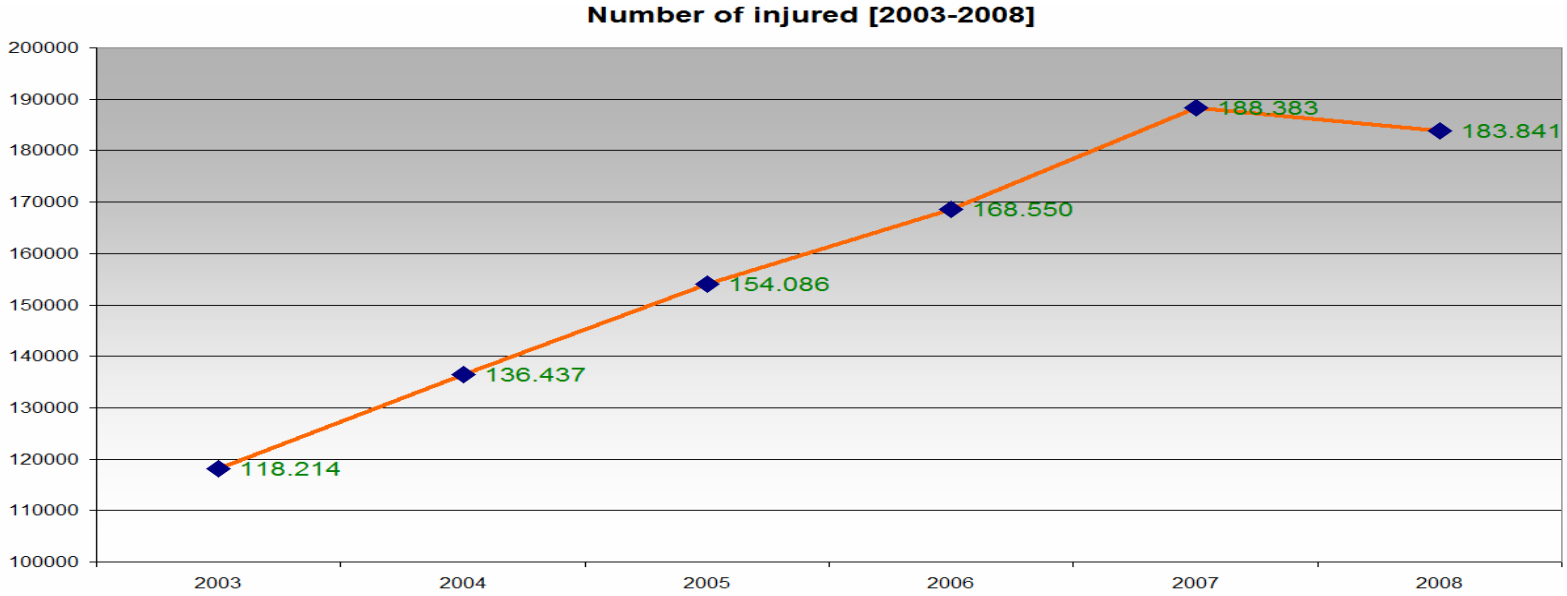
Emergency Health Care Services 112

- 1.314 emergency health care stations
- 2.235 road ambulances
- 7 helicopters

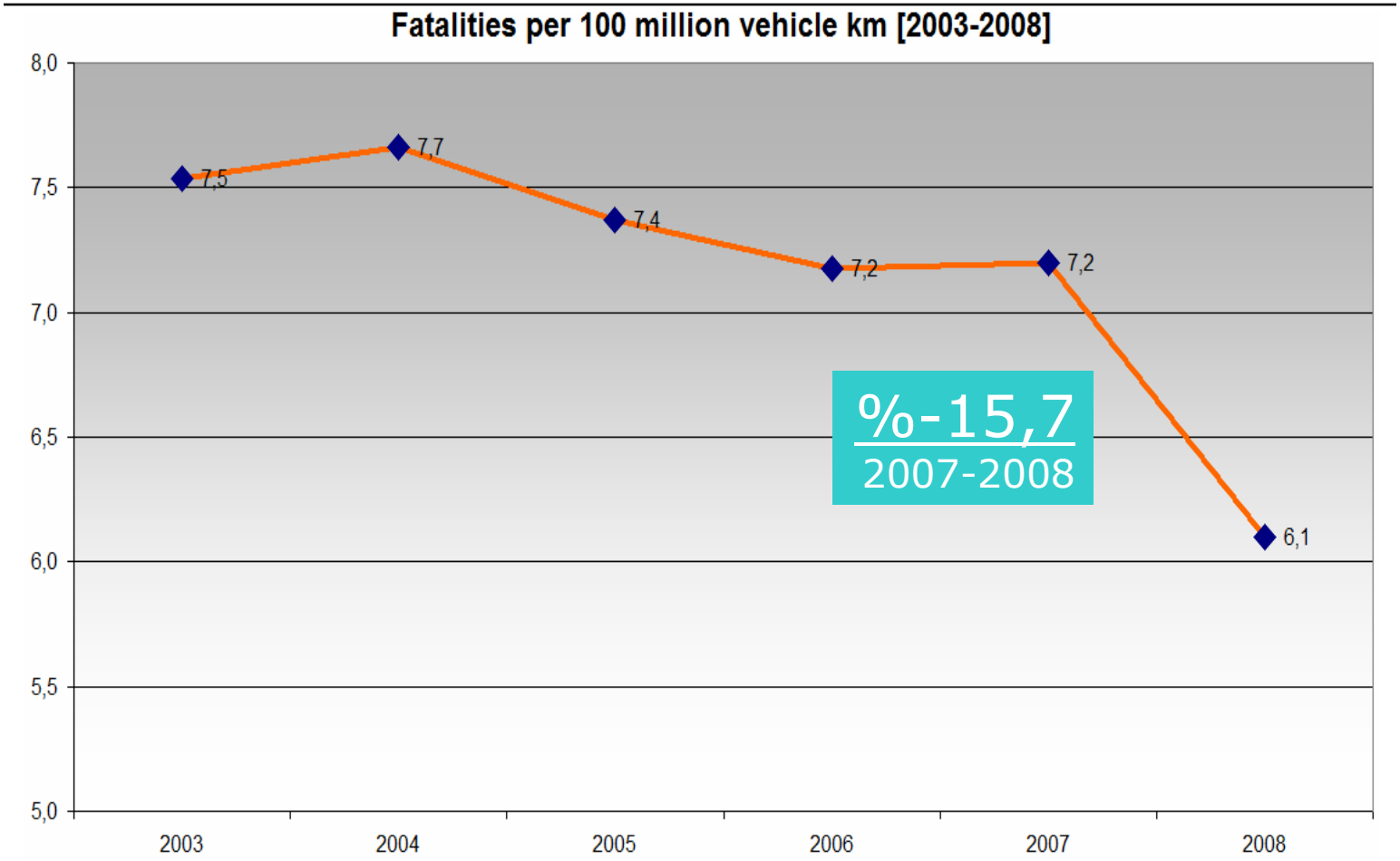
- 17 helicopters will be in use by September 2009
- In Air Ambulance System, 2 ambulance planes are planned to take service by the end of 2009

First Year Results / 2008 Statistics

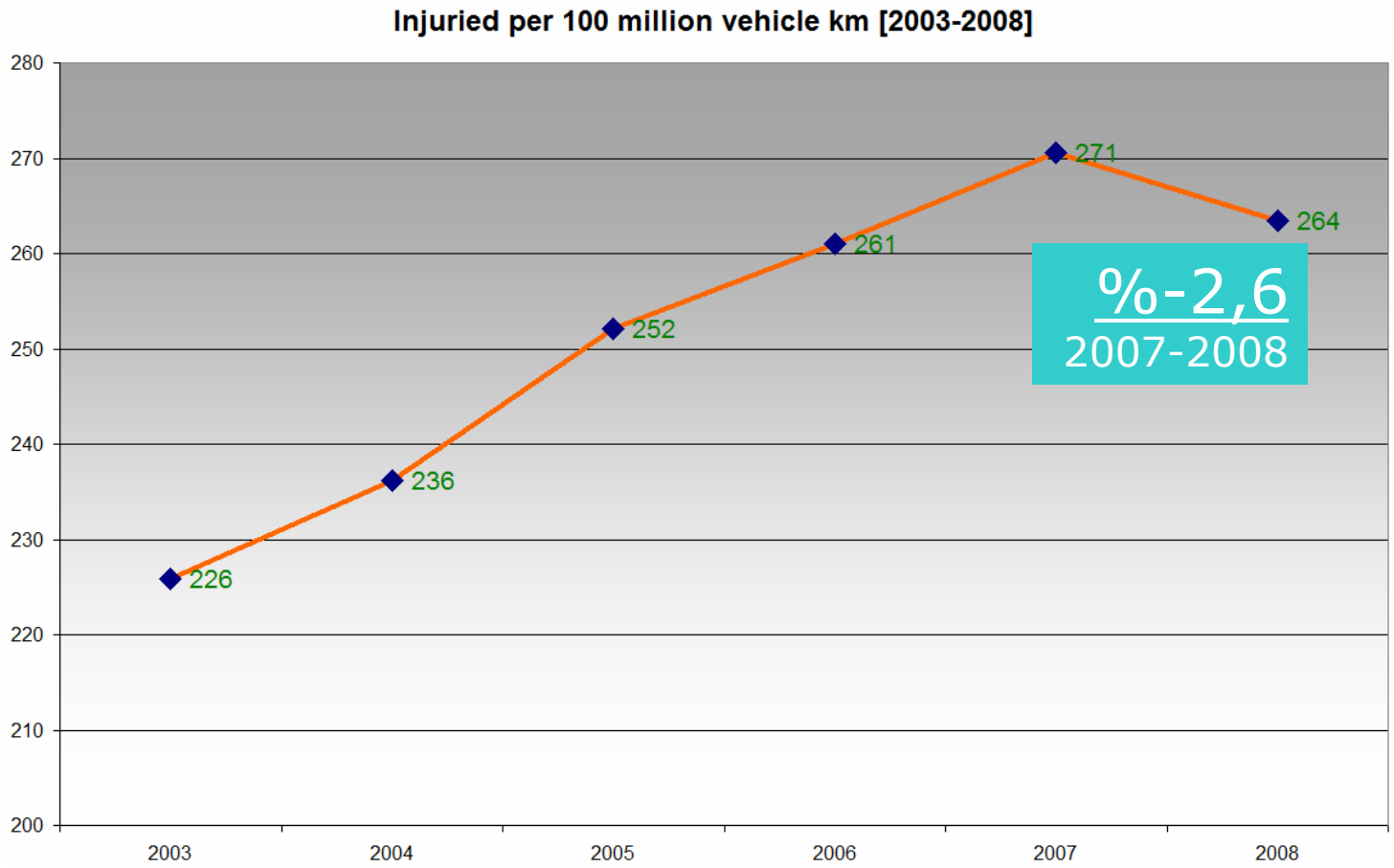




First Year Results / 2008 Statistics



First Year Results / 2008 Statistics

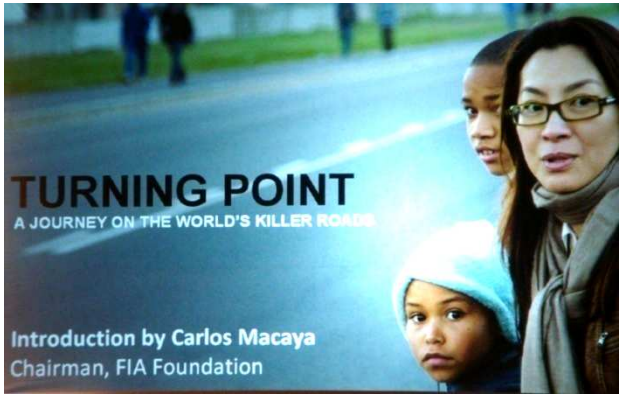


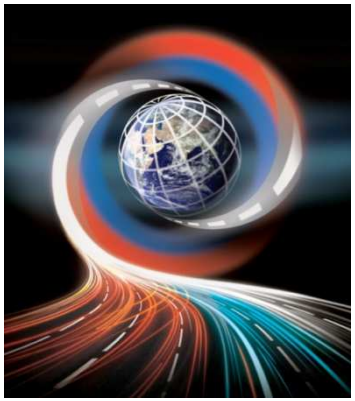
supports;

- UN initiatives on improving global road safety "Call for a Decade"
- First Global Road Safety Ministerial Conference in Moscow
- Make Roads Safe Campaign

Thank you

Hüseyin Şimşek
Turkish National Police





MAKE ROADS SAFE