

Road Safety in Singapore- June 2007

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Status paper on road safety

National trends in road accidents

- Total number of road fatalities; number of serious injuries; number of road accidents.

Year	No. of Road Fatalities	No. of Serious Injuries	No. of Road accidents
1995	225	423	5240
1996	225	420	5685
1997	257	288	5576
1998	221	314	5636
1999	198	393	6552
2000	213	395	7226
2001	194	340	7091
2002	199	173	6879
2003	212	143	6443
2004	193	82	6845
2005	173	87	6705
2006	190	104	9602

Source: TP Road Traffic Accidents (RTA) In Singapore 2005;
2006 RTA figures are correct as at 16/5/07 (Traffic Police)

- Pedestrian deaths (per head of population and per 10,000 vehicles).

Year	No. of Pedestrian Deaths	Population	Per 100,000 Head of Population	No. of Registered Vehicles	Per 10,000 Vehicles
1995	63	3,467,500	1.82	626,727	1.01
1996	70	3,612,000	1.94	656,552	1.07
1997	78	3,736,700	2.09	677,818	1.15
1998	67	3,865,600	1.73	685,213	0.98
1999	56	3,893,600	1.44	682,572	0.82
2000	59	4,017,700	1.47	684,287	0.86
2001	54	4,131,200	1.31	708,969	0.76
2002	49	4,171,300	1.17	705,059	0.69
2003	64	4,185,200	1.53	707,865	0.90
2004	46	4,240,300	1.08	716,907	0.64
2005	41	4,351,400	0.94	742,156	0.55
2006	42	4,483,900	0.94	776,571	0.54

Source: Mid-year population estimates from Table 2 Pg 5 TP RTA in Singapore 2005;
Mid-year No. of Registered Vehicles from Table 12 Pg 21 TP RTA in Singapore 2005
2006 RTA figures are correct as at 16/5/07 (Traffic Police)

- Motorcyclist deaths (per number of motorcycles).

Year	No. of Motorcyclist + Pillion deaths	Number of Motorcycles	Per 10,000 Number of Motorcycles
1995	117	127,869	9.15
1996	94	131,319	7.16
1997	111	132,816	8.36
1998	87	133,421	6.52
1999	85	133,921	6.35
2000	99	134,745	7.35
2001	88	131,835	6.68
2002	101	130,287	7.75
2003	94	134,573	6.99
2004	95	135,921	6.99
2005	95	138,360	6.87
2006	102	141,318	7.22

Source: Number of registered motor cycles can be found in Table 12 Pg 21 TP RTA in Singapore 2005
2006 RTA figures are correct as at 16/5/07 (Traffic Police)

- Road accident deaths of children less than 5 years.

Year	No. of deaths of children less than 15 years
2003	4
2004	3
2005	2
2006	NA

Source: Table 5 Pg 14 TP RTA in Singapore 2005

- “Fleet safety records” of public or private organizations (e.g., deaths per 100,000 km).
 - SMRT (formerly SBST) – Accident rate improves from 0.95 accidents per 10,000 km in 1995 to 0.60 in 2002 and 0.54 in 2003.
 - Source: ADB-ASEAN Regional Road Safety Program Country Report: CR 8: Road Safety in Singapore

Government policy

- National road safety policy, strategy, plan of action and/or priority areas (Website).
 - In Singapore, road safety management is a responsibility of two government agencies - the Land Transport Authority (LTA) and Traffic Police (TP). While LTA provides road related facilities for road users and ensures the safety of vehicles, TP is responsible for the enforcement of traffic regulations, and for publicity and education. Together with National Safety Council (NSC), TP conducts regular campaigns to promote observance of road safety rules.
 - On 26 February 05, the National Road Safety Action Plan (RSAP) was officially launched at the National Road Safety Exhibition and Rally. The RSAP was conceived in 2003 under the ADB-ASEAN Road Safety Programme. The RSAP is the result of a strategic collaboration between various government agencies, non-governmental organisations and the private sector. Specifically tailored to the particular needs of Singapore, the RSAP aims to improve road safety through five key areas namely Encouragement, Education Enforcement, Emergency Preparedness and Engineering.
 - Source (<http://www.adb.org/Documents/Reports/Arrive-Alive/Action-Plans/action-plan-08-sin.pdf>)’

- On 21 April 07, LTA, TP and National Safety Council jointly launched the first “Global Road Safety Week 2007” in conjunction with the **1st United Nations Global Road Safety Week (23-29 April 2007)**. Singapore is participating in this worldwide coordinated effort together with other United Nations member countries, in holding similar road safety events globally at the same time. The campaign aims to raise public awareness of road safety. A Road Safety Conference was held with a theme “Towards better road safety for all”. The event involved Shell road safety games for the children, an exhibition that includes road safety messages from the various road safety partners like AAS, driving schools and motorcar service centres.
- Designated lead agency.
 - Land Transport Authority and Traffic Police.
- Amount of financial and human resources allocated to road safety issues. Sources of financing road safety (e.g., road funds, road safety levies on insurance premiums).
 - We do not have exact figures as different aspects of road traffic / road safety require different budgetary amounts over the years.
- National road safety reports or impact evaluation reports of government programmes published?
 - National Road Safety Action Plan (Launched in February 2005)
- Overall road safety target of the government?
 - To reduce 100 fatalities over 5 years (2004-2008) via National Road Safety Action Plan.
- Involvement of the private sector?
 - They include private sponsor organisations and road user group associations such as National Safety Council of Singapore, Automobile Association of Singapore, Singapore Action Group for the Elderly, Nanyang Technological University of Singapore, National University of Singapore.

National road safety status

Road users

- Laws on helmet and seat-belt wearing, and “compliance”.
 - 3 Demerit points will be given for the following offences:
 - Riders failing to wear or wear insecurely on his head a protective helmet (Section 74 of the Road Traffic Act) - a fine not exceeding \$200
 - Driver failing to wear a seat belt
 - Driver failing to ensure that front/rear seat passenger wears a seat belt

(Source: http://driving-in-singapore.spf.gov.sg/services/Driving_in_Singapore/Information/dips/offences.htm)

Helmet offences for year 2003 - 2006	2003	2004	2005	2006
FAILING TO WEAR HELMET OF AN APPROVED TYPE UNDER S74(1) RTA CAP 276	4	8	16	9
PILLION RIDING WITHOUT PROTECTIVE HELMET UNDER S74(1) RTA CAP 276	18	17	19	8
RIDER PROTECTIVE HELMET INSECURELY WORN UNDER SEC 74(1) RTA CAP 276	325	357	601	918
RIDING WITHOUT PROTECTIVE HELMET UNDER S74(1) RTA CAP 276	45	76	58	49
Total	392	458	694	984

(Source: Traffic Police)

- Seat belt laws have been in effect since 1993. Vehicles registered on or after 1 Jan 93 must have rear seat belts in addition to the front seat belts. (Source: http://driving-in-singapore.spf.gov.sg/services/Driving_in_Singapore/Faq/seatbeltfaq.htm)
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Seatbelt Enforcement	2003	2004	2005	2006
Driver fail to wear seat belt	3465	5085	4750	3588
Driver fail to ensure front seat passenger	108	56	31	33

wear seat belt				
Driver fail to ensure rear seat passenger wear seat belt	28	25	20	21
Front seat passenger fail to wear seat belt	87	57	18	13
Driver wearing seat belt improperly	22	48	262	259
Rear seat passenger fail to wear seat belt	31	18	7	5
Allowing a child below 8 yrs, a front passenger to be secured with an unapproved child restrain	4	0	3	2
Use a vehicle where a child below 8 yrs, a front passenger is not properly secured by an approved child restrain	14	12	7	30
Use a vehicle where a child below 8 yrs, a rear passenger is not properly secured by an approved child restrain	20	12	11	15
Allowing a child below 8 yrs, a rear passenger to be secured with an unapproved child restrain	1	0	0	3
Total	3780	5313	5109	3969

(Source: Traffic Police)

- Mandatory to keep motorbike front-lights on during the day? How prevalent is it?
 - Legislation on “Ride-bright” implemented on 1st Nov 95 (Source: http://www.onemotoring.com.sg/publish/onemotoring/en/ta_information_guidelines/modification_guide/modification_not_allowed.html)
 - Paper on effectiveness of Motorbike Front-lights in Singapore (Source: http://www.ntu.edu.sg/nbs/sabre/working_papers/05-98.pdf)
 - Generally, most of the motorcyclists in Singapore do observe the rule
- (Survey) information on helmet use, seat belt use, and use of child restraints.
 - Helmet: ==> Source: <http://emj.bmjournals.com/cgi/content/full/21/4/478>
- Road safety education part of the school curriculum?
 - MOE has included road safety education in its curriculum for primary school students, starting from the first level and all primary five students have to participate in traffic games held at Road Safety Park.
 - Other than formal classes, there are also assembly talks and exhibitions (Source: <http://www.adb.org/Documents/Reports/Arrive-Alive/Country-Reports/ctry-rep-08-sin.pdf>)
- Drinking and driving (information from surveys, not prosecutions)?
 - Not available.

Roads

- Policy and practice regarding planning/design, hazardous locations improvement, including road safety audits.
 - We aim to make our roads safer by implementing road safety schemes which include Road Safety Audits, Black Spot Programme, Hazardous Road Locations, Accident Investigation and Prevention. These road safety schemes are often implemented in consultation with Road Design Engineers and Road Maintenance Engineers.

- National or local programmes to provide separate/secure road space for pedestrians and cyclists. Programmes to make roads “forgiving” by removing or cushioning roadside obstacles.
 - LTA – Barrier free accessibility for road and road related facilities including footpaths, continual maintenance of existing footpaths
 - National Parks – Cycle paths near parks

Vehicles

- Number of passenger cars, buses and trucks, motorcycles and 3-wheelers.
 - Refer to Annex A (Source: [http://www.lta.gov.sg/corp_info/doc/MVP01-1%20\(MVP%20by%20type\)%20.pdf?](http://www.lta.gov.sg/corp_info/doc/MVP01-1%20(MVP%20by%20type)%20.pdf?))
- Technical safety requirements for new vehicles (in line with UNECE recommendations)?
 - The vehicle safety requirements for new and in-use vehicles that are put in place in Singapore are generally effective in ensuring that vehicles are built to acceptable international standards and are maintained in a condition suitable for use on the roads.
- Details of periodic inspection of vehicles (obligatory/prevalent)?

Vehicle Type	Age of Vehicle	Frequency
Motor cycles & Scooters	>3 years	Once a year
Cars / Rental Cars	3 – 10 years	Once in 2 years
Cars	>10 years	Once a year
Tuition cars	--	Once a year
Goods Vehicles	<10 years	Once a year
Goods Vehicles	>10 years	Twice a year
Trailers	--	Once a year
Taxis	--	Twice a year
Omnibuses	--	Twice a year
All Other Vehicles & Buses	<10 years	Once a year
All Other Vehicles & Buses	>10 years	Twice a year

(Source: http://www.onemotoring.com.sg/publish/onemotoring/en/lta_information_guidelines/maintain_vehicle/inspection.html)

- Refer to Annex B (Source: [http://www.lta.gov.sg/corp_info/doc/MVP06-1%20\(Veh%20Insp\).pdf?](http://www.lta.gov.sg/corp_info/doc/MVP06-1%20(Veh%20Insp).pdf?))

Systems and cooperation

- National (computerized) database? Provides information on the location of accidents?
 - LTA developed Traffic Accident Analysis Module (TAAM) in Dec 04. Should mention that TP also keeps a national database. Our module is more to analyse the data from TP’s database to get trends etc.
- Which alcohol tests are allowed for prosecution (e.g., breathalyzer tests, behavioural tests such as walking along a straight line)?
 - Breathalyzer tests
 - Even when the alcohol content is below the legal limit, a driver can be convicted of drink-driving if there is evidence to show that he cannot control his vehicle.
- Geographical coverage of emergency assistance system for road victims.

The Singapore Civil Defence Force (SCDF) provides emergency ambulances service to bring accident victims to hospitals. It operates 24hr a day. In addition, ambulances are also provided by hospitals.

Ambulances usually arrive at accident scenes within 30 minutes from the time being called. TP are also at the accident scenes to offer assistance.

Asian Highway road safety status and trends

- Road safety actions specifically targeting the Asian Highway or trunk roads in general?
- Road safety-related grants or loans from international sources?
- Trends in road safety on the Asian Highway (fatalities/accidents on AH sections).

(To be discussed)

Road safety data files

We would be grateful, if you could also review/update the road safety data on your country with respect to:

- Sectional AH data: <http://www.unescap.org/ttdw/common/TIS/AH/Member%20countries.asp>
- National-level data: <http://www.unescap.org/ttdw/data/aprad.aspx>