

A light gray world map is centered in the background of the slide, showing the outlines of continents and major landmasses.

DEVELOPMENT OF ASEAN ROAD SAFETY ENGINEERING GUIDELINE

ROAD SAFETY STATUS BASED ON WHO REPORT

GLOBAL STATUS REPORT ON ROAD SAFETY **2018**



- Published by World Health Organisation (WHO) in 2018 using 2016 data
- data collected from the self-administered surveys for which responses were received from 175 Member States
- **1.35** million deaths each year
- **8th** leading cause of death for people of all ages
- **#1** cause of death for children and young adults **5 – 29** years of age

Malaysia

Population: 31 187 264 | Income group: Middle | Gross national income per capita: US\$ 9 850



INSTITUTIONAL FRAMEWORK

Lead agency	Road Safety Department, Ministry of Transport
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	50% (2014-2020)

SAFER ROADS AND MOBILITY

Audits or star rating required for new road infrastructure	Yes
Design standards for the safety of pedestrians / cyclists	Yes
Inspections / star rating of existing roads	Yes
Investments to upgrade high risk locations	Yes
Testing carried out in case of fatal crash	All drivers tested
Policies & investment in urban public transport	Yes

SAFER VEHICLES

Total registered vehicles for 2016	27 613 129
Cars and 4-wheeled light vehicles	13 123 630
Motorized 2- and 3-wheelers	12 677 841
Heavy trucks	1 191 310
Buses	59 977
Other	561 154

Vehicle standards applied (UNECE WP.29)

Frontal impact standard	Yes
Electronic stability control	Yes
Pedestrian protection	Yes
Motorcycle anti-lock braking system	No

POST-CRASH CARE

National emergency care access number	National, single number
Trauma registry	None
Formal certification for prehospital providers	Yes
National assessment of emergency care systems	No

DATA

Reported road traffic fatalities (2016)	7 152* (87% M, 13% F)
WHO estimated road traffic fatalities (2016)	7 374 (95% CI 4 482 - 8 266)
WHO estimated rate per 100 000 population (2016)	23.6

* Traffic Investigations and Enforcement Department, The Royal Malaysia Police (RMP). Died within 30 days of crash

Speed limit set per vehicle and road type with a maximum speed limit for passenger cars of 110 km/h on highways and 90 km/h on other roads
Legislation requires probable cause to test drivers or commission of a traffic offence
2016, The Royal Malaysia Police
2016, Malaysian Institute of Road Safety Research (MIRS)
2013, Malaysian Institute of Road Safety Research (MIRS)

Deaths by road user category



Source: The Royal Malaysia Police

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Trends in reported road traffic deaths



Cambodia

Population: 15 762 370 | Income group: Middle | Gross national income per capita: US\$ 1 140



INSTITUTIONAL FRAMEWORK

Lead agency	National Road Safety Committee (NRSC)
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	50% (2011-2020)

SAFER ROADS AND MOBILITY

Audits or star rating required for new road infrastructure	Yes
Design standards for the safety of pedestrians / cyclists	No
Inspections / star rating of existing roads	Yes
Investments to upgrade high risk locations	Yes
Policies & investment in urban public transport	No

SAFER VEHICLES

Total registered vehicles for 2016	2 751 715
Cars and 4-wheeled light vehicles	97 239
Motorized 2- and 3-wheelers	2 714 193
Heavy trucks	57 321
Buses	5 972
Other	876 990

Vehicle standards applied (UNECE WP.29)

Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No
Motorcycle anti-lock braking system	No

POST-CRASH CARE

National emergency care access number	National, multiple numbers
Trauma registry	National
Formal certification for prehospital providers	No
National assessment of emergency care systems	No

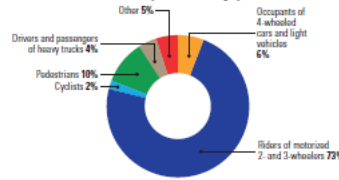
DATA

Reported road traffic fatalities (2016)	1 852* (80% M, 20% F)
WHO estimated road traffic fatalities (2016)	2 803 (95% CI 2 361 - 3 226)
WHO estimated rate per 100 000 population (2016)	17.8

* Road Crash and Victim Information System (RCVIS). Died within 30 days of crash

Speed limit set per vehicle and road type with a maximum speed limit for passenger cars of 110 km/h on highways and 90 km/h on other roads
Legislation requires probable cause to test drivers or commission of a traffic offence
2016, The Royal Malaysia Police
2016, Malaysian Institute of Road Safety Research (MIRS)
2013, Malaysian Institute of Road Safety Research (MIRS)

Deaths by road user category



Source: 2016, Road Crash and Victim Information System (RCVIS) annual report

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Trends in reported road traffic deaths



Source: Road Crash and Victim Information System (RCVIS)

Indonesia

Population: 261 115 456 | Income group: Middle | Gross national income per capita: US\$ 3 440



INSTITUTIONAL FRAMEWORK

Lead agency	National Planning Agency (Badan Perencanaan Pembangunan Nasional - BAPPENAS)
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	50% (2011-2020)

SAFER ROADS AND MOBILITY

Audits or star rating required for new road infrastructure	Yes
Design standards for the safety of pedestrians / cyclists	Yes
Inspections / star rating of existing roads	Yes
Investments to upgrade high risk locations	Yes
Policies & investment in urban public transport	Yes

SAFER VEHICLES

Total registered vehicles for 2016	128 399 594
Cars and 4-wheeled light vehicles	Yes
Motorized 2- and 3-wheelers	Yes
Heavy trucks	Yes
Buses	Yes
Other	Yes

Vehicle standards applied (UNECE WP.29)

Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No
Motorcycle anti-lock braking system	No

POST-CRASH CARE

National emergency care access number	Partial coverage
Trauma registry	None
Formal certification for prehospital providers	Yes
National assessment of emergency care systems	No

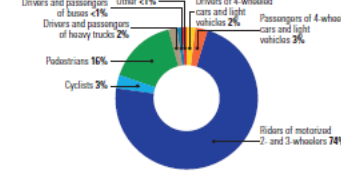
DATA

Reported road traffic fatalities (2016)	31 262* (76% M, 22% F)
WHO estimated road traffic fatalities (2016)	31 726 (95% CI 27 277 - 36 176)
WHO estimated rate per 100 000 population (2016)	12.2

* IRMS Korantas Post. Died within 30 days of crash

Speed limit set per vehicle and road type with a maximum speed limit for passenger cars of 110 km/h on highways and 90 km/h on other roads
Legislation requires probable cause to test drivers or commission of a traffic offence
2016, The Royal Malaysia Police
2016, Malaysian Institute of Road Safety Research (MIRS)
2013, Malaysian Institute of Road Safety Research (MIRS)

Deaths by road user category

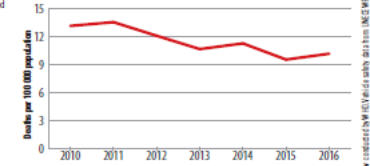


Source: 2016, Indonesia National Police

Source: IRMS Korantas Post

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Trends in reported road traffic deaths



	Cambodia	Philippines	Indonesia	Malaysia
Population:	15 762 370	103 320 224	261 115 456	31 187 264
Income group:	Middle	Middle	Middle	Middle
Gross national income per capita:	US\$ 1 140	US\$ 3 580	US\$ 3 400	9 850

	Myanmar	Singapore	Thailand	Viet Nam
Population:	52 885 224	5 622 455	68 863 512	94 569 072
Income group:	Middle	High	Middle	Middle
Gross national income per capita:	US\$ 1 190 a	US\$ 51 880	US\$ 5 640	US\$ 2 050

	Lao
Population:	6 758 353
Income group:	Middle
Gross national income per capita:	US\$ 2 150

INSTITUTIONAL FRAMEWORK	Cambodia	Philippines	Indonesia	Malaysia
Lead agency	National Road Safety Committee (NRSC)	Department of Transportation (DOTr)	National Planning Agency (Badan Perencanaan Pembangunan Nasional - BAPPENAS)	Road Safety Department, Ministry of Transport
Funded in national budget	Yes	Yes	Yes	Yes
National road safety strategy	Yes	Yes	Yes	Yes
Funding to implement strategy	Partially funded	Fully funded	Partially funded	Partially funded
Fatality reduction target	50% (2011-2020)	50% (2011-2020)	50% (2011-2020)	50% (2014-2020)

	Myanmar	Singapore	Thailand	Viet Nam
Lead agency	National Road Safety Council (NRSC), Ministry of Transport and Communications	Traffic Police & Land Transport Authority	Department of Disaster Prevention and Mitigation, Ministry of Interior	National Traffic Safety Committee (NTSC)
Funded in national budget	No	Yes	Yes	Yes
National road safety strategy	Yes	Yes	Yes	Yes
Funding to implement strategy	Not funded	Partially funded	Partially funded	Partially funded
Fatality reduction target	50% (2011-2020)	—	≤ 10 deaths per 100 000 population (2010-2020)	5-10% annually (20122020)

	Lao
Lead agency	National Road Safety Committee (NRSC)
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	50% (2011-2020)

SAFER ROADS AND MOBILITY	Cambodia	Philippines	Indonesia	Malaysia
Audits or star rating required for new road infrastructure	Yes	Yes	Yes	Yes
Design standards for the safety of pedestrians / cyclists	No	Partial	Yes	Yes
Inspections / star rating of existing roads	Yes	Yes	Yes	Yes
Investments to upgrade high risk locations	Yes	Yes	Yes	Yes
Policies & investment in urban public transport	No	Yes	Yes	Yes

	Myanmar	Singapore	Thailand	Viet Nam
Audits or star rating required for new road infrastructure	Yes	Yes	Partial	Yes
Design standards for the safety of pedestrians / cyclists	Yes	Yes	Partial	Partial
Inspections / star rating of existing roads	Yes	Yes	Yes	Yes
Investments to upgrade high risk locations	Yes	No	Yes	Yes
Policies & investment in urban public transport	Yes	Yes	Yes	Yes

	Lao
Audits or star rating required for new road infrastructure	Partial
Design standards for the safety of pedestrians / cyclists	Partial
Inspections / star rating of existing roads	No
Investments to upgrade high risk locations	Yes
Policies & investment in urban public transport	No

SAFER VEHICLES	Cambodia	Philippines	Indonesia	Malaysia
Total registered vehicles for 2016	3 751 715	9 251 565	128 398 594	27 613 120
Cars and 4-wheeled light vehicles	97 239	3 434 329	—	13 123 638
Motorized 2- and 3-wheelers	2 714 193	5 329 770	—	12 677 041
Heavy trucks	57 321	407 357	—	1 191 310
Buses	5 972	29 794	—	59 977
Other	876 990	50 315	—	561 154
Vehicle standards applied (UNECE WP.29)				
Frontal impact standard	No	No	No	Yes
Electronic stability control	No	No	No	Yes
Pedestrian protection	No	No	No	Yes
Motorcycle anti-lock braking system	No	No	No	No

	Myanmar	Singapore	Thailand	Viet Nam	Lao
Total registered vehicles for 2016	6 381 136	933 534	37 338 139	50 666 855	1 850 020
Cars and 4-wheeled light vehicles	516 707	727 533	15 003 774	3 033 527	370 043
Motorized 2- and 3-wheelers	5 391 505	142 439	20 497 296	47 131 928	1 422 869
Heavy trucks	59 680	45 224	1 055 717	—	52 443
Buses	28 383	18 338	157 799	—	4 665
Other	384 861	0	623 553	501 400	
Vehicle standards applied (UNECE WP.29)					
Frontal impact standard	No	No	No	No	No
Electronic stability control	No	No	No a	No	No
Pedestrian protection	No	No	Yes	No	No
Motorcycle anti-lock braking system	No	No	No	No	No

POST-CRASH CARE	Cambodia	Philippines	Indonesia	Malaysia
National emergency care access number	National, multiple numbers	National, single number	Partial coverage	National, single number
Trauma registry	National	National	None	None
Formal certification for prehospital providers	No	No	Yes	Yes
National assessment of emergency care systems	No	No	No	No

	Myanmar	Singapore	Thailand	Viet Nam	Lao
National emergency care access number	National, multiple numbers	National, single number	National, single number	Partial coverage	Partial coverage
Trauma registry	National	National	Some facilities	National	None
Formal certification for prehospital providers	No	Yes	Yes	No	Yes
National assessment of emergency care systems	No	No	Yes	No	No

DATA	Cambodia	Philippines	Indonesia	Malaysia
Reported road traffic fatalities (2016)	1 852 a (80% M, 20% F)	10 012 a (81% M, 19% F)	31 282 a (76% M, 22% F)	7 152 a (87% M, 13% F)
WHO estimated road traffic fatalities (2016)	2 803 (95% CI 2 381 - 3 226)	12 690	31 726 (95% CI 27 277 - 36 176)	7 374 (95% CI 6 482 - 8 266)
WHO estimated rate per 100 000 population (2016)	17.8	12.3	12.2	23.6
	a Road Crash and Victim Information System (RCVIS). Died within 30 days of crash	a Philippine Statistical Authority, Civil Registration and Vital Statistics. Unlimited time period following crash	a IRSMS Korlantas Polri. Died within 30 days of crash	a Traffic Investigations and Enforcement Department, The Royal Malaysia Police (RMP). Died within 30 days of crash

	Myanmar	Singapore	Thailand	Viet Nam	Lao
Reported road traffic fatalities (2016)	4 887 b (82% M, 18% F)	141 a (73% M, 27% F)	21 745 b (79% M, 21% F)	8 417 a	1 086 a (86% M, 14% F)
WHO estimated road traffic fatalities (2016)	10 540 (95% CI 8 860 - 12 219)	155	22 491 (95% CI 20 265 - 24 717)	24 970 (95% CI 21 576 - 28 363)	1 120 (95% CI 946 - 1 294)
WHO estimated rate per 100 000 population (2016)	19.9	2.8	32.7	26.4	16.6
	a Data available only for 2015 b Traffic Police. Died within 30 days of crash	Singapore Police Force. Died within 30 days of crash	a Thailand launched an ECO-CAR program with tax incentives to cars with ESC but is not mandatory for all cars b Data Integration: (1) Death registration validated with Medical Certification of Cause of Death from hospitals; (2) Royal Thai Police; (3) Road Accident Victims Protection Company Limited. Unlimited time period following crash	a Report of Road Safety Performance Review of Viet Nam, The United Nations Economic and Social Commission for Asia and Ministry of Transport of Viet Nam (MOT). Died within 7 days of crash	Department of Traffic Police. Died within 30 days of crash

SAFER ROAD USERS	Cambodia	Philippines	Indonesia	Malaysia
National speed limit law	Yes	Yes	Yes	Yes ^b
Max urban speed limit	40 km/h	40 km/h	50 km/h	90 km/h
Max rural speed limit	90 km/h	80 km/h	80 km/h	90 km/h
Max motorway speed limit	100 km/h	No	100 km/h	110 km/h
Local authorities can modify limits	No	Yes	Yes	Yes
Enforcement	5	5	8	6
Predominant type of enforcement Manual National drink-driving law	Manual	Manual	Manual	Manual
National drink-driving law	Yes	Yes	Yes ^b	Yes
BAC limit – general population	< 0.05 g/dl	< 0.05 g/dl	—	≤ 0.08 g/dl
BAC limit – young or novice drivers	< 0.05 g/dl	< 0.05 g/dl	—	≤ 0.08 g/dl
Random breath testing carried out	Yes	Yes ^b	Yes	Yes ^c
Testing carried out in case of fatal crash	No	Some drivers tested	All drivers tested	All drivers tested
Enforcement	5	4	9	4
% road traffic deaths involving alcohol	13% ^b	—	—	<1% ^d
National motorcycle helmet law	Yes	Yes	Yes	Yes
Applies to drivers and passengers	Yes	Yes	Yes	Yes
Helmet fastening required	No	No	No	Yes
Helmet standard referred to and/or specified	Yes	Yes	Yes	Yes
Children passengers on motorcycles	Not restricted	Not restricted ^c	Not restricted	Not restricted
Enforcement	6	5	9	8
Helmet wearing rate	70% - 43% Drivers ^c , 30% - 13% Passengers ^c	87% Drivers ^d , 51% All riders ^d National seat-belt law Yes	71% All riders ^c	91% Drivers ^e , 87% Passengers ^e
National seat-belt law	Yes	Yes	Yes	Yes
Applies to front and rear seat occupants	No ^d	Yes	No	No
Enforcement	7	6	8	4
Seat-belt wearing rate	—	80% Drivers ^e	69% All occupants ^c	74% Front seats ^f , 10% Rear seats ^f
National child restraint law	Yes ^e	No	No	No
Children seated in front seat	Prohibited under 10 yrs ^f	Prohibited under 6 yrs ^d	—	Not restricted
Child restraint required	Up to 4 yrs	—	—	—
Child restraint standard referred to and/or specified	No	—	—	—
Enforcement	1	—	—	—
% children using child restraints	—	—	—	—
National law on mobile phone use while driving	Yes	Yes	Yes	Yes
Ban on hand-held mobile phone use	Yes	Yes	Yes	Yes

	Myanmar	Singapore	Thailand	Viet Nam	Lao
National speed limit law	Yes	Yes	Yes	Yes	Yes
Max urban speed limit	48 km/h	70 km/h b	80 km/h	60 km/h	40 km/h
Max rural speed limit	80 km/h	— c	90 km/h	90 km/h	90 km/h
Max motorway speed limit	No	90 km/h	120 km/h	120 km/h	
Local authorities can modify limits	No	No	No	No	No
Enforcement	6	8	5	7	5
Predominant type of enforcement Manual National drink-driving law	Automated	Manual and automated	Manual	Manual and automated	Manual
National drink-driving law	Yes c	Yes	Yes	Yes	Yes
BAC limit – general population	—	≤ 0.08 g/dl	≤ 0.05 g/dl	0.00 - 0.05 g/dl b	≤ 0.05 g/dl
BAC limit – young or novice drivers	—	≤ 0.08 g/dl	≤ 0.02 g/dl	0.00 - 0.05 g/dl b	≤ 0.05 g/dl
Random breath testing carried out	Yes	Yes d	Yes c	Yes	Yes
Testing carried out in case of fatal crash	Some drivers tested	All drivers tested	Some drivers tested	Some drivers tested	No
Enforcement	6	8	6	8	3
% road traffic deaths involving alcohol	21% d	6% e	14% d	—	
National motorcycle helmet law	Yes	Yes	Yes	Yes	Yes
Applies to drivers and passengers	Yes	Yes	Yes	Yes	Yes
Helmet fastening required	Yes	Yes	Yes	Yes	No
Helmet standard referred to and/or specified	No	Yes	Yes	Yes	No
Children passengers on motorcycles	Prohibited e	Prohibited under 10 yrs	Not restricted	Not restricted	Not restricted
Enforcement	6	9	6	8	7
Helmet wearing rate	32% Drivers d, 27% Passengers d	—	51% Drivers e, 20% Passengers e	81% Drivers c, 60% Passengers c	
National seat-belt law	Yes	Yes	Yes	Yes	Yes
Applies to front and rear seat occupants	Yes	Yes	Yes	No	No
Enforcement	7	8	6	6	2
Seat-belt wearing rate	7% Drivers d	—	58% Drivers f, 40% Front seats f	—	
National child restraint law	No	Yes	No	No	Yes
Children seated in front seat	Not restricted	Allowed in a child restraint	Not restricted	Not restricted	Not restricted
Child restraint required	—	Up to 135 cm	—	—	Yes
Child restraint standard referred to and/or specified	—	Yes	—	—	No
Enforcement	—	8	—	—	1
% children using child restraints	—	—	—	—	—
National law on mobile phone use while driving	No	Yes	Yes	Yes	Yes
Ban on hand-held mobile phone use	—	Yes	Yes	Yes	Yes



THANK YOU



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