

MALAYSIAN INSTITUTE OF ROAD SAFETY RESEARCH

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MALAYSIAN INSTITUTE OF ROAD SAFETY RESEARCH

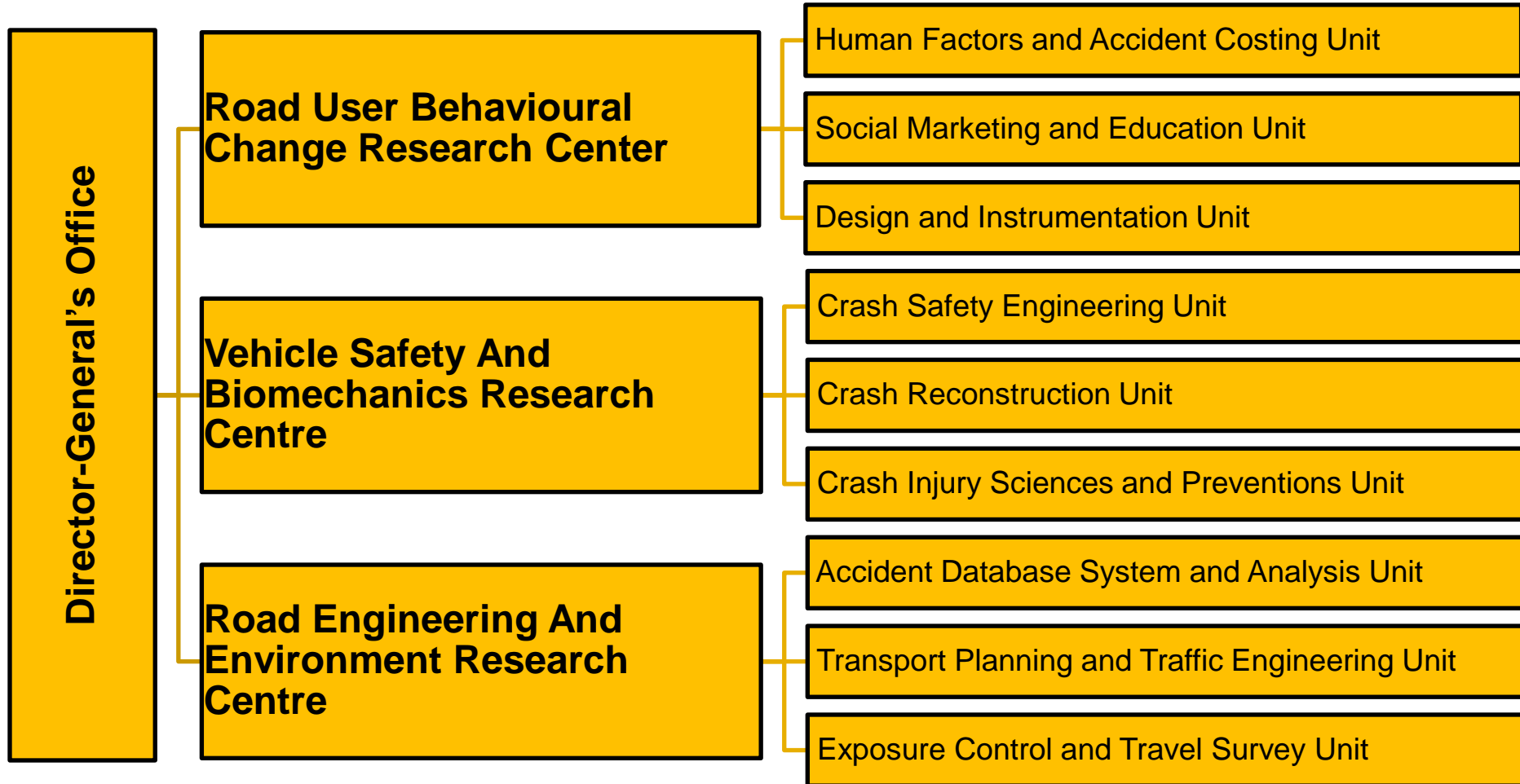
Established on 3rd January 2007, MIROS functions as a **one-stop centre** for the generation and dissemination of road safety information through the print media and a concerted training programme. Under the Ministry of Transport (**MOT**)

MIROS carries out studies and evaluates current procedures on road safety to generate information that will form the core of its **evidence-based intervention programmes** to enhance road safety.

Mission

To foster the science and art of road safety interventions

RESEARCH CENTRES



FUNCTIONS

- Conduct high impact research that will be translated into road safety policies.
- Develop national objectives, policies, and priorities for the orderly development and administration of road safety research.
- Enhance and increase knowledge based on new developments in issues related to road safety.
- Serve as an audit and accreditation agency in curriculum design and standards on road safety.
- Propose evidenced based cost-effective interventions/ programmes.
- Serve as a repository of knowledge and linkage on road safety (MROADS, CRU Database, Hospital Injury Data)
- Serve as a centre providing consultation and advice on road safety issues.



ROAD ENGINEERING AND ENVIRONMENT RESEARCH CENTRE

This Centre will serve as the accident database for the national and will undertake the following task:

- Provide for a continuously update on national accident and injury database, Map accident data using geographical code, RUM accident code and digital code
- Undertake diagnostic analysis on road accident and assessment of safety interventions
- Undertake research on safer road design and road environment
- Develop models on traffic and transportation facilities
- Develop national fatality index
- Design suitable methods to control exposure to road accidents
- Undertake annual vehicle survey to assess Vehicle Kilometer Travelled (VKT) and passenger Kilometer Travelled (PKT) rates



VEHICLE SAFETY AND BIOMECHANICS RESEARCH CENTRE

This Centre is tasked with the following:

- Undertake research on trauma care, post injury treatment, emergency response and pre- and post-crash medical fitness
- Review policies and current approach towards improving Standard Operating Procedures, Code of Practice and Industrial Standard through Technical Reports, Recommendations, and Science and Technical Publications
- Carry out crashworthiness investigation mechanics of injury, bio-mechanics and human tolerance to crash
- Reconstruct injury related crashes
- Carry out validation tests on the impact of road accidents
- Undertake computer-aided engineering analysis
- Initiate safe practice in technical management of transportation
- Monitor and audit implementation of SHE
- Oversee and accredit driving institutes nationwide and the implementation of new driving curriculum



ROAD USER BEHAVIOURAL CHANGE RESEARCH CENTRE

This Centre will undertake several task to effect road user behavioural change:

- Develop the national Road User Assessment Programme (RUAP)
- Undertake research on the effectiveness of road safety campaigns and enforcement
- Undertake research on psychology of road user behaviour
- Assess the effectiveness of road safety education
- Design research instruments for effectiveness behavioural research
- Undertake research on the effectiveness of traffic calming measures on road users
- Undertake research on the sociology of transport
- Develop a national accident costing index

RESEARCH TRANSLATED INTO POLICIES

Compliance to UNECE Regulations

Enhancing Guardrail Standards

Code of Practice on Safety, Health and Environment for Transportation Sector

Implementation of New Driving Training Curriculum Based on Learning Outcomes

Implementation of Rear Seatbelt Use

Implementation of Road Safety Education in School

Implementation of Community Based Programmed on Safety Helmet

Electric Bicycle

RESEARCH & DEVELOPMENT PROJECT

Risk Factors and Benefits of Education/Training Programs for Young Driver

Assessment on The Implementation of Malaysia Driving Curriculum in Driving Institutes

Exploratory Study of Aggressive Driving/Riding in Malaysia

Prevalence of Child Restraint Use in Vehicle Among Children

Provisional CRASE Crash Centre (PC3)

Refinement of non Destructive Approach for Vehicle Safety Assessment (MyVAP)

Seat Belt Wearing in Passenger Vehicle Fatal Crashes in Malaysia

Feasibility study on Unmanned Aerial Vehicle (UAV) in Crash Investigation

Modelling of Traffic Accident Risk

Development of VKT Index for Commercial vehicles

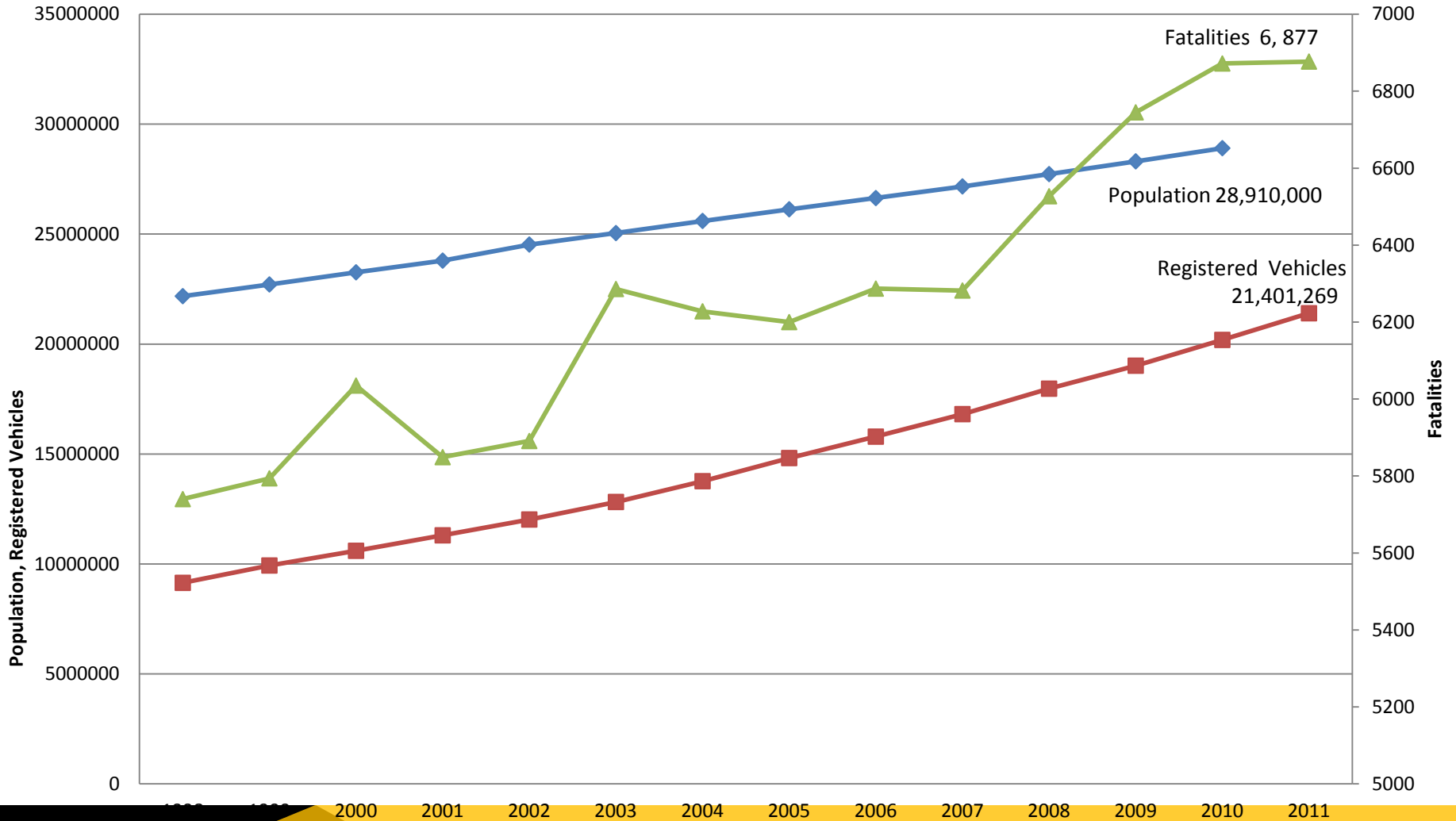
Evaluation of Non-exclusive Motorcycle Lane in Malaysia

Vehicle Kilometre Travelled for Goods Vehicle

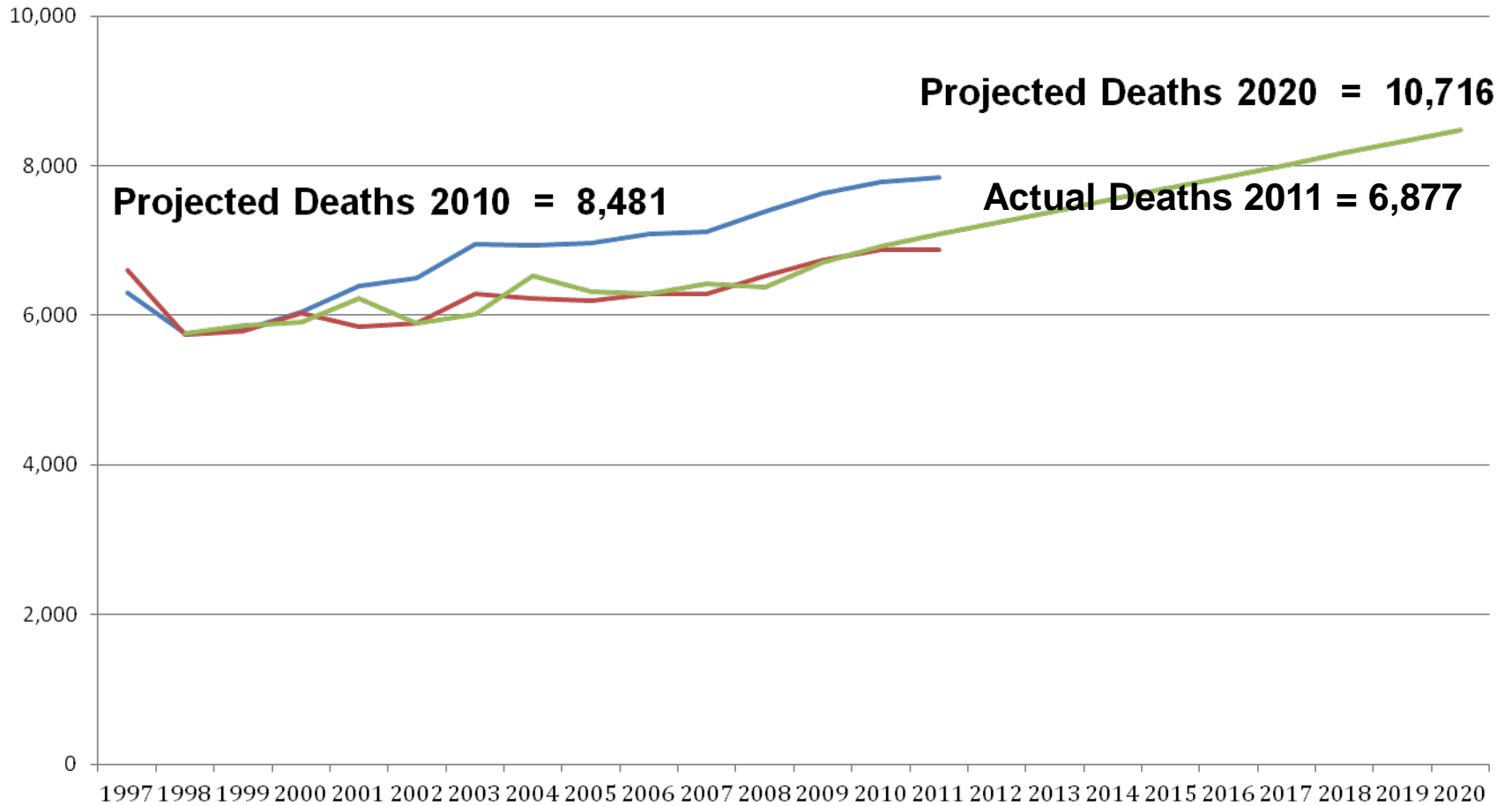
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ROAD SAFETY SCENARIO IN MALAYSIA

ROAD FATALITIES TREND IN MALAYSIA



PROJECTION DEATHS CAUSED BY ROAD CRASHES IN MALAYSIA



Year	Total death for Road User in Malaysia	Road Safety Index in Malaysia		
		Per 10,000 vehicles	Per 100,000 population	Per Billion VKT (Vehicle Kilometre Travelled)
1997	6302	7.37	29.1	33.57
1998	5740	6.28	25.8	28.75
1999	5794	5.83	25.5	26.79
2000	6035	5.69	26.0	26.25
2001	5849	5.17	25.1	23.93
2002	5891	4.90	25.3	22.71
2003	6286	4.90	25.1	22.77
2004	6228	4.52	24.3	21.10
2005	6200	4.18	23.7	19.58
2006	6287	3.98	23.6	18.69
2007	6282	3.74	23.1	17.60
2008	6527	3.63	23.5	17.65
2009	6745	3.55	23.8	17.27
2010	6872	3.40	23.8	16.21
2011	6877	3.21	-	14.68

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TRANSPORT RESEARCH

ORGANISATIONS INVOLVED IN TRANSPORT RESEARCH

MIROS

Centre of
Transportation
Research (CTR) –
University of Malaya

MITRANS –
University Technology
MARA

Road Safety
Research Centre
(RSRC) – University
Putra Malaysia

Transport Research
Alliance (TRA) –
University Technology
Malaysia

Transportation
Engineering
Research Group –
University
Kebangsaan Malaysia

Highway and Traffic
Engineering Group –
University Science
Malaysia

University Technology
Petronas

AREAS OF RESEARCH

- Intelligent Transportation System, Pavement, Public Transport, Transport Safety, Transport and Environment.
- Logistics
- Pavement, Education
- Transportation, vehicle safety, .
- Transport Economics, Traffic Engineering, Pavement materials.
- Traffic engineering, pavement, transportation
- Pavement materials.

Fundamental and applied research on transportation topics.

producing the type of publications that are expected from researches conducted by researchers at universities and research institute.

RESEARCH REPORTS

- Published in , journals, conference proceedings, special reports. All the reports (more than 95%) are in English. Some of them make known their published articles online (RSRC).
- There is no library in Malaysia collecting all the information on transport research carried out by academicians at university.
- Research reports by MIROS available in MIROS library and online.
- There was an understanding to make MIROS as the one stop centre for the transport research publication depository .

RESEARCH SOCIETY

- There are initiatives, at least now there is a society by the name of Transport Science Society of Malaysia (TSSM) where the society is involved in organising the Malaysian Universities Transport Research Forum and Conference (MUTRFC) and the latest (5th) was carried out on 12-14th April 2011.
- TSSM is the domestic society for the EAST ASIAN TRANSPORTATION SOCIETY (EASTS) whereby researchers have to be member of domestic society if would like to participate in EASTS program
- MIROS initiated the first road safety conference (ROSCON2010)

RESEARCH AND PUBLICATIONS

- Accurate understanding of the transport research and transport publications?
- Yes and No. Transportation research is more focus on road transportation and needs to rebalance the research area.
- Publications need to be accessible to all researchers. Need to have a central agency to coordinate and collate all research outputs.
- Need to set national one stop center/multi centre for transportation research output,
- How to coordinate the information sharing nationally before sharing with international partners?

SUMMARY

Miros and road safety scenario

Need for information sharing, nationally and internationally and the mechanism for sharing

Research to reduce the fatality and improve the transportation for the population (shift mode of transport for the motorcyclists)

One stop centre, multicentre for depository.

MIROS

MALAYSIAN INSTITUTE OF ROAD SAFETY RESEARCH

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