

12th ATRANS Annual Conference, ATRANS & IATSS Joint
Session, Bangkok, 22nd & 23rd August 2019

Data Collection on Motorcycle Crashes – Malaysian Perspective and Beyond

Professor Dr. Shaw Voon Wong
University Putra Malaysia

Board of Directors, Malaysian Institute of Road Safety Research (MIROS), ASEAN Road Safety
Centre

Special Advisor, Ministry of Transport & Communications Myanmar

Chairman, PIARC TC C2 Design and Operation of Safer Road Infrastructure

Convener, ISO TC241 /WG5, ISO 39001 & ISO39002

Road Safety Expert, FIA High Level Panel

Management Board, SaferAfrica Dialog Platform

Vice Chairman, Alliance of Safe Community

Expert Panel, Commonwealth Road Safety Initiative

International Academic Expert Group, 3rd Global Ministerial Conference on Road Safety 2020

Road Safety Advisor, Suu Foundation

Road Safety Advisor, The Asia Foundation

ATRANS



TOPICS OF DISCUSSION

Who and How to collect & manage the data

What kind of data collected

Past and Present Experiences

Challenges & Situation

Countermeasures

Who & How - collect and manage data

- MERS999 Database
 - Accident -> call for emergency rescue (call 999 in Malaysia)
 - Brief Accident data being recorded
 - Location, crash type, involved vehicles
 - Some injury information, but not by professional
 - By first and/or third parties.
- Highway Operators Database
 - Only on highway with such system – the main highway operator
 - With and by own Emergency Response & Petrol Teams

- Traffic Police Traffic Accident Database system

- Police Report

- By Police, passerby, first and third parties, any witness

- Investigation Report

- Police Accident Report (POL27)

- By Investigation Officer

- Most comprehensively collected. Not able to reject any party reporting.

- All fatal crashes would be reported – as it involved death certificate issuance, insurance claims, transfer of ownership; all requires complete investigation report

- Serious, minor and damage only crashes, would have substantial underreporting, unless involving insurance claims.

- MIROS Databases

- Mirror of Police Data set

- MROADS
 - Different and independent DBMS
 - Transferred offline & Manually managed

- In-depth Crash Data

- Collected while performing in-depth crash analysis and investigation by MIROS
 - Crashes met certain criteria and/or with special interest
 - Not particularly on motorcycle crashes



The Independent Advisory Panel to
The Minister of Transport Malaysia

REPORT

on Genting Highlands Bus Crash

at KM 3.6 Genting Highlands-Kuala Lumpur Road
on 21 August 2013



- Hospital Trauma & Emergency Database Management – All trauma
- Insurance Claim Data
 - Insurance claim data from insurance companies
 - Data from SOCSO (for workers only)
- University Research
 - University Putra Malaysia – Road Safety Research Centre, Once operated such.
 - MAAP5 – same DBMS as the police at the time – in the late 1990s and early 2000s
 - Hardcopy of POL27 made available to UPM

The slide features a light gray background with a subtle gradient. In the top-left and bottom-right corners, there are several realistic water droplets of various sizes, rendered with soft shadows and highlights to give them a three-dimensional appearance. The text is centered in the upper half of the slide.

What kind of data collected

SALINAN ASAL

NO. SIRI : POL27 (Pin. 191)

POLIS DI RAJA MALAYSIA LAPORAN KEMALANGAN JALAN RAYA (Isi semua salinan)	Untuk Kegunaan Pejabat	Dikendalikan Didid Oleh Pegawai Berkecaraan	
	NO. BATCH (Jangan Isi)	PEGAWAI YANG MENGISI BORANG	DISEMAK OLEH
	NO. RUJ. TRAFIK	T/TANGAN NO/PKT NAMA	T/TANGAN NO/PKT NAMA

A. BUTIR LAPORAN/MASA KEJADIAN
(Sila isi/bulatkan nombor berkenaan)

KOD BALAI: 1 0 0 1 0 1 (Sila rujuk buku kod balai)

1. Negari 2. Daerah 3. Bahai

4. NO. LAPORAN: 0 8 2 5 6 3

5. TAHUN: 9 1

6. BULAN: 0 1 (01 - 12)

7. TARIKH: 2 9 (01 - 31)

8. MASA KEJADIAN: 2 0 3 0 (0 - 2359)

9. HARI: 1. Abad, 2. Isnin, 3. Selasa, 4. Rabu, 5. Khamis, 6. Jumaat, 7. Sabtu

10. BILANGAN KENDERAAN TERLIBAT: 0 2

11. BILANGAN KENDERAAN ROSAK: 0 2

12. BILANGAN PEMANDU MATI: 0 0

13. BILANGAN PEMANDU CEDERA: 0 2

14. BILANGAN PENUMPANG MATI: 0 0

15. BILANGAN PENUMPANG CEDERA: 0 2

16. BILANGAN PEJALAN KAKI MATI: 0 0

17. BILANGAN PEJALAN KAKI CEDERA: 0 0

18. JENIS KEMALANGAN:
1. Maut, 2. Parah, 3. Ringan, 4. Rosak Sahaja

B. BUTIR-BUTIR JALAN RAYA
(Sila isi/bulatkan nombor berkenaan)

19. JENIS PERMUKAAN:
1. Batu, 2. Berturap Batu, 3. Berturap Bitumen/Tar, 4. Berturap Konkrit, 5. Tanah

20. SISTEM LALULINTAS:
1. Sepi, 2. Dua Hala, 3. Tiga Lorong, 4. Berkembar atau Lebih

21. BENTUK JALAN:
1. Lurus, 2. Selekoh, 3. Bulatan, 4. Simpang Empat/Lebih, 5. Simpang T-Y, 6. Simpang, 7. Simpang Bertingkat

22. KUALITI PERMUKAAN:
1. Rata, 2. Berlobang, 3. Mendap, 4. Berombak

23. KEADAAN JALAN:
1. Rata, 2. Curam

24. JENIS GARIS:
1. Garis Kembang, 2. Garis Tengah Bertanda, 3. Jalan Sepi, 4. Pemisah Jalan, 5. Pusingan U, 6. Tengah Tak Bertanda

25. LANGGAR LARI:
1. Ya, 2. Tidak

26. JENIS KAWALAN:
1. Polis, 2. Agensi Luar, 3. Berlampu Isyarat, 4. Lintasan Jalan Kaki, 5. Lintasan Jalan Kaki Berlampu, 6. Lintasan Keretapi, 7. Garis Lintang Kuning, 8. Kotak Kuning, 9. Tiada Kawalan

27. LEBAR JALAN: 0 8 Meter

28. LEBAR BAHU JALAN:
1. Berturap, 2. Tidak Berturap

29. JENIS BAHU JALAN:
1. Kering, 2. Banjir, 3. Basah, 4. Berminyak, 5. Berpasir, 6. Sedang, 7. Diperbaiki

30. SEBAB-SEBAB UTAMA KECACATAN JALAN:
1. Bahu Jalan Rendah/Tinggi, 2. Manhole Rendah/Tinggi, 3. Batu Longgar, 4. Jalan Berdebu, 5. Jalan Berlubang, 6. Jalan Licin, 7. Kerosakan Lampu Isyarat, 8. Lintasan Keretapi Sempit, 9. Jambatan Sempit, 10. Tiada Guard Rail, 11. Tiada Kurang Laju, 12. Tiada Berkecaraan

31. HAD LAJU:
1. 50 KMJ, 2. 70 KMJ, 3. 80 KMJ, 4. 90 KMJ, 5. 110 KMJ, 6. Lain-lain

32. KEADAAN PERMUKAAN JALAN:
1. Kering, 2. Banjir, 3. Basah, 4. Berminyak, 5. Berpasir, 6. Sedang, 7. Diperbaiki

33. JENIS PERLANGGARAN YANG PERTAMA:
1. Depan Dengan Depan, 2. Langgar Belakang, 3. Langgar Rusuk Tepat, 4. Langgar Sebelah Tepi, 5. Bergesel, 6. Terhimpit, 7. Langgar Binatang, 8. Langgar Objek Di Jalan, 9. Langgar Objek Di Jalan, 10. Langgar Pejalan Kaki, 11. Terhimpit, 12. Terbabas, 13. Cermiri Pecah Sahaja

34. SUASANA SEKITAR (Bulatkan nombor berkenaan):
1. Baik, 2. Angin Kuat, 3. Hujan atau Lintang

35. CAHAYA:
1. Siang, 2. Subuh, 3. Gelap Lampu, 4. Gelap Tanpa Lampu, 5. Malam

D. LOKASI (Sila isi/bulatkan nombor berkenaan)

36. JENIS JALAN:
1. Jalan Raya Ekspres, 2. Persekutuan, 3. Negeri, 4. Bandar, 5. Lain-lain

37. NO. LALUAN (Isikan):
E, F, 0, 0, 0, 1

38. JENIS TEMPAT:
1. Bandaraya, 2. Bandar, 3. Pekan, 4. Luar Bandar

39. JENIS PERKAWASAN:
1. Perumahan, 2. Pejabat, 3. Kawasan Beli-Belah, 4. Pembinaan/Industri, 5. Jambatan/Sejantas, 6. Sekolah, 7. Lain-lain

POS KILOMETER TERDEKAT:

Jarak Dari SEREMBAN (Nama Tempat/Bandar): 0 0 6 Km

No. Seksyen: 0 0 6

Jarak Dari TAMPIN (Nama Tempat/Bandar): 0 4 0 Km

JARAK KEJADIAN adalah 0 0 0 meter dari Pos Kilometer ke arah SEREMBAN (nama tempat/bandar)

Jika TIDAK TERDAPAT POS KM atau NO. SEKSYEN, sila isikan bahagian ini. Jarak kejadian adalah [] km dari [] (nama tempat/bandar) ke arah [] (nama tempat/bandar)

SALINAN ASAL

E. BUTIR-BUTIR KENDERAAN
(Sila isikan/bulatkan nombor yang berkenaan)

40. JENAMA KENDERAAN (Isikan):
Y A M
Bustan
Y 8 0
Model Kenderaan

41. TAHUN DIBUAT: 8 6

42. NOMBOR KENDERAAN: N Y 8 7 7 7

43. JENIS KENDERAAN:
1. Bas Ekspres, 2. Bas Henti-henti, 3. Bas Kilang, 4. Bas Mini, 5. Bas Periaran, 6. Bas Sekolah, 7. Pemacu 4 Roda, 8. Kenderaan Tugas Khas, 9. Kereta Lembu, 10. Lori Bertrailer, 11. Lori Sebuah, 12. Lori Kecil, 13. Motosikal/Wagon, 14. Motosikal > 250 cc, 15. Motosikal < 250 cc, 16. Teksi, 17. Beca/Roda Tiga, 18. Van, 19. Kereta Sewa, 20. Basikal

44. PEMILIK KENDERAAN:
1. Persendirian, 2. Barangan, 3. Perkhidmatan, 4. Pihak Kanan, 5. Tertera

45. BAHAGIAN KENDERAAN YANG TERUTAMA ROSAK SELEPAS PERLANGGARAN (Untuk selain daripada basikal atau motosikal sila bulatkan nombor yang berkenaan pada gambarajah kereta):
1. Tidak Rosak
2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63.

46. P. JERAKKAN KENDERAAN:
1. T. rietak, 2. Berhenti Tiba-tiba, 3. Berpecah Halusan, 4. Bersatu Halusan, 5. Tergelincir, 6. Memusing Ke Kanan, 7. Memusing Ke Kiri, 8. Memotong, 9. Membuat Pusingan U, 10. Menuju Ke Hadapan, 11. Undur, 12. Lain-lain

47. FUNCA KEMALANGAN DARI KENDERAAN:
1. Berek, 2. Cermiri Pecah, 3. Kenderaan Tidak Berlampu, 4. Kerosakan Lampu, 5. Steering, 6. Tayar Buruk, 7. Tayar Celup, 8. Tayar Botak, 9. Wiper, 10. Asap Berlebihan, 11. Tidak Berkecaraan

48. KENDERAAN TERPERANGKAP:
1. Ya, 2. Tidak

49. PANJANG KESAN BEREK: 0 3 Meter

50. TAYAR PECAH:
1. Ya, 2. Tidak

51. KENDERAAN ASING:
1. Singapura, 2. Thailand, 3. Diplomat, 4. Brunei, 5. Lain-lain, 6. Tiada Berkecaraan

F. BUTIR-BUTIR PEMANDU
(Sila isikan/bulatkan nombor yang berkenaan)

52. JANTINA:
1. Lelaki, 2. Perempuan

53. UMUR: 3 8 Tahun

54. BANGSA:
1. Melayu, 2. Cina, 3. India, 4. Kadazan, 5. Murut, 6. Melanau, 7. Bajau, 8. Bidayah, 9. Iban, 10. Asing, 11. Lain-lain

55. CARA MENDAPATKAN LESEN:
1. Persendirian, 2. Sekolah Memandu, 3. Tidak Berkecaraan

56. KEDUDUKAN LESEN:
1. Tiada Lesen, 2. Lesen 'L', 3. Lesen Penuh < 5 Tahun, 4. Lesen Penuh > 5 Tahun, 5. Lesen Antarabangsa/Asing, 6. Lesen Polis, 7. Lesen Tentera

57. KECEDERAAN PEMANDU:
1. Cedera Maut, 2. Cedera Parah, 3. Cedera Ringan, 4. Tidak Cedera

58. PEMAKAIAN KELEDAR:
1. Pakai Tali Pinggang, 2. Tanpa Tali Pinggang, 3. Pakai Topi Keledar, 4. Serban, 5. Pakai Topi Keledar Tapi Tidak Kancing, 6. Tanpa Topi Keledar/Serban

59. BAHAGIAN CEDERA:
1. 2. 3. 4. 5. 6. 7.

60. KESALAHAN PEMANDU:
1. Cuali Waktu Masuk/Keluar Kenderaan, 2. Isyarat Tidak Sempurna, 3. Melebihi Muatan (Barang), 4. Melebihi Muatan (Penumpang), 5. Melatak Kenderaan Tidak Betul, 6. Dadah, 7. Memandu Secara Cuali, 8. Memandu Secara Bahaya, 9. Membelok Secara Bahaya/Salah, 10. Memotong Secara Bahaya/Salah, 11. Mengekor Terlalu Dekat, 12. Tidak Mengikut Lampu Isyarat, 13. Kesalahan Lain, 14. Tidak Bersalah

61. KELAYAKAN PEMANDU:
1. Tidak Berskolah, 2. Sekolah Rendah, 3. Sekolah Menengah, 4. Pengajian Tinggi

62. ADAKAH PEMANDU MABUK?:
1. Tidak Disyaki, 2. Diuji Positif, 3. Diuji Negatif

63. PEKERJAAN PEMANDU:
1. Bekerja, 2. Pelajar, 3. Tiada Berkecaraan

(Bulatkan SATU SAHAJA nombor yang berkenaan)

SALINAN ASAL

| PENUMPANG DAN PEJALAN KAKI
(Isikan kotak berkenaan dengan simbol
kotak berlorek) | | KEPARAHAN PENUMPANG | | | | | | | | | | |
|--|------------------|---------------------|--------------|------------|-------------|------------|-------------------------|---------------------------|--|--|--|--|
| NAMA PENUMPANG | KEND. MANA
64 | JAN.
65 | BANGSA
66 | UMUR
67 | KECEDERAAN | | PEMAKAIAN KELEDAR
70 | KEDUDUKAN PENUMPANG
71 | | | | |
| | | | | | JENIS
68 | BHG.
69 | | | | | | |
| 1. VIJAY A/L SUNDRA | 2 | 1 | 013 | 212 | 3 | 8 | 3 | 2 | | | | |
| 2. SIM LFF SFF | 1 | 2 | 012 | 018 | 3 | 8 | 3 | 2 | | | | |
| 3. | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | |
| 11. | | | | | | | | | | | | |
| 12. | | | | | | | | | | | | |

| PEJALAN KAKI | | KEPARAHAN PEJALAN KAKI | | | | | | |
|-------------------|------------|------------------------|------------|-------------|------------|----------------|--------------|---------------|
| NAMA PEJALAN KAKI | JAN.
72 | BANGSA
73 | UMUR
74 | KECEDERAAN | | KELAKUAN
77 | LOKASI
78 | PELAJAR
79 |
| | | | | JENIS
75 | BHG.
76 | | | |
| 1. | | | | | | | | |
| 2. | | | | | | | | |
| 3. | | | | | | | | |
| 4. | | | | | | | | |
| 5. | | | | | | | | |
| 6. | | | | | | | | |

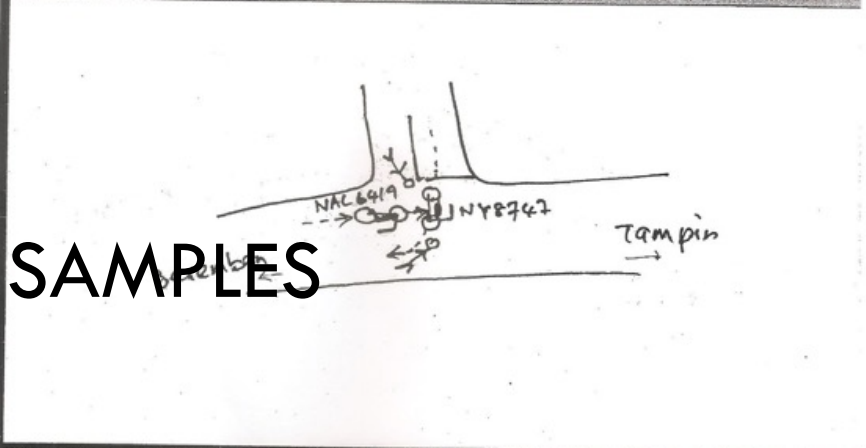
| | | | | |
|---|---|--|--|--|
| UNTUK NO. 65/72 JANTINA
1. Lelaki 2. Perempuan | UNTUK NO. 69/76
BAHAGIAN CEDERA | 70. PEMAKAIAN KELEDAR
1. Pakai Tali Pinggang
2. Tanpa Tali Pinggang
3. Pakai Topi Keledar
4. Serban
5. Pakai Topi Keledar Tapi Tidak Kancing
6. Tanpa Topi Keledar atau Serban | 77. KELAKUAN PEJALAN KAKI
1. Berjalan atau Bekerja atau Bermain Di Jalan Raya
2. Bertukar
3. Cacat
4. Cuci Melintas
5. Dadah
6. Mabuk
7. Tidak Menggunakan Kemudahan Lalulintas
8. Uzur/Tidak Siuman | 78. LOKASI PEJALAN KAKI
1. Di Tempat Melintas
2. Sekitar 50 Meter dari Tempai Melintas
3. Di Pembahagi Jalan
4. Di Tengah Jalan
5. Di Kaki Lima/Laluan Pejalan Kaki
6. Lain-lain |
| UNTUK NO. 66/73 BANGSA
1. Melayu 7. Bajau
2. Cina 8. Edayah
3. India 9. Iban
4. Kadazan 10. Azing
5. Murut 11. Lain-lain
6. Melanau | | 71. KEDUDUKAN PENUMPANG
1. Penumpang Depan
2. Penumpang Belakang
3. Tidak Berkenaan | 79. PEJAJAR
1. Bukan Pelajar
2. Ke/Dari Sekolah
3. Luar Waktu Sekolah
4. Lain-lain | |
| 80. SEBAB BINATANG
1. Anjing
2. Kambing
3. Lembu/Kerbau
4. Tidak Berkenaan | 81. ANGGARAN KEROSAKAN KENDERAAN \$ 0 0 0 2 5 0 | 82. ANGGARAN KESELURUHAN KEROSAKAN HARTA \$ 0 0 0 0 0 0 | | |

| MAKLUMAT TAMBAHAN (Untuk Kegunaan Pejabat) | |
|--|--------------|
| 87. Paksi X
88. Paksi Y
89. Nod 1
90. Nod 2 | 91. Arah
 |

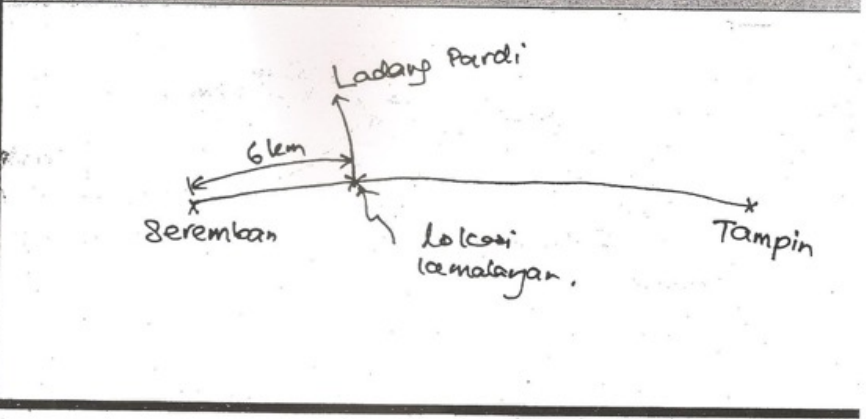
SALINAN ASAL

ULASAN
 Pada jam 2030, 29/1/91, M/sikal NAC 6419 sedang menuju ke Tampin. Apabila sampai di KM 6, simpang T telah berlanggar dgn M/sikal NY8747. Lelaki pemandu cedera.

LAKARAN KEJADIAN KEMALANGAN (Tunjukkan semua jalan, arah pergerakan kenderaan, kedudukan akhir kenderaan dan lain-lain)



LAKARAN LOKASI KEMALANGAN (Tunjukkan kedudukan dan jarak kemalangan berbanding dengan persimpangan, jalan utama, bangunan atau lain-lain pada temp.)



POL27 - SAMPLES


Data Items Collected for Every Road Crash Cases (POL 27)

| General Accident Info | | | Location Info |
|------------------------|------------------------|------------------------|---------------------|
| Report number | No. pedestrian killed | Collision type | Kilometre post |
| State | No. pedestrian injured | Weather | Nearest KM post |
| District code | Accident severity | Light condition | Map series |
| Police station | Road surface type | Road type | Map code |
| Month | Road geometry | Location type | Latitude |
| Hour | Quality of surface | Area type | Longitude |
| Day of week | Road condition | Vehicle damage cost | Route no |
| No. vehicle involved | Lane marking | Property lost | Node 1 |
| No. vehicle damaged | Hit run | Accident sketch | Node 2 |
| No. drivers killed | Control type | Road defect | Direction of travel |
| No. drivers injured | Road width | Speed limit | Section no |
| No. passengers killed | Shoulder width | Road surface condition | Animal Info |
| No. passengers injured | Shoulder type | Traffic system | Animal fault |

| Vehicle Info | | Driver Info | |
|------------------------|--------------------------------|---------------------|---------------------------------|
| Vehicle damage | Vehicle defect | Driver gender | Driver qualification |
| Vehicle model | Vehicle modification | Driver age | Drinking drive |
| Vehicle year | Length of skid marks | Driver race | Driver occupation |
| Registration no. | Tyre burst | License status | License type |
| Vehicle type | Foreign vehicle | Driver injury | Part of body injured |
| Vehicle ownership | Vehicle movement | Driver belt wearing | Driver errors |
| Passenger Info | | Pedestrian Info | |
| Passenger injury | Passenger race | Pedestrian action | Pedestrian age |
| Passenger belt wearing | Vehicle Code | Pedestrian injury | Pedestrian part of body injured |
| Passenger position | Passenger part of body injured | Pedestrian gender | School pupil |
| Passenger gender | Passenger age | Pedestrian race | Pedestrian location |

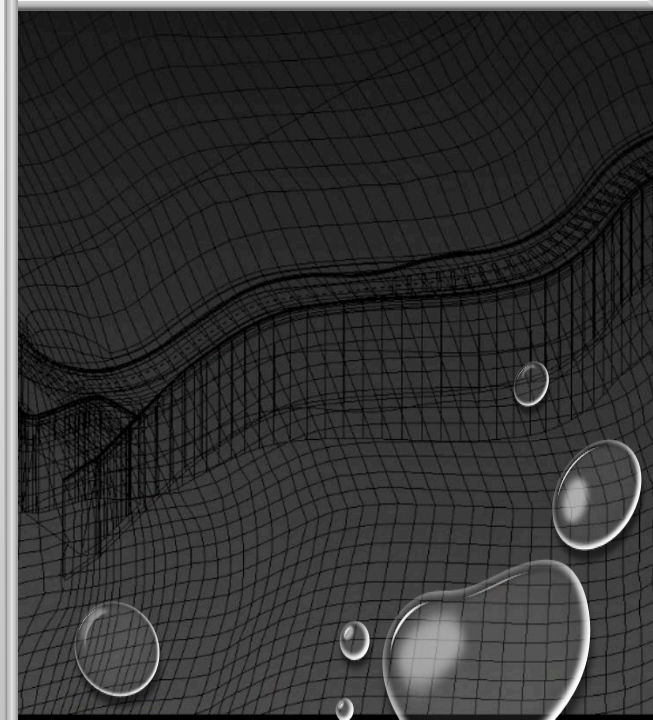
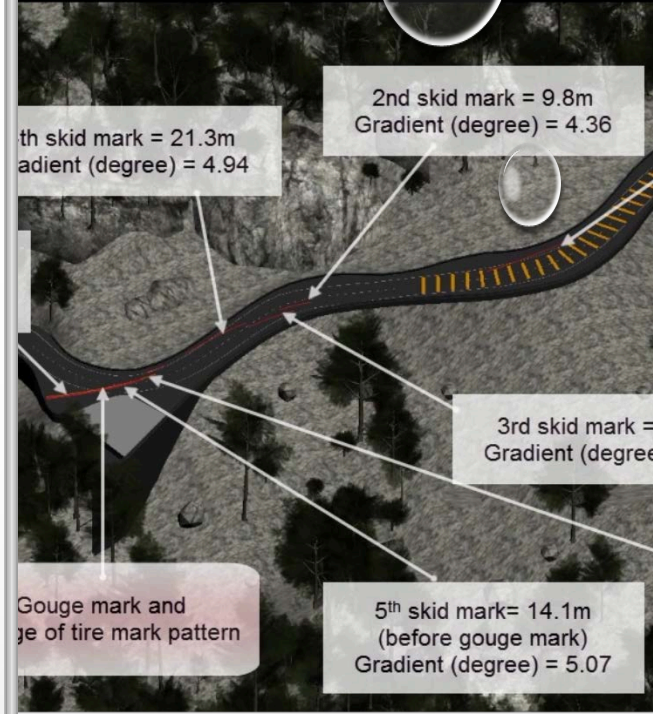
- Accident DBMS By Highway Operators & Authority

- Additional data such as
- Toll System (open or close toll network)
- Accident location according to the zone
 - Eg.: Main traffic lane
 - At R&R Area
 - At or around (within in 20 m) elevated intersection
 - Etc.
- Which part of highway, specifically which lane, and specific part of the highway.
- Status of the highway at the material time – closed lane, congested traffic, etc.

| 
LAPORAN KEMALANGAN LEBUHRAYA | Disediakan Oleh
Tandatangan : _____ | Disemak Oleh
Tandatangan : _____ | Disahkan Oleh
Tandatangan : _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--------------------------------------|--------------------------------|----------------------------------|--------------------------------|----------------------------------|-----------------|----------------------|----------------------|----------------------|--------------|----------------------|----------------------|----------------------|-----------------|----------------------|----------------------|----------------------|---------|----------------------|----------------------|----------------------|-------|----------------------|----------------------|----------------------|---------------------------|----------------------|----------------------|----------------------|------------------------|----------------------|----------------------|----------------------|-------------------------|----------------------|----------------------|----------------------|
| | Nama : _____
Tarikh : _____ | Nama : _____
Tarikh : _____ | Nama : _____
Tarikh : _____ | Nama : _____
Tarikh : _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Medan bertanda (*) wajib diisi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A. BUTIRAN LAPORAN (Sila isi/bulatkan nombor berkenaan) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. No Laporan* <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Tarikh Kemalangan* <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | | 3. Masa* a) Kejadian <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> (0001 - 2400)
b) Selesai <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> (0001 - 2400) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. Hari Kejadian*
1. Hari biasa 3. Hujung minggu
2. Cuti umum/am | | 5. Hari*
1. Isnin 5. Jumaat
2. Selasa 6. Sabtu
3. Rabu 7. Ahad
4. Khamis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. Laporan Masa Tindakan* <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Personel</th> <th>Masa Notifikasi
(0001 - 2400)</th> <th>Masa Ketibaan
(0001 - 2400)</th> <th>Tempoh Tindakan
(0001 - 2400)</th> </tr> </thead> <tbody> <tr> <td>Pasukan Peronda</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Polis Daerah</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Polis Lebuhraya</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Ambulan</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Bomba</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Pegawai Petugas Lebuhraya</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Pegawai Petugas Sekyen</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Pegawai Petugas Wilayah</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table> | | | | Personel | Masa Notifikasi
(0001 - 2400) | Masa Ketibaan
(0001 - 2400) | Tempoh Tindakan
(0001 - 2400) | Pasukan Peronda | <input type="text"/> | <input type="text"/> | <input type="text"/> | Polis Daerah | <input type="text"/> | <input type="text"/> | <input type="text"/> | Polis Lebuhraya | <input type="text"/> | <input type="text"/> | <input type="text"/> | Ambulan | <input type="text"/> | <input type="text"/> | <input type="text"/> | Bomba | <input type="text"/> | <input type="text"/> | <input type="text"/> | Pegawai Petugas Lebuhraya | <input type="text"/> | <input type="text"/> | <input type="text"/> | Pegawai Petugas Sekyen | <input type="text"/> | <input type="text"/> | <input type="text"/> | Pegawai Petugas Wilayah | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Personel | Masa Notifikasi
(0001 - 2400) | Masa Ketibaan
(0001 - 2400) | Tempoh Tindakan
(0001 - 2400) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pasukan Peronda | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Polis Daerah | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Polis Lebuhraya | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ambulan | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bomba | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pegawai Petugas Lebuhraya | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pegawai Petugas Sekyen | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pegawai Petugas Wilayah | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. Cahaya*
1. Siang 3. Gelap berlampu
2. Subuh/senja 4. Gelap tanpa lampu | | 8. Cuaca*
1. Baik 4. Angin kuat/lintang
2. Hujan 5. Lain - lain (nyatakan)
3. Kabus/jerebu _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. Jenis Kemalangan*
1. Maut
2. Parah
3. Ringan
4. Rosak sahaja | | 10. Kerosakan Aset Lebuhraya*
(Boleh pilih lebih dari satu jawapan)
1. Tiada 8. Emergency Median Opening
2. Penghadang jalan 9. Crash Cushion
3. Penghadang jambatan
4. Lampu jalan
5. Papan tanda
6. Longkang
7. Kerb 10. Lain - lain (nyatakan) _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

- In-depth Crash Database

- more details about the crash configuration
- Conditions of the vehicles and motorcycles, such as tyres, skid marks measurements – width and pattern, rather than just condition of the tyre groove
- Analysis details, such as extend of the damage and deformation,



Past & Existing Experiences

- Started with DBase III in the late 80s and 90s – standalone, by police of a station
- Fully paper based – electronic entry
- MAAP5
- Involved in improvement of Police Database – by incorporating GIS with GPS location in 2003/4
- MIROS database
- In-depth Crash data
- Incorporation of Hospital Trauma Data



Challenges & Situation

- Enable data collection, and institutionalized it, including injury details, rehab, etc.
- Ability to acquire such data, accurately
- Willingness to report and report correctly
- System driven with incentive, continuous monitoring and evaluation
- Systematically manage the data
- Analysis and Reporting
- Make use of such data to drive crash avoidance & injury prevention for road safety

UPCOMING

- ASIA Road Safety Observatory
- End of UN DOA 2011-2020 for road safety
- Beginning of new Decade for 2030 target & UNSDG 2030
- 3rd Global Ministerial Conference on Road Safety, Stockholm, 2020
- Motorcycle for sure a very different challenge in ASIA than other part of the world

Countermeasures – Recommendations together with IATSS – ATRANS for the coming Decade on Road Safety

- Forming IATSS Academic Advisory Board on Road Traffic Crash Data Management and Analysis with some funding support for
 - Joining the observatory development with similar influencing position for the upcoming observatory if materialized
 - Recommend data collection mechanism, management system requirements
 - Provide scientific advisory consultation and continual support to Asian countries towards institutionalizing crash data collection and management
 - Gather the regional needs, influence and position IATSS to the upcoming Global Ministerial Meeting

- Explore and Establish Crash Data collection via non-conventional road safety and crash data stakeholders.
 - Sizable Private and public organization, utilizing UNSDG target reporting mechanism
 - Build capacity with effective Road Traffic Safety Management System for organizations where data is being gathered systematically and analyzed for continual improvement. ISO39001 would be a good tool to be explored and utilized
- Establish similar mechanism and platform like IRTARD under OECD, but for ASIAN Countries, so data collection can be spread wider and being collected with tangible output (annual, or bi-annual reporting, etc), and specific focus shall be placed for Motorcycle Crashes.

The background of the slide is a light gray gradient. On the right side, there are several realistic water droplets of various sizes, rendered with soft shadows and highlights to give them a three-dimensional appearance. The largest droplet is in the lower right quadrant, while others are scattered towards the top and middle right.

THANK YOU

Professor Dr. Shaw Voon Wong

wongsv@upm.edu.my