

Black spot/Hazardous road location along Classified roads

Method adopted : KILOMETRE grid analysis.

The severity weightings for black-spot analysis are as follows:

Fatal Accidents: 12

Serious Accidents: 8

Total 18

The analysis has been carried out in order to meet the objectives of the TMRSU, that is to reduce the severity of accidents and number of KSIA (Killed and Serious Injury Accidents) and in so doing, only KSIA have been considered for the determination of black spots.

Considering that the least sum of the adopted weightings for two 'KSIA' is 16, and that the analysis is based on a period of 6 years (2004-2009), the threshold score adopted is 100 points beyond which score that grid will be considered as a blackspot.

The analysis in fact considers weightings of the '1 square Km', referred to as A –square and 10% of the adjacent grid weightings referred to as the B-Square weightings for a total score. This is done to cater for arbitrary positioning of the grid lines.

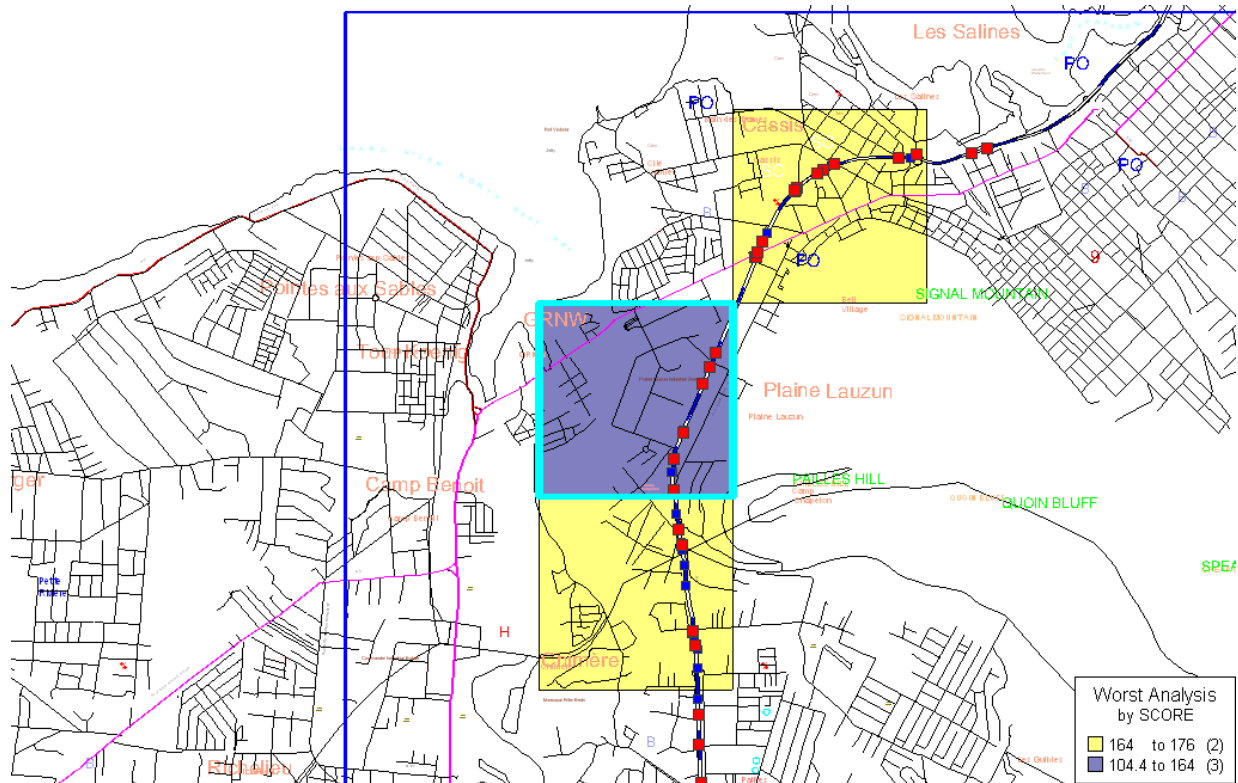
For instance, if there are two KSI per year, the score for that grid would be at least 96 + (10% of the adjacent grid weightings), over six years, hence would be a black-spot.

A list of black spot / Hazardous road locations has been prepared accordingly and is being considered for treatment by applying accident countermeasures based on the analysed causes.

A few examples are given hereunder, on a map generated by the MAAP software, in which the yellow or purple square represent a square kilometer, analysed as black spot with different ratings.

Also the stick analysis carried out in these clusters have been shown.

1.1 MOTORWAY M1 in the region of Port Louis



1.11 From the table below it is found out that, on the stretch of road from Belle Village up to Caudan Round about, on the Motorway M1, is particularly risky for Pedestrians and two wheelers, during night time.

Presently, new road infrastructure is under construction and Engineering measures are being taken to address the problem.

year	2004	2005	2005	2005	2005	2005	2006	2006	2007	2008	2008	2008	2008	2009	2009
acc sev	Fatal	Ser	Fatal	Fatal	Ser	Fatal	Fatal	Fatal	Fatal	Fatal	Ser	Fatal	Fatal	Ser	Fatal
coll type	HitPd	Side	HitPd	HitPd	Right	HitPd	HitIn	HitOf	HitPd	HitPd	Side	Side	HitPd	Side	HitPd
time	20:00	08:00	19:00	16:00	19:10	11:15	03:20	22:40	23:10	20:00	11:55	08:15	21:30	08:15	07:45
veh type V1	Car	Car	LGV	Car	Car	Car	MotorCycle	Car	LGV		Car	Autocycle	Minibus	HGV	Car
veh type V2		Motorcycle			Autocycle						Bicycle	HGV		Bicycle	

1.12 From the table below it is found that from Camp Chapelon up to Belle Village, the accidents were mainly 'ran off' and 'hit off street objects', and also 'hit pedestrians'. Most accidents occurred during night time. Street Lighting, visibility and speeding during off peak hours, is the most probable cause.

Black spot countermeasures taken as follows:

1. Segregation of pedestrians from Vehicular Traffic.
2. New Footbridge constructed at (Food Canners) Belle Village.
3. Fixed Speed Camera.
4. Street Lighting.

year	2004	2006	2006	2007	2009	2009	2009	2009	2009
acc sev	Fatal	Fatal	Fatal	Fatal	Ser	Ser	Ser	Fatal	Fatal
coll type	HitPd	Side	HitPd	HitOf	HitOf	Other	RanOf	HitOf	HitOf
time	19:35	21:00	10:45	00:30	17:25	16:45	00:05	01:40	22:55
veh type V1	Car	MotorCycle	Bus	MotorCycle	Car	MotorCycle	LGV	MotorCycle	LGV
veh type V2		AutoCycle							

1.13 From Table below, it is found that the stretch of the motorway from Grewal Junction up to Camp Chapelon is particularly dangerous for pedestrians crossing the motorway at grade and these accidents occur mostly during the night time.

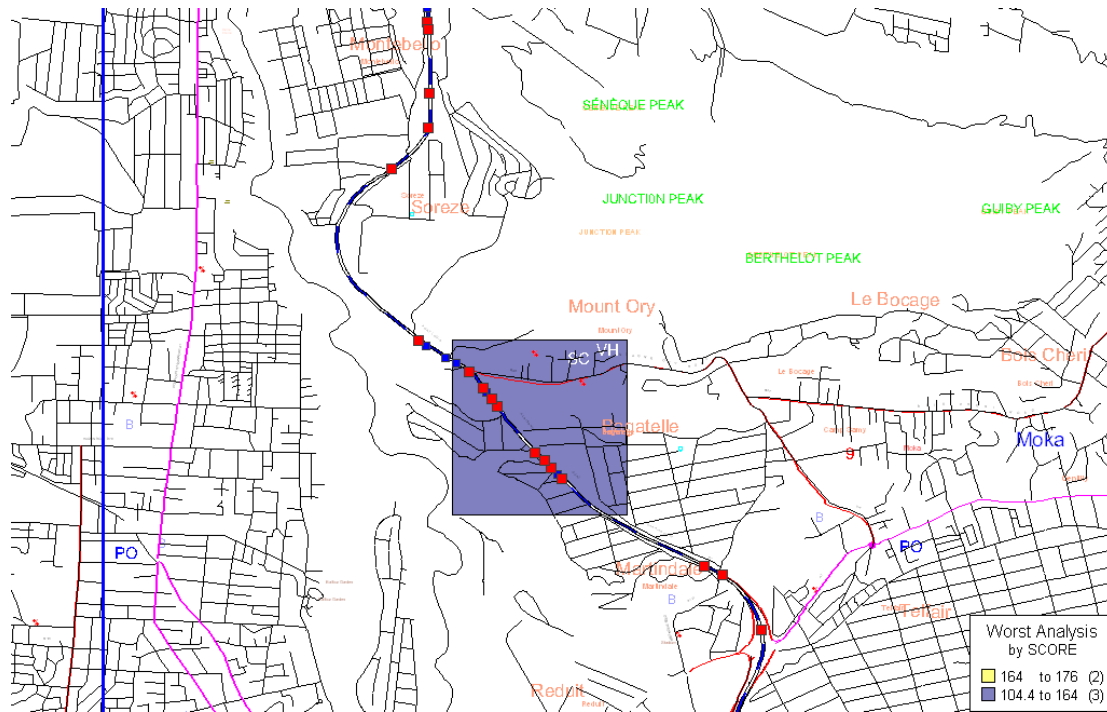
Black spot countermeasures taken as follows:

1. Segregation of pedestrians from Vehicular Traffic.
2. Fixed Speed Camera
3. Closure of gap in at Guibies and from St Vincent Road.
4. Street Lighting

This stretch of the motorway will be monitored to determine the effectiveness of the measures taken

year	2004	2005	2005	2006	2006	2006	2006	2006	2008	2008	2008	2008	2009	2009	2009	2009
acc sev	Ser	Fatal	Ser	Ser	Fatal	Ser	Fatal	Ser	Ser	Fatal	Fatal	Ser	Ser	Ser	Ser	Ser
coll type	RanOf	HitPd	Side	HitPd	HitPd	HitPd	HitPd	Right	HitPd	HitPd	HitPd	Head	Side	HitPd	Rear	RanOf
time	02:44	18:00	15:00	16:30	21:35	20:30	20:45	23:55	20:30	22:00	20:05	23:45	09:55	20:15	20:10	16:20
veh type V1	Car	Car	HGV	Car	Car		Car	Car	MotorCycle	Car	Car	Car	MotorCycle	Car	Car	LGV
veh type V2			AutoCycle				Car	Car				Car	Car			
veh type V3							MotorCycle	AutoCycle								

1.2 MOTORWAY M1 in the region of Montagne Orly

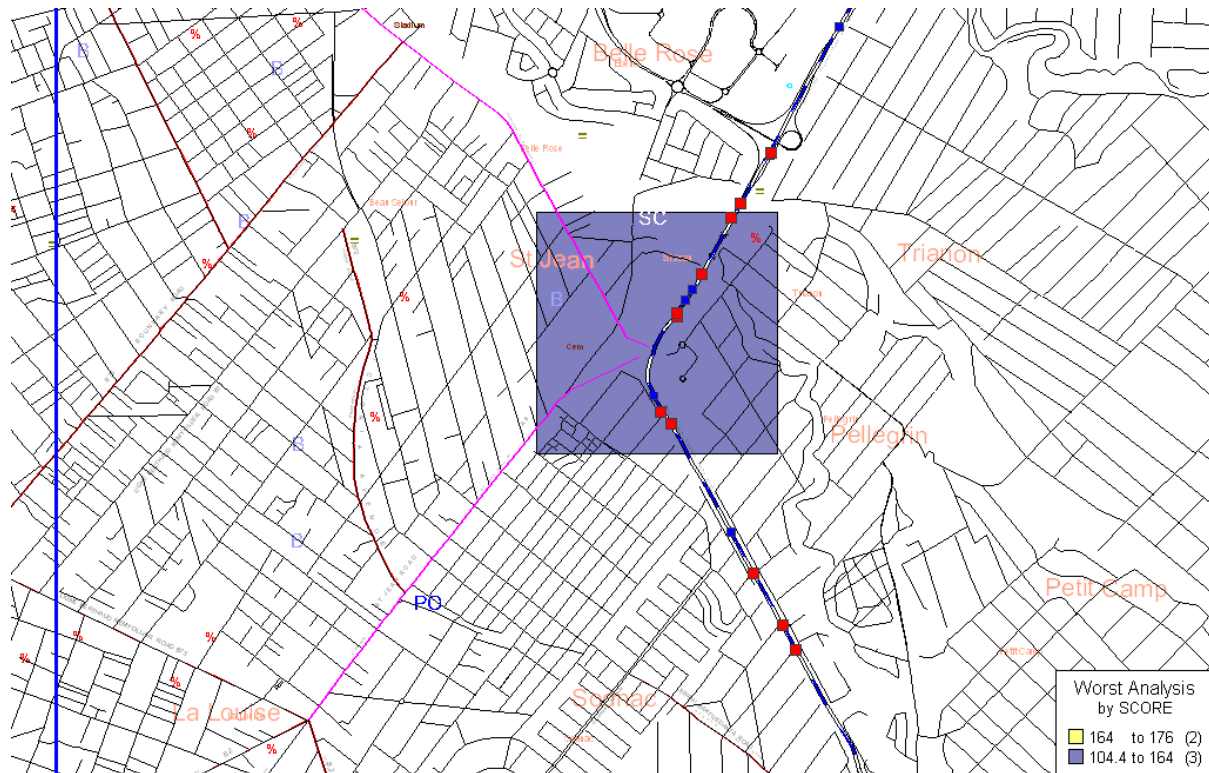


1.21 From the table below, it is found that the stretch of the motorway from Bagatelle up to Montagne Orly involved ‘out of control vehicles’, running off the road or ‘rear collision’.

The sloping gradient of the road before the approach to Pont Colville Deverell Bridge, on the northbound carriageway, encourages speeding and a sudden flat level road on the bridge combined with a bend after the bridge often causes vehicle to lose control or hard braking by vehicles.

year	2003	2004	2004	2004	2004	2004	2005	2005	2006	2006	2007	2007	2008	2008	2009	2009
acc sev	Fatal	Fatal	Fatal	Fatal	Fatal	Fatal	Ser	Fatal	Ser	Fatal	Ser	Ser	Fatal	Fatal	Ser	Ser
coll type	Right	Other	Head	RanOf	Head	HitPV	RanOf	HitPd	Rear	Rear	HitOf	Side	HitPd	HitPd	HitPd	Side
time	22:10	23:05	14:30	14:30	15:15	14:30	15:20	06:10	21:00	07:20	18:10	14:10	11:50	10:35	14:15	10:45
veh type V1	LGV	MotorCycs	Car	Minibus	Car	HGV	Car		HGV	Car	LGV	Car	HGV	MotorCycs	Bus	Car
veh type V2	Bicycls		Car		Car	MotorCycs		Car	LGV		MotorCycs					MotorCycs
veh type V3			Car		Car					MotorCycs						
veh type V4					LGV					LGV						
veh type V5					Car					LGV						
veh type V6					HGV											

1.3 MOTORWAY M1 in the region of St Jean



1.31 After analysis of this section it is found that due to the horizontal bend at the grade separated junction at St Jean, in spite of a posted speed limit of 80Kms, speeding is still being observed on the northbound carriageway and vehicles often lose control which result in road crashes.

The RDA is presently widening the motorway at that junction and safety measures are being incorporated within the project.

year	2005	2005	2006	2006	2006	2008	2008	2008	2008
acc sev	Fatal	Fatal	Fatal	Fatal	Fatal	Ser	Fatal	Ser	Ser
coll type	Rear	RanOf	HitPd	HitPd	HitOf	HitPd	HitOf	Other	HitPd
time	12:40	15:30	23:30	17:25	22:35	15:30	04:15	08:40	18:30
veh type V1	Car	LGV	Car	Bus	Car	Car	Car	HGV	Car
veh type V2	AntiCycle							MobiCycle	
veh type V3								Bus	

List of Blackspot areas along Classified roads in Mauritius

Based on analysis carried out using the MAAP software.

Black spot along Port Louis - Plaisance Dual Carriageway (M1)

1. Belle Village up to Caudan
2. Grewal junction up to Camp Chapelon
3. Bagatelle up to Montagne Ory
4. St Jean Grade separate junction

Black spot along Port Louis –Pamplemousses Dual Carriageway (M2)

5. Place D’Armes up to Quay D
6. Quay D to Cocoterie/Roche bois roundabout
7. Cocoterie to Riche Terre roundabout Bois Marchand to Calebasses

Black spot along Port Louis - St Jean road (A1)

8. Pointe aux Sable junction GRNW to Cite Valeejee
9. From Belle village to Brabant road
10. From Beau Bassin Market to Gamma Civic plant (Chapman hill)
11. RICHELIEUE

Black spot along Port Louis – Central Flacq road (A2)

12. Le Hochet to Terre Rouge
13. Abercombie up to Nicolay street

Black spot along Riviere Noire road (A3)

14. Bambous Up to its junction with Medine Road.
15. La Gaulette village

Black spot along Terre Rouge- Triolet –G.Baie road (A4)

16. Triolet from Lady Sushill SSS up to Bon Air road
17. NEAR Solitude Junction

Black spot along Mapou- GoodLands road (A5)

18. From its junction with Grand Gaube road up to GoodLands Traffic Centre road

Black spot along Moka- Camp De Masque-Flacq road (A7)

19. From its Junction with B7 up to St Pierre Traffic centre

Black spot along Savanne road (A9)

20. From St Aubin up to Union Du Cray

Black spot along Phoenix-Plaisance road (A10)

21. St Paul up to riverside road Phoenix

22. From Eau Coulee up to Malartic road Curepipe

Black spot along Plaine Magnien –Mahebourg road (A12)

23. Beau Vallon up to Mahebourg

Black spot along Candos- Vacoas (B3)

24. From La Caverne to Bonne Terre

Black spot along St Paul road (B4)

25. From Ligne Berthaud up to Golf road

Black spot along Black River Savanne Coast road (B9)

26. Riambel

Black spot along The Vale road (B12)

27. From Bois Rouge up to Fond du Sac

Black spot along Plaine des Papayes road (B17)

28. From Police Station to Bois Mangués Primary school

Black spot along Montagne Longue Creve Coeur road (B19)

29. Notre Dame

Black spot along Flacq –Mahebourg road (B28)

30. La Caroline up to Bel Air Riviere seche

Black spot along Flic en Flac road (B34)

31. From Medine Branch road up to Anna branch road

Black spot along Vingt pieds road (B45)

32. Sottise up to Plaine des Papayes road

Black spot along Sivananda road (B63)

33. From Curepipe road up to Floreal Junction.