



Implementing Safer Journeys and Embedding the Safe System Approach
(with a focus on NZ State Highways)

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Presentation Outline

1. Safer Journeys/Safe System resources
2. Embedding Safe System Training
3. New Guidelines
4. KiwiRAP monitoring
5. Research/Trials

www.saferjourneys.govt.nz



Safe system Training

1. Safe System in Practice (SSiP)
 - A two day introduction workshop
 - 4 last year (200 attendees)
 - 8 to 9 this year
2. Safe System Engineering Workshop (27-31 May 2013)
 - A five day workshop (renamed)
 - Safe system presentations with focus on engineering
 - Crash reduction and safety audit training

Safe system Training

Tentative two day SSiP Programme for 2013

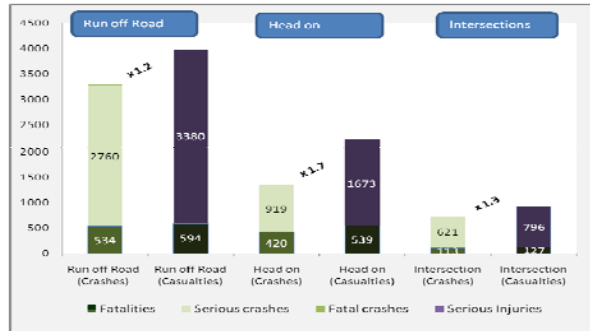
- Auckland (March – been)
- Palmerston North (8/9 May)
- Christchurch (6/7 June)
- Hamilton (25/26 June)
- Auckland (August)
- Tauranga (September)
- Dunedin (October)
- Napier (TBC)



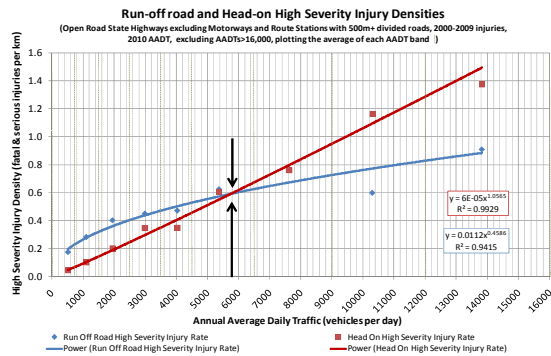
Safe system Guidelines



High Risk Rural Roads & Crash Types



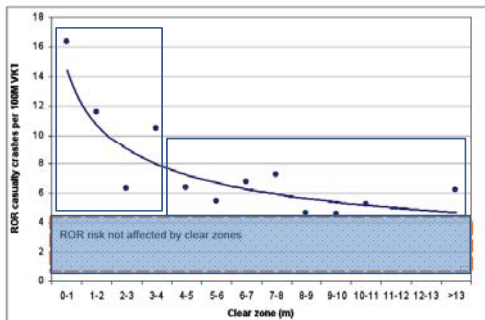
Rural State Highway – run-off road and head-on



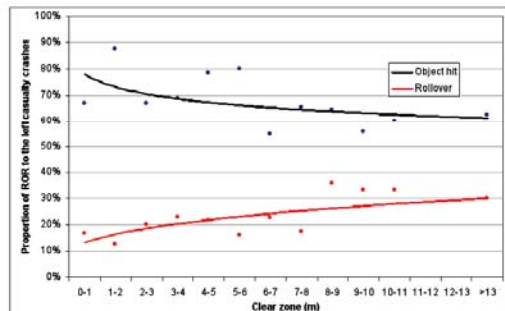
Run-off Road Hit Object Severity

Hazard	Dsi/Injury Crash	
	100km/h	60km/h
Poles	0.81 (Frangible 0.57)	0.68
Trees	0.75	0.61
Fence/Wall	0.55	0.44
Embankment	0.53	0.31
Traffic Signs	0.43	0.52
Safety Barrier		
• Rigid	0.50	-
• Semi-rigid	0.61	0.36
• Flexible (Wire Rope Barrier)	0.33	-

Effect of clear zone width

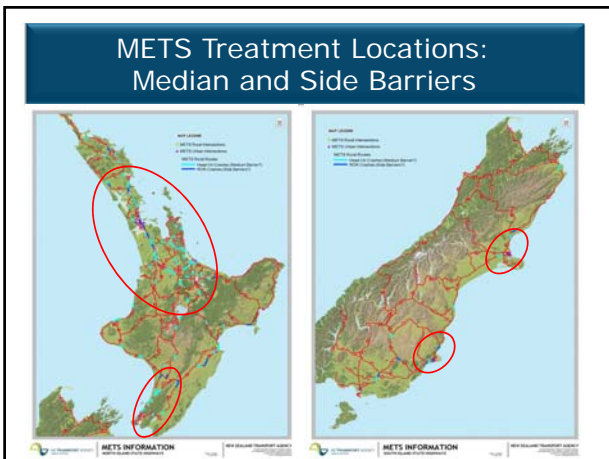
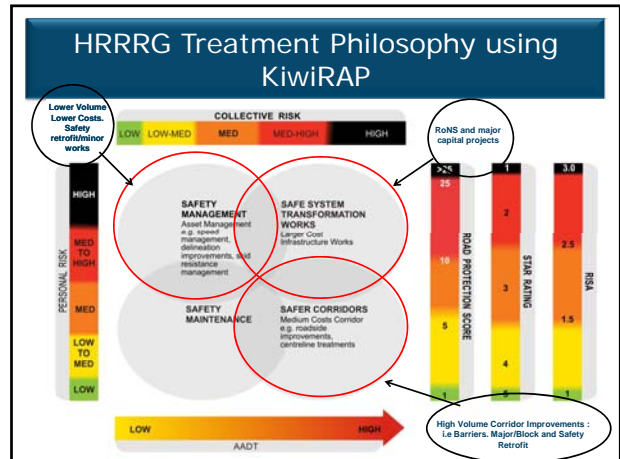
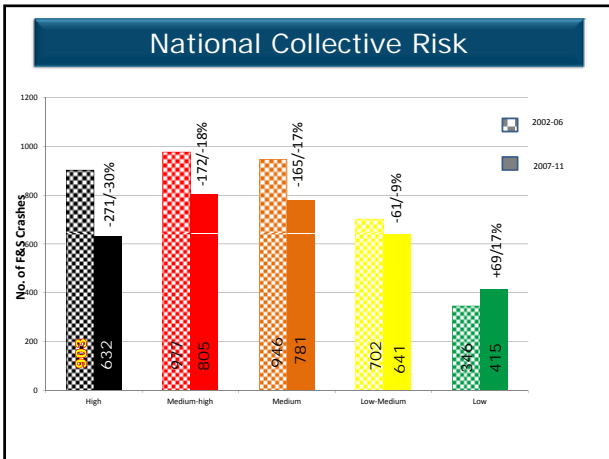
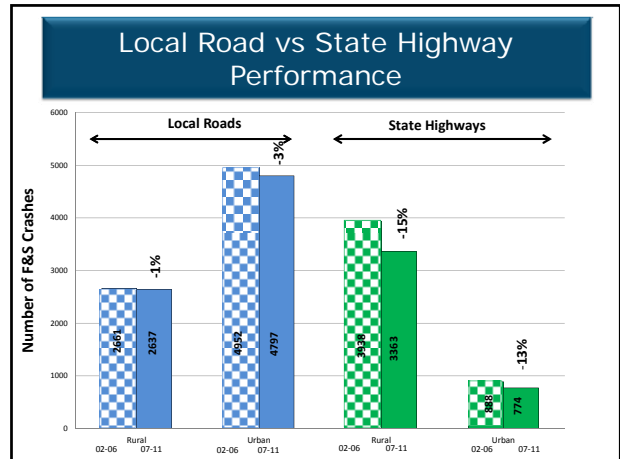


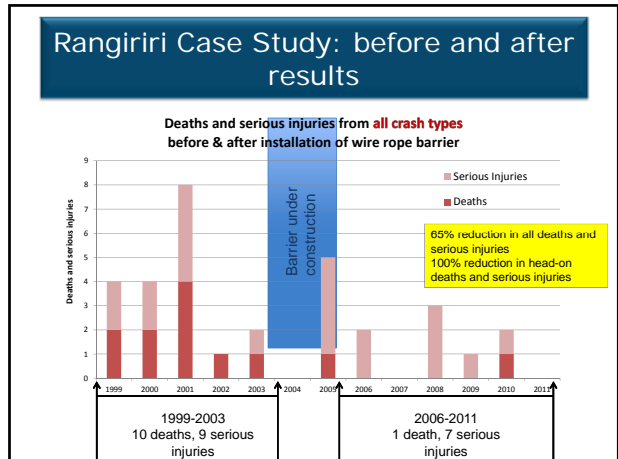
Proportions of ROR versus rollover within clearzone



Identifying High Risk Rural Roads KiwiRAP Road Assessment Programme

2008 **2010** **2012**



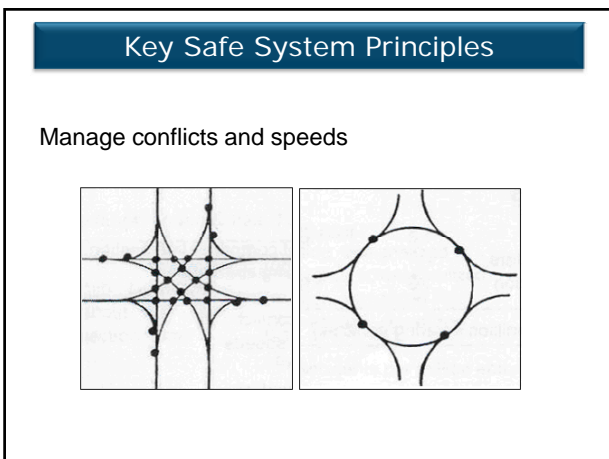


Targeting High Risk Intersections

National Worst 100 State Highway Intersections									
National Rank	Region	Count Fatal	Count Serious	Count Minor	Dist Crash Equivalents	Collective Risk	State Highway	Street 1	Street 2
1	Waikato	0	2	16	3,987	HIGH	9	Falgun Road	
2	Waikato	1	1	10	3,246	HIGH	5	Armoithi Avenue	Kidika Drive
3	Hawkes Bay	0	1	11	3,123	HIGH	2	28	Waltman Road
4	Bay of Plenty	0	3	9	3,455	HIGH	5	30	
5	Auckland	0	0	11	3,300	HIGH	18	Old North Road	Tangohi Road
6	Canterbury	0	3	15	3,341	HIGH	013	Memorial Avenue	
7	Hawkes Bay	0	4	7	3,308	HIGH	2	SGA	Ta Puia Road
8	Otago	0	2	18	3,070	HIGH	011	Green King Street North	
9	Canterbury	1	4	17	3,046	HIGH	74	Main North Road	
10	Wellington	0	5	7	2,957	HIGH	2	Wakaki Street	Hurricane Road
11	Waikato	0	0	9	2,892	HIGH	18	Holland Road	
12	Wellington	1	1	18	2,873	HIGH	019	Victoria Street	
13	Taranaki	0	4	6	2,854	HIGH	3	Wanganui Road	
14	Southland	0	2	7	2,660	HIGH	011	Kennings Road	Kennings-Roslyn Bush Road
15	Wellington	0	2	9	2,617	HIGH	11	Monteth Road	
16	Waikato	2	3	4	2,573	HIGH	029	5	(Trail)
17	Canterbury	0	3	8	2,551	HIGH	021	Shannon Road	Waiharakeke Road
18	Canterbury	0	6	15	2,524	HIGH	754	Epsom Road	Main South Road
19	Manawatu-Wanganui	0	3	5	2,475	HIGH	019	Highway 50	
20	Canterbury	0	4	11	2,449	HIGH	74	Marlborough Road	
21	Auckland	0	5	2	2,463	HIGH	14	Kapitiwhara Road	
22	Auckland	0	2	4	2,396	HIGH	029	Southern Road	South Avenue
23	Bay of Plenty	1	2	4	2,349	HIGH	2	Showground Road	Ta Tumu Road
24	Bay of Plenty	1	1	6	2,309	HIGH	2	Wilsons Bay Road	
25	Auckland	1	2	6	2,251	HIGH	029	Wayby Station Road	Wayby Valley Road

Top 5 Crash Types at Intersections

Urban			Rural		
Crossing no turns	19%		Right turn out	20%	
Right turn in with opposing traffic	17%		Loss of control while cornering	20%	
Pedestrians	13%		Crossing no turns	16%	
Loss of control while cornering	13%		Right turn in with opposing traffic	13%	
Right turn out	11%		Turn in same direction	9%	



Updated Safety Audit Procedures

Severity Rating (Likelihood of Death or Serious Injury Consequence)	Frequency Rating (Probability of a Crash)			
	Frequent	Common	Occasional	Infrequent
Very Likely	Serious	Serious	Significant	Moderate
Likely	Serious	Significant	Moderate	Moderate
Unlikely	Significant	Moderate	Minor	Minor
Very Unlikely	Moderate	Minor	Minor	Minor

