

KiwiRail Level Crossing Safety Initiatives

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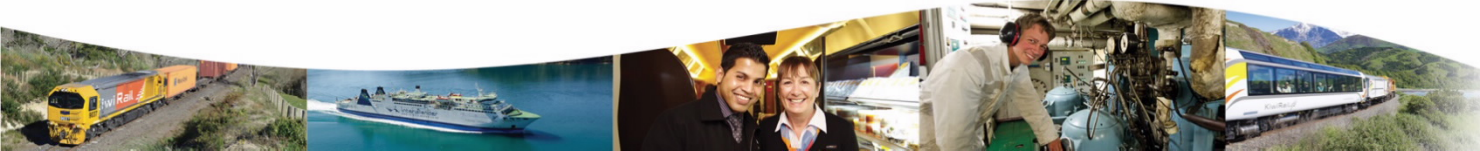
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Safer System Approach

Problem Identification

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1) Safer System Approach

- People make mistakes
- People are vulnerable
- Reduce serious and fatal injuries
- Very much the scenario for Level Crossings



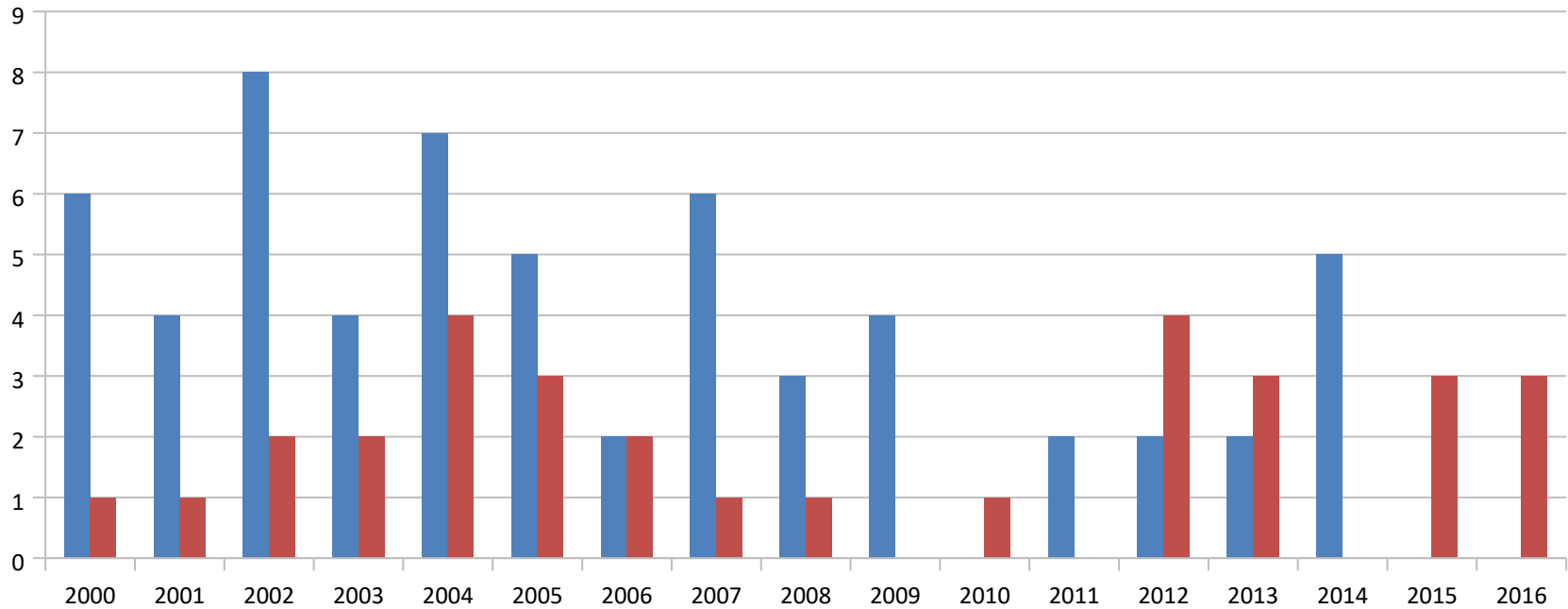
2) Problem ID

Distraction



Vulnerable Users

Figure 1 Motor Vehicle and Pedestrian /Cyclist Fatality Numbers Jan2000 - May2016



■ Motor Vehicle Fatalities ■ Pedestrian and Cyclist Fatalities



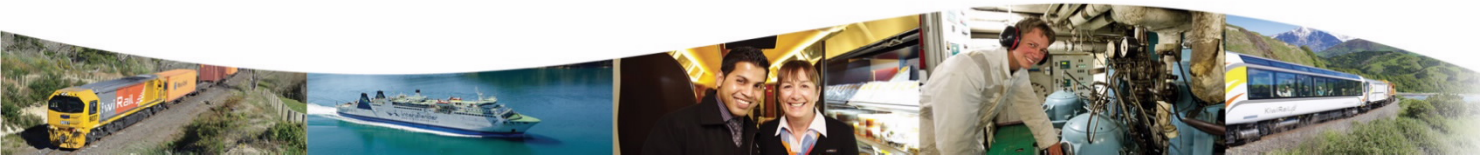
Passive Crossings



- Driver required to look for trains
- Complacency – Low train numbers

Passive Crossing	Active Crossing	Passive Crossing	Active Crossing
Serious injury	Serious injury	Fatal injury	Fatal injury
23	9	9	2

Table 1 Number of serious and fatal injuries at NZ level crossings- 2010-2014 - Source CAS



Short Stacking

- 26 metres clearance required between road limit line and nearest rail



Metro Areas

- Faster, quieter trains
- Higher exposure rates
- Irrational driver behaviour



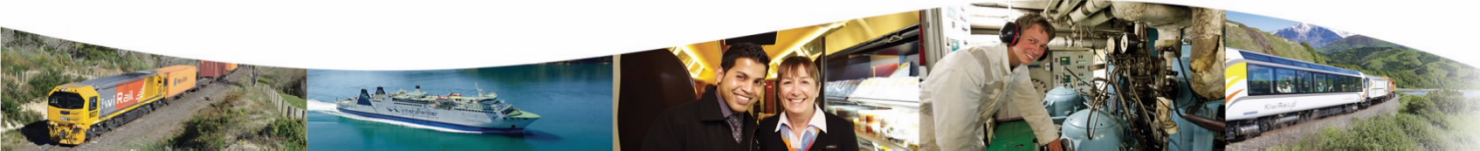
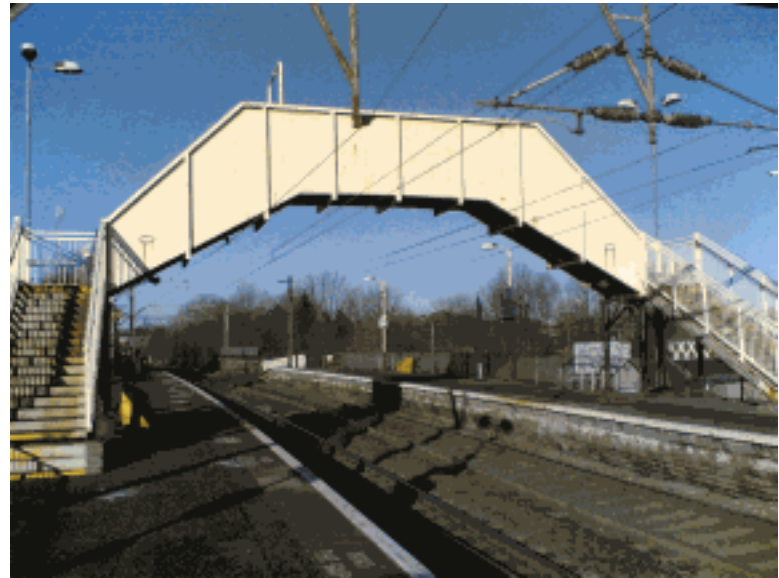
3) Initiatives

- Level Crossing Safety Impact Assessment
- Rail Crossing Risk Assessment Guidance, July 2017



Active User Design Guide

- NZTA, RCA Forum, KiwiRail endorsed Pedestrian / Cycle design guide , July 2017



Active Signs Trial

- ‘Expect Trains’ active sign initiative
- Move to ‘Stop Ahead’ words –NZTA trial



Short Stacking Trial

- Crash Prediction Early Warning System



Pedestrian Pavement Lights

- Pedestrian Distraction Initiative



Regional Seminars

- Oct-Nov 2016, May 2018



4) Conclusions

- Attitudinal step change
- Risks are real
- Shared responsibility
- On the right track

