



**Land Transport NZ**  
Ikiiki Whenua Aotearoa

# Australasian Level Crossing Assessment Method (ALCAM)

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## **Land Transport NZ Board decision:**

- February 2006
- Adopt ALCAM for NZ
- Obtain ALCAM with OnTrack
- Conduct surveys of public crossings jointly with OnTrack
- Fund required improvements at normal FAR

## ALCAM – A Risk Model

- Developed in Queensland 1999 – 2003
- All Australian states and NZ
- Identifies and quantifies risks at level crossings
- Compares risk to two limits
- Optimises, prioritises treatments to reduce risks
- Tested on sample of NZ level crossings
- Continuously reviewed and calibrated

# ALCAM – Elements of the Model

- Risk score based on 7 characteristics:
  - quality of active protection
  - road geometry
  - road traffic control
  - road vehicles mix and speed
  - rail vehicles frequency and speed
  - crossing geometry (surface and number of tracks)
  - sight distances
- Data entered into LXM database

## **ALCAM – Elements of the Model**

- Characteristics indicate what the best remedial measure may be
- Less effective measures get less priority
- Current OnTrack model only considers installing active controls
- PEM will be changed to include ALCAM
- Improvements required on the road will be funded at the normal FAR

## ALCAM - Progress in New Zealand

- Survey staff engaged by OnTrack
- Land Transport liaising with r.c.a.s, TMPs
- Completed DART crossings, north Waikato
- Planned to Te Kuiti, Wellington, Onehunga
- Expand to two teams
- Data into LXM

# ALCAM – Expectations of Road Controlling Authorities

- Approval of TMPs
- Provision of road traffic data
- Attendance at surveys
- Implement identified improvements