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# A model for star rating school walking routes – *Walk this Way*

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# A vision to facilitate safer walking

- Community priority to encourage active transport to school for young people
- One of the biggest safety risks is crossing the road
- Users need an objective way to:
  - Identify dangerous road crossings
  - Determine areas for improvement
  - Assess alternatives
- Vision to provide a simple, objective tool to rate road crossing safety

# Five key factors

1. Speed
  - Including speed-moderating infrastructure
2. Traffic volume
3. Road width
4. Number of conflicting traffic directions
5. Presence/type of crossing facility

# Walk this Way

- 'Base' star rating derived from speed
- Modify base according to relative risk contributions from other factors
- Ratings capped at top and bottom of scale
  - Rating  $\geq 5$  stars  $\rightarrow$  5 stars
  - Rating  $\leq 0$  stars  $\rightarrow$  0 stars



## Results – residential street

- 50 km/h with speed hump (-20 km/h)
  - Base  
2.0 ★ + 5.2 ★ = 7.2 ★
- 2 lanes, 2 conf. dirns
  - No correction
- 0-150 veh./hour: +1.2 ★
- Total: 8.4 ★



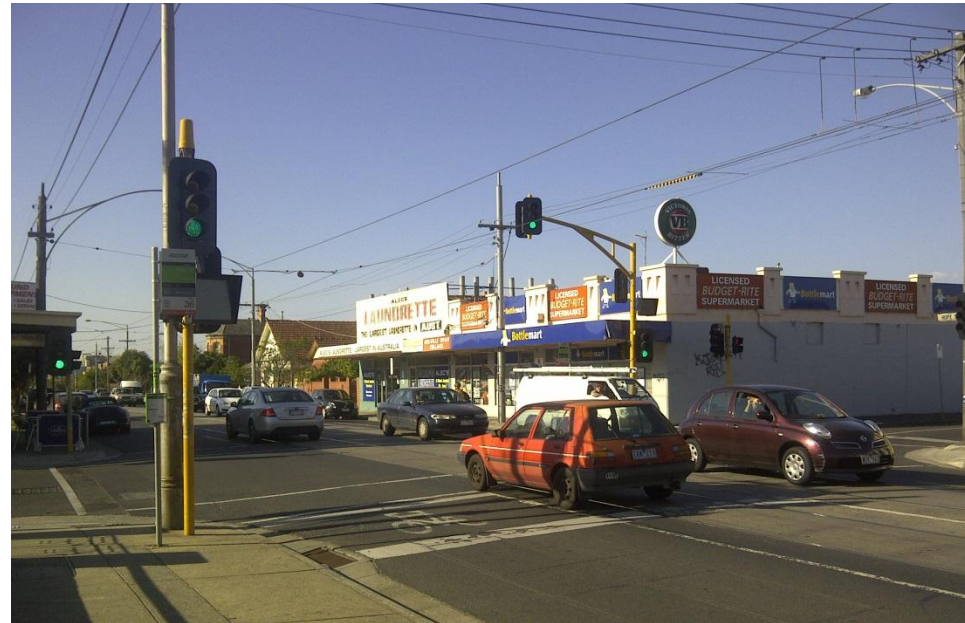
## Results – suburban arterial

- 60 km/h
  - Base 1.1 ★
- Traffic signals: +1.5 ★
- 3 lanes: +0.5 ★
- 3 conf. dirns: +1.0 ★
- 1500-2000 veh./hour
  - No correction
- Total: 4.1 ★



## Results – inner suburban arterial

- 60 km/h
  - Base 1.1 ★
- Traffic signals: +1.5 ★
- Crossing supervisor: +0.5 ★
- 4 lanes, 4 conf. dirns:
  - No correction
- 2501-3000 veh./hr: -0.6 ★
- Total: 2.5 ★



★★★

# Finally...

- Walk this Way
  - Known relationships supplemented by expert judgement
  - Calibrated for internal consistency
  - Further work
    - Validate relative risk levels
    - Include other variables

