

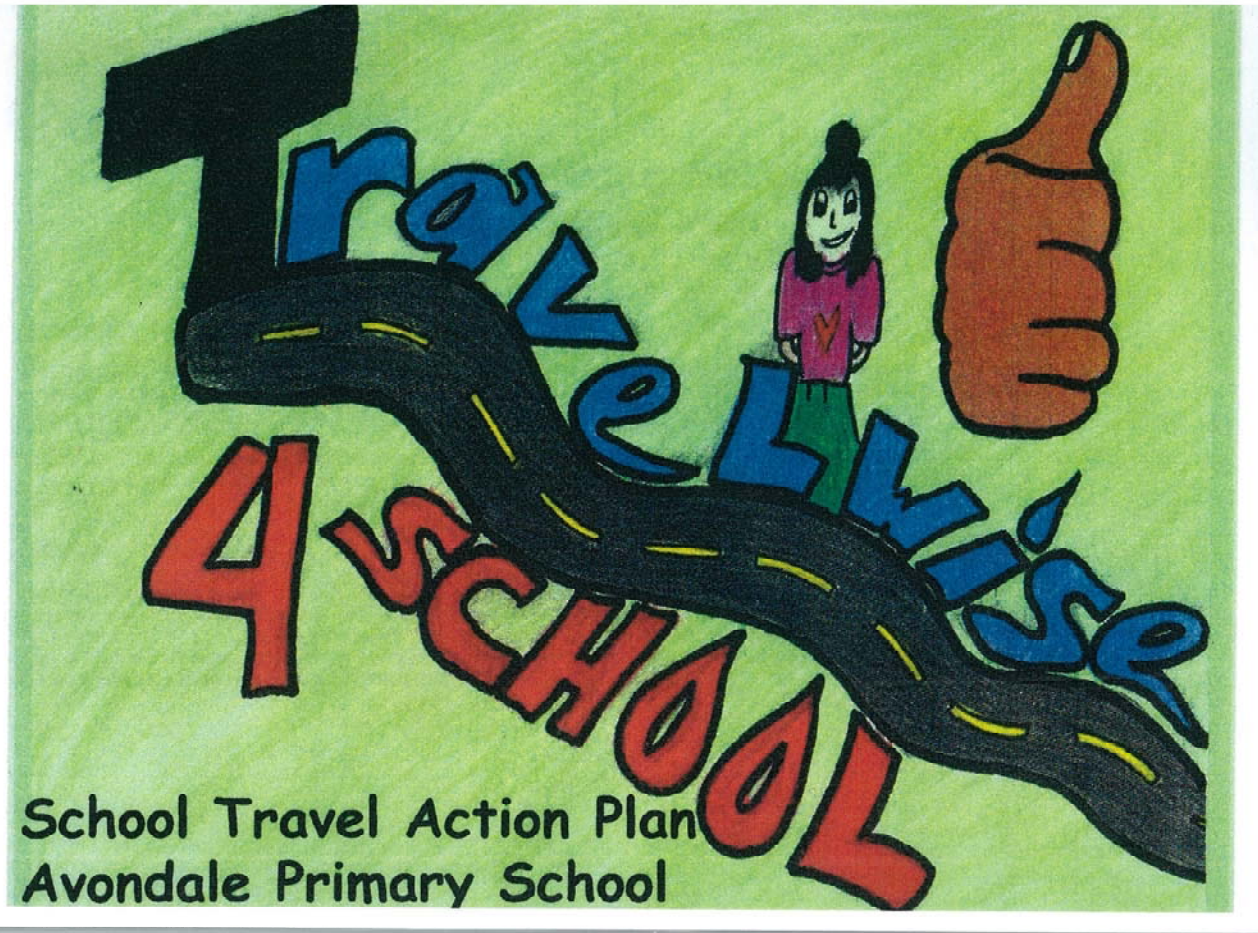


NZ TRANSPORT AGENCY
WAKA KOTAHI

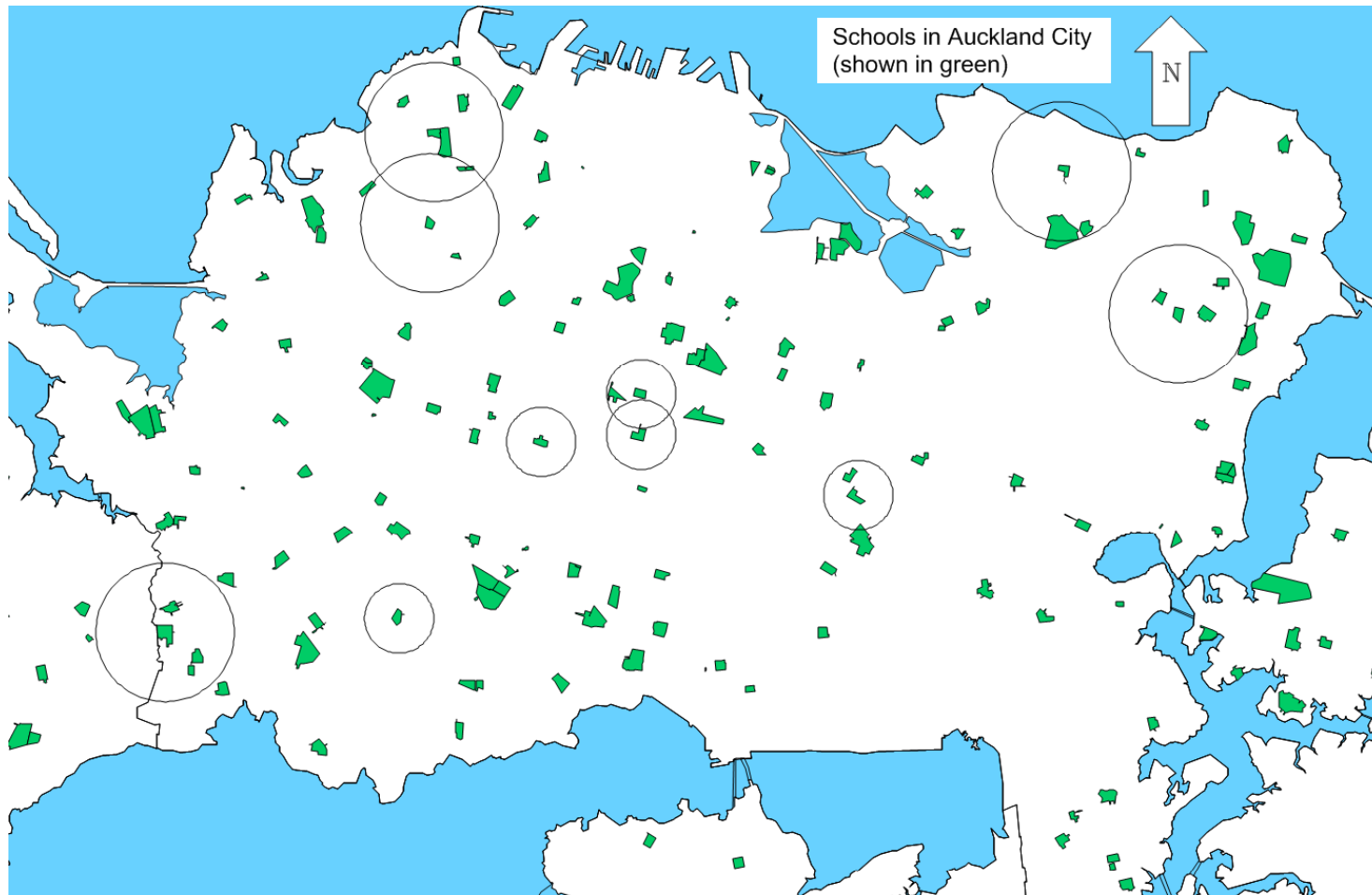
The Statistical Accident – Safety Benefits of School Travel Plans

August 2010

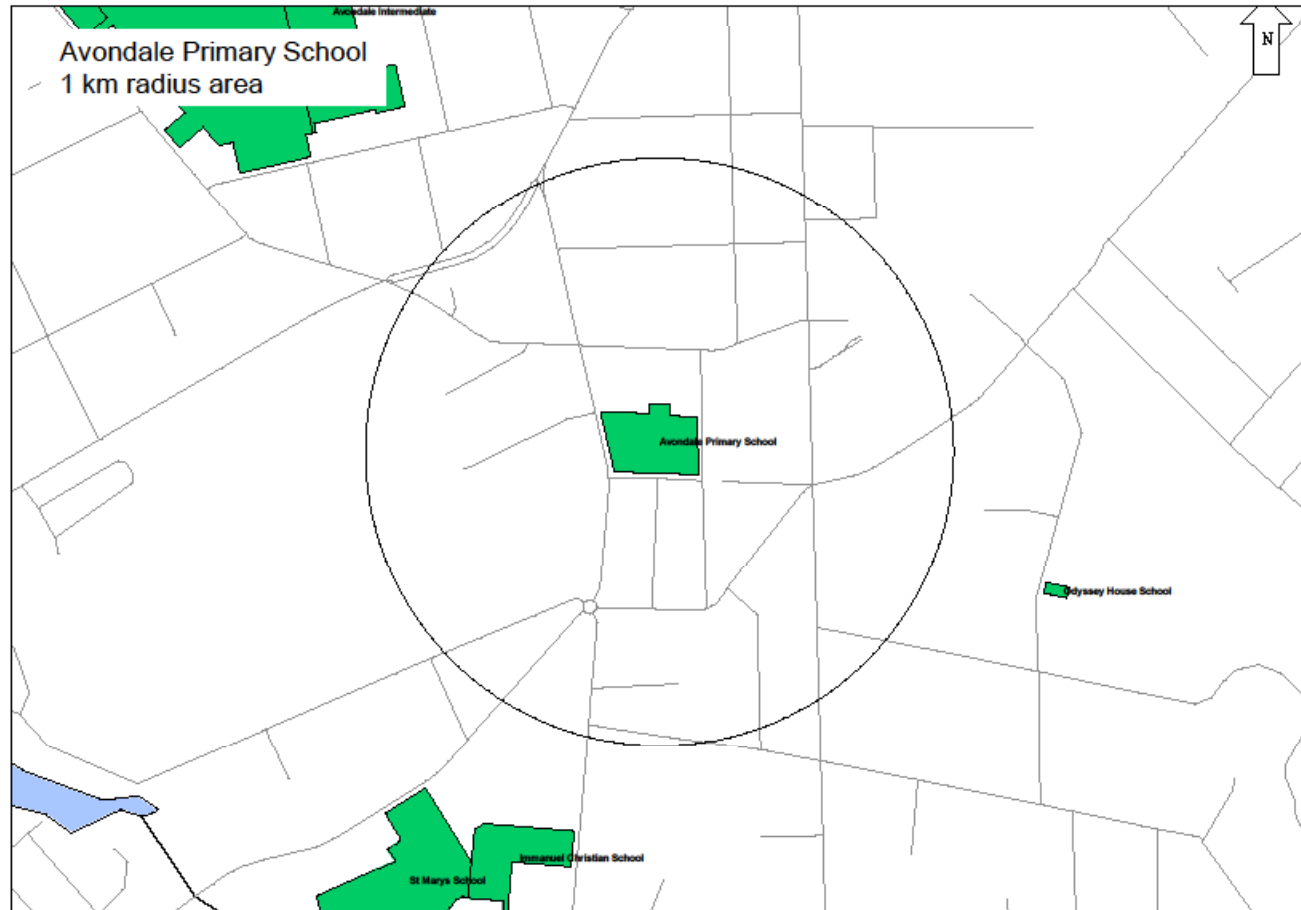
In the beginning ... the glow



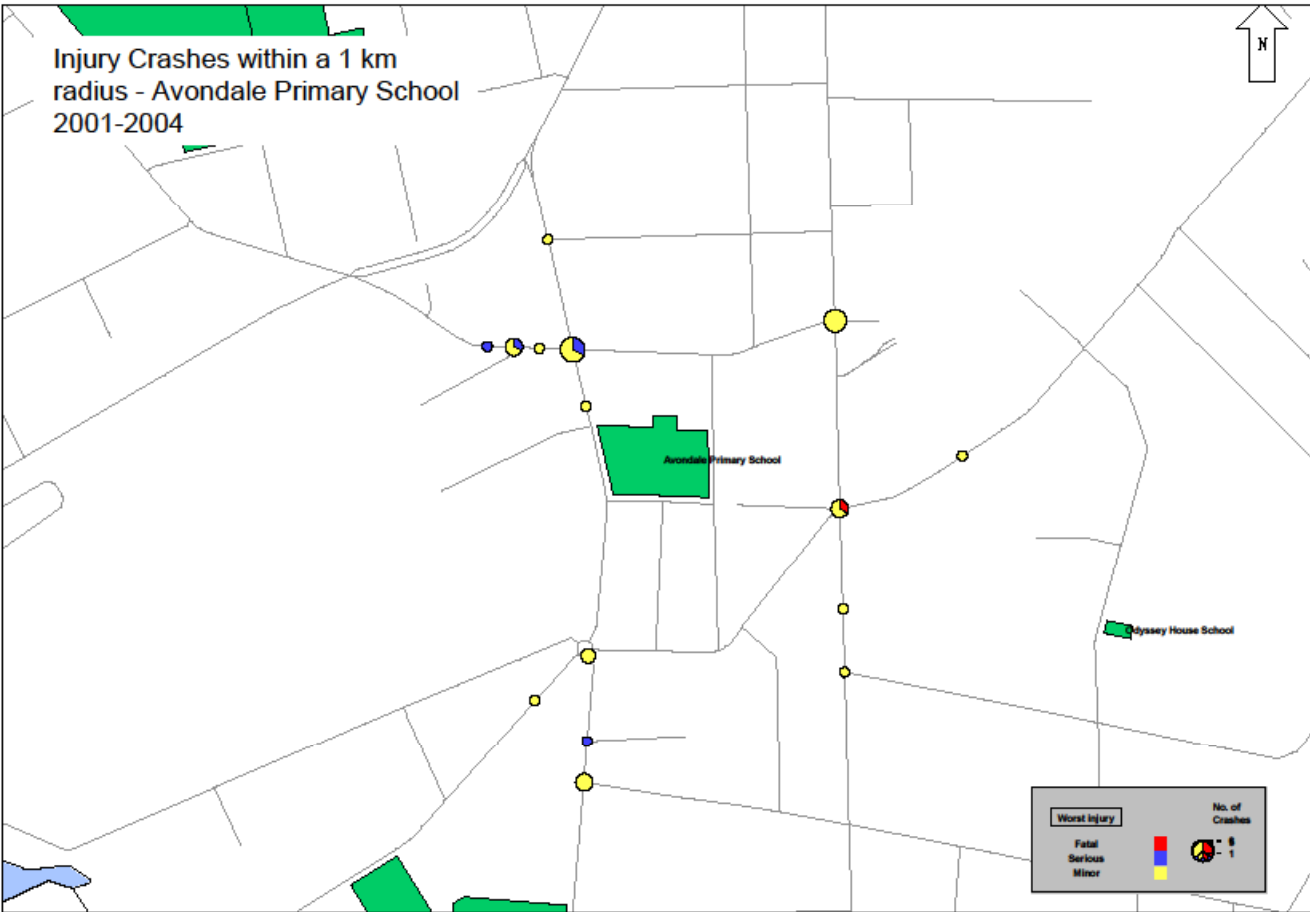
An Overview



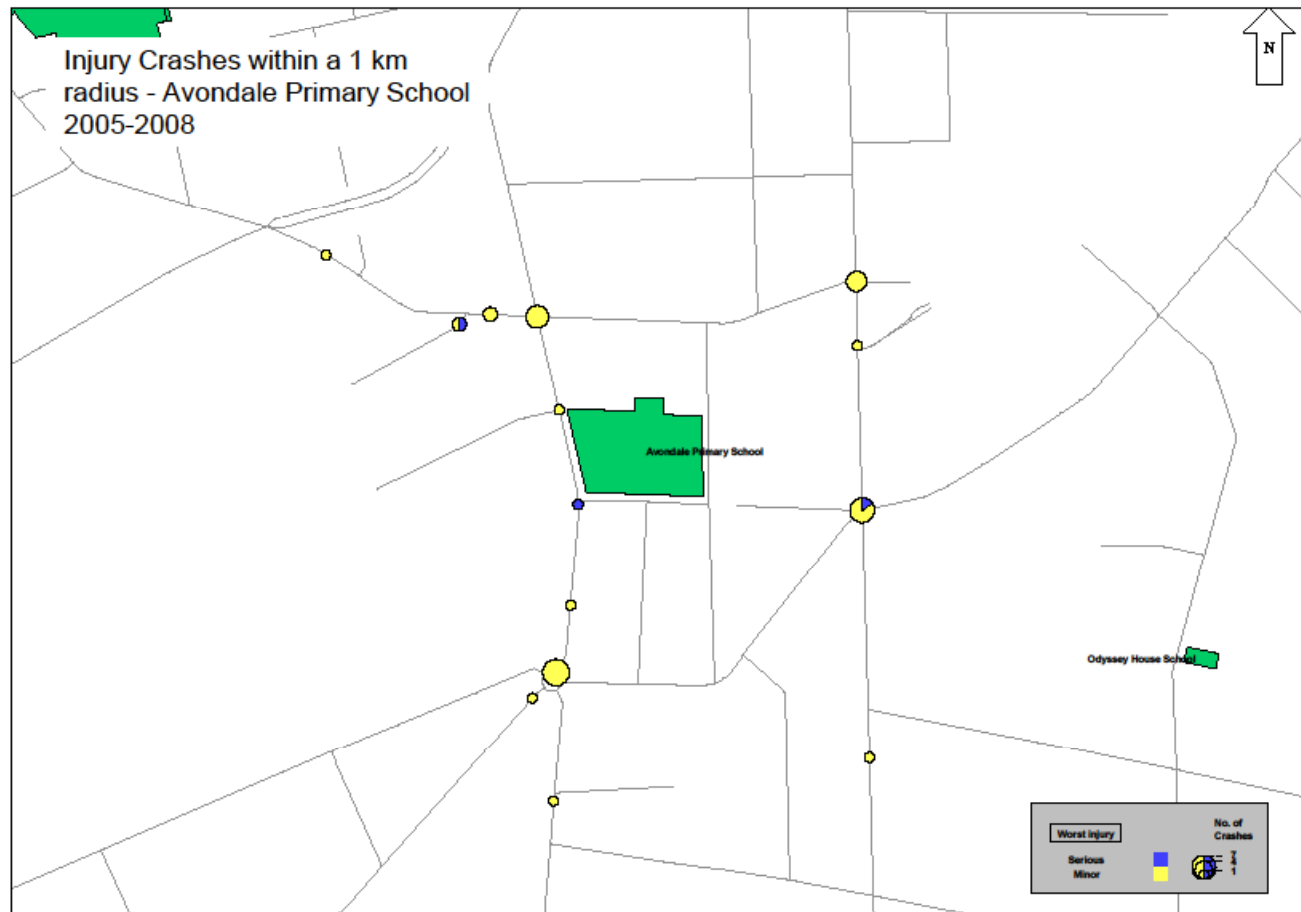
A peek into CAS



Avondale Primary - before



Avondale Primary - after



Defining 'with' and 'without'

- Finding out how students and teachers travel to and from school
- Finding out how they would prefer to travel
- Identify barriers to changing from private vehicle trips
- Identifying ways to remove those barriers including ...
 - “hard measures”
 - Pedestrian crossings
 - New footpaths
 - 40km speed zones
 - “soft measures”
 - Walking school buses

It's all relative

- 11 Schools with STPs in the Auckland City area
- How did they compare with schools without STPs?
- Are we comparing apples with apples?

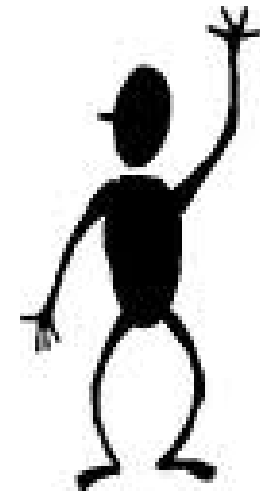
Apples with Apples

- **Roading environment**
 - Number of signalised intersections
 - Length of arterial roads
- **School Roll size**
- **Decile rating**
- **“Exposure”**
 - At the very least constant

Hands Up ...

Some weaknesses

- Relatively small sample size
- Doesn't account for other works
- Basic 'exposure' calculation
- Small 'after' periods available
- Basic 'hard' & 'soft' measure assessment
- No 'severity' assessment
- Limited to Auckland City



What's been going on??

- Reported walking and cycle crashes for 5-13 year olds
- **Schools with STPs**
 - 57% less
 - Average annual social cost reduced by 60% (\$1.3m to \$0.5m)
- **Schools without STPs**
 - 8% less
 - Average annual social cost increased by 48% (\$0.3m to \$0.5m)

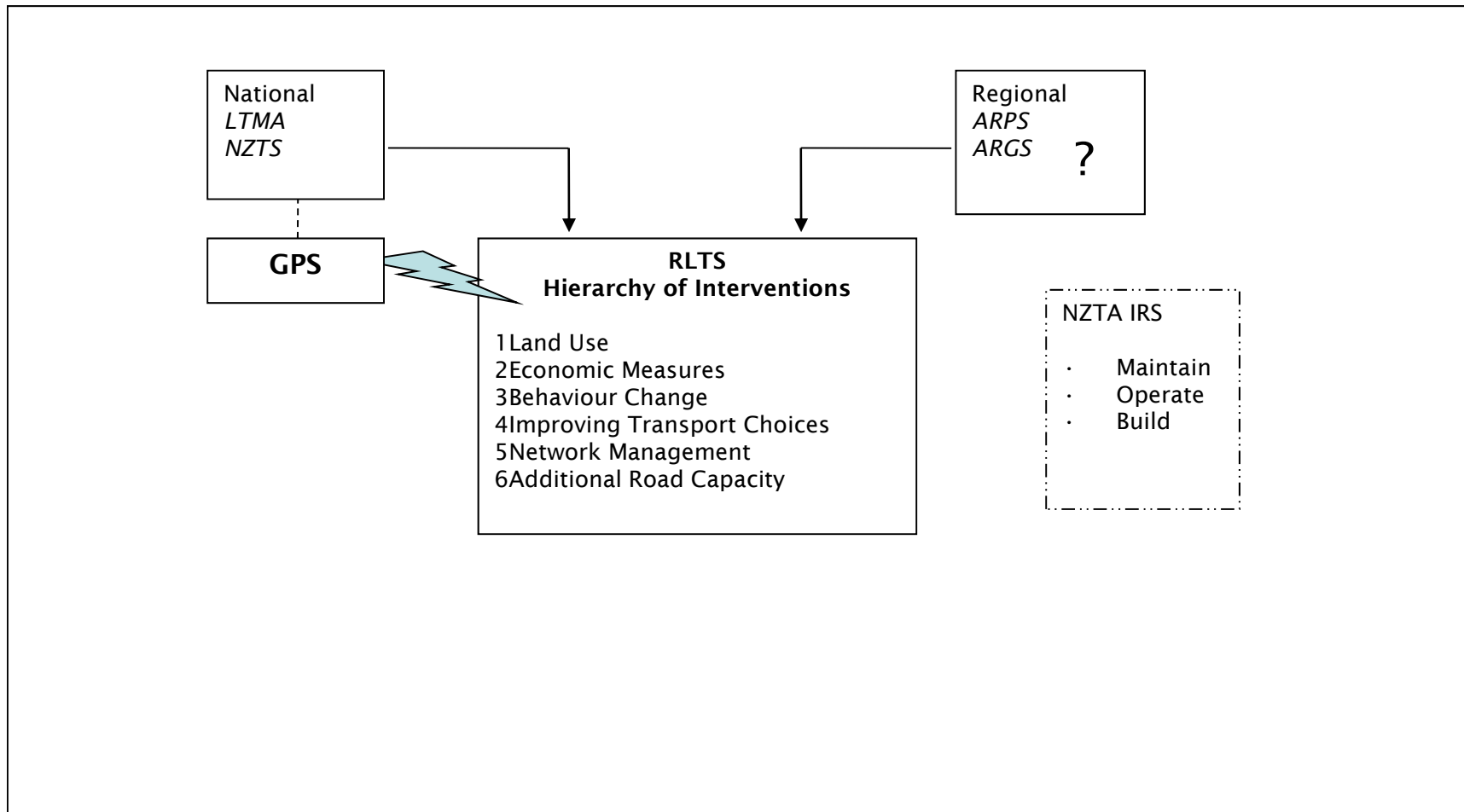
Summary

- **Auckland City**
 - **Schools**
 - **11 Schools**
 - **Crashes**
 - **All schools**
 - **Beyond schools**
 - **Outside of Auckland City**
- **Inclusive of Environment, Health & Accessibility**

Special thanks to ...

- **Karyn Van Dam & Chris Hewitt**
 - Performance Information, NZTA
- **Doug Millar**
 - Performance Monitoring, NZTA
- **Angie Crafer and Michelle Seymour**
 - Flow Transportation Specialists

Strategic Background



The Hierarchy

1. Land Use

- Appreciating the extent land use decisions affect transport planning

2. Economic Measures

- Such as parking supply and cost

3. Behaviour Change

- Such as ARTA's school travel plan programme

4. Improving Transport Choice

- Improving and extending the walking, cycling and PT network

5. Network Management

- Arterial Road Network optimisation

6. Additional Road Capacity

- Planned local authority and NZTA works