The Low volume road sector

Jamie Cox – RCA- Chair LVR SIG
National guidelines

Landuse
Pavement consumption
Users paying their fair share
Primary products comprise 55% of NZ export receipts

Getting NZ’s exports to port

requires 1.3 to 1.8 tonne kilometres use of local and regional roads for every 1 tonne kilometre use of state highways
Rural Based $24.6B

Total = $44 Billion
Total agriculture, fishing, and forestry export revenue is forecast to exceed $40 billion in 2018.
What's powering the NZ boom economy?

The super city? No

Low Volume roads! Yes
What is happening about Dust?
Local government remit - That the Crown establish a working party to:

(a) investigate the impact of unsealed road dust

(b) develop a national strategy supporting RCA’S to mitigate the effects of road dust
The working group has a national action plan for the prioritisation of risk for the network. The working group will provide councils with exemplar business cases to secure co-investor funding.
Road dust working group representation:
• National Air Quality Working Group – Karen Parcell, BoP Regional Council
• Ministry of Health – Suz Halligan and Louise Wickham (Emission Impossible)
• Ministry for the Environment – Travis Ancelet
• Local Government New Zealand – Tom Simonson
• NZTA – Greg Haldane, Chris Gasson, Rob Hannaby, Janette Williams
• Far North District Council – Cr Ann Court and Jacqui Robson
• Marlborough Roads – Steve Murrin
• Marlborough District Council – Jon Cunliffe
• Whangarei District Council – Jeff Devine and Mark Seakins
• Kaipara District Council – Garry McGraw and Bernard Peterson
• Wairoa District Council/RCA – Jamie Cox
Knowledge gaps

• Scale of the problem - Enormous breadth
• Tools to assess priority
• Tools to assess mitigation
• Tools to support investment
Road dust effects

• Public health impacts
• Road safety impacts
• Ecological impacts
• Economic impacts
• Amenity and wellbeing effects
Funding dust treatment

- Proprietary dust suppressants - $5/m^2 to $16/m^2 limited lifespan
- Most effective method - seal the road - $150,000 per km

- NZ Transport Agency has released a methodology for assessing the merits of undertaking dust mitigation (General Circular Investment 16/04)
General Circular
Investment: No 16/04

Subject
Release of an approved methodology for assessing the merits of undertaking dust mitigation and how this fits within the investment assessment process for the Road Maintenance Activity Classes.

Circulation
Asset Managers (all Approved Organisations)
NZTA (State Highways)
Local Government New Zealand
Office of the Auditor General

Circulated by
Bob Alkema – National Manager Investment

Date
5 August 2016
<table>
<thead>
<tr>
<th>Number of dwellings (houses/km)</th>
<th>0</th>
<th>1</th>
<th>2-4</th>
<th>5-7</th>
<th>8-10</th>
<th>More than 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other locations where people are likely to be exposed. (eg schools, marae, or hospitals) (sensitive locations/km)</td>
<td>None</td>
<td>1-2</td>
<td>3 or more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecologically sensitive areas such as rare species habitats or wetlands (sensitive locations/km)</td>
<td>None</td>
<td>1-2</td>
<td>3 or more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horticultural sensitive areas such as fruit orchards (sensitive locations/km)</td>
<td>None</td>
<td>1-2</td>
<td>3 or more</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Dust Risk Category and Action to Be Taken

<table>
<thead>
<tr>
<th>Total dust risk score</th>
<th>Dust risk category</th>
<th>Potential benefit from dust mitigation</th>
<th>Action to be taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 9</td>
<td>Low</td>
<td>Little or no benefit from mitigation.</td>
<td>End of decision-making process.</td>
</tr>
<tr>
<td>10 to 19</td>
<td>Medium</td>
<td>There may some benefit from mitigation.</td>
<td>Return to and repeat the 'Site dust risk factors and scores' with refined site-specific information.</td>
</tr>
<tr>
<td>20 to 28</td>
<td>High</td>
<td>There is likely to be a benefit from mitigation.</td>
<td>Complete assessment of suitable mitigation options.</td>
</tr>
</tbody>
</table>
Where to from here?

• Continue to shape work with NZTA to:
  • Develop model Business Case for mitigation funding
  • Assemble reference case studies

• Continue to collect local prioritisation data
  • Is it not a high priority for some RCAs?
Content

Funding dust treatment

• Take dust treatment out of the ‘too hard’ basket

• Do the detail to justify expense

• Work together