Managing Future Demands

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NZ Transport Agency

Delivering Change Through Collaboration

18 September 2015
Todays conversation

- What is the problem we are trying to fix?
- What is collaboration
- We have achieved some great stuff to date
- What will the partners bring to the conversation
- What do we need to do next?
What are we trying to achieve – the strategic context

2009 Government Policy Statement on Transport

Road Maintenance Task Force – Oct 2012

Road Efficiency Group

Cost Drivers
Asset Mgmt Planning
Risk Management
Delivery of M,O & R
Innovative Procurement
Innovative services and products

Strategy into Action
The ONRC Framework
### Government, Regional & Local objectives

<table>
<thead>
<tr>
<th>Government Policy Statement</th>
<th>One Network Road Classification</th>
<th>Regional Land Transport Policy</th>
<th>Community Outcome</th>
<th>Transportation Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic Growth and Productivity</strong></td>
<td>Reliability</td>
<td>A transport system that provides appropriate choices</td>
<td>A Thriving Economy</td>
<td>Provide a fully accessible roading network</td>
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<tr>
<td></td>
<td>Resilience</td>
<td>A transport system that supports economic activity and productivity.</td>
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<td></td>
<td>Accessibility</td>
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<tr>
<td></td>
<td>Amenity</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Road Safety</strong></td>
<td>Safety</td>
<td>A transport system that is safe</td>
<td>A Safe and Healthy Community</td>
<td>Provide a safe roading network</td>
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<td>Optimal Speeds</td>
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<tr>
<td><strong>Value for Money</strong></td>
<td>Effectiveness</td>
<td>A transport system that delivers appropriate levels of service</td>
<td>A Sustainable Environment</td>
<td>Provide an efficient roading network</td>
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</table>
The Measure Minefield! Central Otago District Council (CODC)

- Mandatory DIA Measures (5) → 5 in LTP
- Council LTP Measures (8) → 4 in LTP
- ONRC Outcome Measures (8) → 1 LTP/8x5 AMP
- ONRC Technical Measures - lots → All in AMP
Using Performance Measure Information

- **Target measures** → Compare to target, identify gap
- **Reporting/Benchmarking measures** → National report back process needs to occur to be meaningful
- **How we deliver specified outcomes** → Identified some gaps which expose Councils to risk
- **Existing local measures** → Resident surveys, customer call numbers etc
## Heavy Vehicle Access – Bridge Restrictions

<table>
<thead>
<tr>
<th></th>
<th>Primary Collector</th>
<th>Secondary Collector</th>
<th>Access</th>
<th>Access Low Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of road not accessible to Class 1 vehicles</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>58km</td>
</tr>
<tr>
<td>Detour(km)</td>
<td>22km</td>
<td>17km</td>
<td>0</td>
<td>None available</td>
</tr>
<tr>
<td>Length not available to 50max</td>
<td>0</td>
<td>17km</td>
<td>24km</td>
<td>173km</td>
</tr>
<tr>
<td>Detour(km)</td>
<td>22km</td>
<td>17km</td>
<td>51km</td>
<td>None available</td>
</tr>
</tbody>
</table>
### Identified Gaps in Customer Level of Service

<table>
<thead>
<tr>
<th>ONRC Outcome-Area</th>
<th>Arterial</th>
<th>Primary-Collector</th>
<th>Secondary-Collector</th>
<th>Access</th>
<th>Low-Volume Access</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reliability</strong></td>
<td>Generally-consistent travel times with some exceptions in urban heavy peak, holidays, major events or during moderate weather events.</td>
<td>Generally-consistent travel times except where affected by other road users for weather conditions.</td>
<td>Travel times may vary as a result of other road users (all modes), weather conditions or the physical condition of the road.</td>
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<tr>
<td><strong>Resilience</strong></td>
<td>Route is nearly always available except in major weather events or emergency events and where no other alternatives are likely to exist.</td>
<td>Route is nearly always available except in major weather events or emergency events and alternatives may exist.</td>
<td>Route may not be available in moderate weather events and alternatives may not exist.</td>
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<tr>
<td><strong>Accessibility</strong></td>
<td>Some land use access restrictions for road users, both urban and rural.</td>
<td>Land use access for road users is generally permitted but some restrictions may apply.</td>
<td>Access is to all adjacent properties for road users.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Amenity</strong></td>
<td>Good level of comfort, occasional areas of roughness.</td>
<td>Moderate level of comfort, occasional areas of roughness.</td>
<td>Lowest level of comfort, may include extended areas of roughness and unsuitable surfaces on rural roads.</td>
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<tr>
<td><strong>Speed</strong></td>
<td>Higher speeds depending on assessed level of risk. Lower if mixed use, high intersection density, schools, shopping, concentration of active road users.</td>
<td>Travel speeds depend on assessed level of risk and recognises mixed use, schools, shopping strips and concentrations of active road users.</td>
<td>As for Collector roads but also recognises access and use values.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td>Variable road standards.</td>
<td>Variable road standards and alignment.</td>
<td>Variable road standards and alignment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost-Effectiveness</strong></td>
<td>Efficiency measures are required to provide assurance that the work we do is necessary, is co-ordinated and is delivering value for money. We will improve efficiency by ensuring the work we do is done at the right time, i.e. it is not done too early, nor is it done to late.</td>
<td>Active road users should expect mixed use environments with some variability in the road environment, including vehicle speed.</td>
<td>All road users should expect mixed use environments with some variability in the road environment, including vehicle speed.</td>
<td></td>
<td></td>
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</table>
Changing the Question

Not what will the network look like if we keep spending what we currently spend?

Or how much do we need to spend to keep the network in its current condition?

INSTEAD

“What is the minimum we need to spend to sustain the network and to meet the proposed ONRC levels of service?”
Financial Outcome (CODC)

Impact of Optimisation/Annum

$m$ Millions

- **2014/15**
- **15/16 Before Dtims**
- **15/16 After Dtims**

- Maintenance
- Renewals
We have achieved so much to date – 2015-18 NLTP.

- Management
- Levels of service
- Efficiency
- Monitoring

$4,568m in 2012-15

$4,831m in 2015-18

6% increase
RMTF Collaborative Business Models

**Working Together**
- Local roads
- Bundle activities – RAMM, Asset Mgmt

**Working Together**
- Include NZTA and State Highways
- By activity – RAMM, Asset Mgmt, Reseals (?)
  - ‘Maintenance by agreement’

**Use road classification as basis for collaboration**
- Tier 1: RON’s by NZTA
- Tier 2: NZTA
- Tier 3 (arterials): NZTA and TLA

**Independent roading company**
- CCO organisation or PPP arrangement
- West Aust model

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**Spectrum of possible collaboration of planning and execution by work type**

**TLA Collaboration**
- Local roads
- Share professional services
  Eg – Manawatu/Rangiteki

**NZTA Delegation to TLA for SH’s**
- Rotorua Model

**NZTA manage local road network for TLA**
- Marlborough Roads

**Full Integration**
Working collaboratively delivers results if:

- The right people are in the room
- They know why they are there,
- Parties know what success looks like,
- It takes work to get results.
Collaboration comes in different forms

- Far North ONRC project
- Waikato RATA
- BoP futures project
- Gisborne Tairawhiti Roads
- Manawatu/Horowhenua cluster
- Canterbury ONRC cluster
- South Canterbury Procurement
- Southern ONRC cluster
Collaboration – Some Great Examples

• A single classification of the network
• All councils have developed a transition plan – we are now moving into transition planning.
• We are seeing evidence of better use of data to drive decision making
• We now have a compendium of good practice guides on the Road Efficiency Group website.
Classifying each network has provided stories.

Far North DC

Southland DC
Different Routes Have Different Functions.
What do we need to do next?

ONRC Performance Framework
– Safety Example

- **SAFETY**
  - **Outcome Measure (OM1)**
    - Reducing number of serious and fatal injuries on the network

- **TECHNICAL OUTPUTS**
  - **Performance Measure (PM1)**
    - The service outputs the customer needs for a safe journey:
      - Sight Lines, Surface Hazards, Road User Education, Forgiving Roads

- **WORK INPUTS**
  - **Efficiency Measure (EM1)**
    - What is the cost of delivering the technical output? We don’t measure how PCCs deliver the outputs, rather their cost efficiency in delivering what the customer needs

- **PERFORMANCE MEASURES**
  - **Customer Outcome Measures**
    - The compelling case for investment in the network
  - **Technical Output Measures**
    - Assess that the service outputs being produced consistently meet the customer levels of service of the ONRC
  - **Cost Efficiency Measures**
    - Assess that whole-of-life costs are optimised in the delivery of affordable customer levels of service
ONRC – Why do we benchmark?
ONRC – What do roads cost?

$2,000/km  $4,000/km  $6,000/km  $8-12,000/km
ONRC Framework – a decision making tool

Business Case 1

Business Case 2

You are not showing how the investment is delivering the outcomes I want (inreflective).

No:

Are you demonstrating that you are an efficient service provider?

Although you do have a good handle on your asset age. That is good, but what does that mean to the customer? Is the age putting the service level at risk?

So who would you invest in?
Different measures will add greater or lesser value;

- Think about what you want to measure and why,
- Which measures are most relevant based on road function,
- Planning and Investment will confirm by June 2016 which measures they will use.
Questions