

# The Key Issues

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ROAD ENGINEERING ASSOCIATION OF ASIA & AUSTRALASIA (NZ)

# LOW VOLUME ROADS WORKSHOP 2007

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# Reflections on Low Volume Roads

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## Outline of Presentation

- Importance of Low Volume Roads
- Some Looking Back
- Challenges
- Innovation
- Do Competitive Pricing Procedures Help?
- What are the Future Options?
- Conclusions

## Importance of Low Volume Roads

- Most of NZ roads could be regarded as low volume
- These low volume roads are an important part of the network
- Serve many iconic tourist sites
- Critical for agriculture, forestry and horticulture

## Some Looking Back

- 2<sup>nd</sup> Low volume roads conference
- Concrete and asphalt roads in some countries
- Level of service – as potholes grow so does the need to buy larger vehicles
- Cutting the grass on cracked concrete roads
- Don't deliver an engineers level of service
- Agree management strategy with stakeholders
- Don't be afraid to be honest as to what can be achieved

## Some Looking Back (continued)

- Monitor the network
- Did deliver good unsealed roads using stabilisation
- Did develop thin granular overlays
- NZ has achieved a good standard of road throughout the country

## Challenges

- Funding from road users and ratepayers
- Limited traffic volumes but a vast array of vehicle types and weights
- High environmental degradation by;
  - aggregate breakdown
  - frost heave
  - water penetration
  - floods, earthquakes etc.
  - inappropriate speed on unsealed roads
- Matching the level of service to road use

## Challenges (continued)

- Ability to innovate
- Ability to provide adequate safety within funds available
- Need to consider whole life cost by all players

## Innovation

- Sustained growth is mainly about increasing productivity without compromising the future resource use
- Need to ensure research funding is used to achieve an applicable outcome
  - Is current research funding serving researchers or end users?
  - Is there a need for more on job research?

## Innovation (continued)

- Must pursue technology for achieving more with less

## Do Competitive Pricing Procedures Help?

- Pre 1991 maintenance costs were high especially for State Highways
- The nineties saw considerable improvement in resource utilisation
- In the last few years costs have increased faster than inflation
- Overall there has been efficiency gains

## Does CPP Help (continued)

- However the opportunities for applied research has declined
- In the past worked directly with councils to carry out onsite trials
- Can this happen today under CPP?
- Do we need to develop a mechanism that allows some risk taking and not always covering the backside

## What are the Future Options

- Is NZ too concerned about capital works at the expense of maintaining what we have?
- Maybe the level of service were too high on some parts of the network?
- Have we forgotten some of the good ideas of the past?

## Conclusions

- The road business is resource hungry
- Don't lose sight of the need to innovate
- Do everything you can to protect the network
- Everyone should be looking for productivity gains

**Thankyou**