What is In-Lane Sealing?
In-Lane Sealing Practice Guide

Purpose of Presentation

- Background
- Safety
- Skid resistance
- Monitoring
- Performance
- Guidance
- Acknowledgements
Background

- SH 33 valley floor
- 10 successive frosts in 2008
- ATP previous summer
- Six year old 2 coat seal stripping
- Grade 5 to hold
- Solution in-lane seal between ATP
- Since had another 2CS (grade 2 and 4)
- 17 additional sites monitored
Safety

Effect of Seal Lip

• Ponding
• Surface water Channelling
• Tyre lip interaction
Skid Resistance

Differential Skid Resistance

• Right turn bays
  • Ave -0.04 (+.08 to -0.13)

• Wide Shoulders
  • Ave. -0.1 (.08 to -0.11)

• Differential skid
  -ve SC greater outside in-lane seal
  +ve SC greater on in-lane seal
Accident Analysis

Confidence that traffic stays within lane

150 M radius Curve
Accident Analysis

Confidence that traffic stays within lane

Multiple sites
Monitoring

Defects

• Centreline ponding
• No defects observed
• Shoulder sealing
  • Alternate seal cycle
  • Use smaller chip
  • 2CS vary overlap
Performance

Safety
• Ensure traffic is in lane

Skid Resistance
• OK if aggregate performance is OK

Cost Effectiveness
• $ goes further
• Longer runs faster sealing
• No additional maintenance cost identified

Effectiveness
• Trial now 8 years old with and no $ goes further
• 2 out of 21 sites have performed OK
Guidance

Aspect to consider

- Vehicle tracking
  - curve radii
  - multiple site factors
- Seal lip ponding
- Shoulder sealing
- Will ATP last as long as the seal coat
- NZTA Highway Information Portal
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