Auckland Motorway Lane Marking Trial

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Roadmap

Existing Marking

Proposed Marking

The Trial

Auckland Motorways
Why Do We Need Lane Markings?

Direction

Position
Motorway Lane Marking Development

Pre-2007

Post-2007
High Performance Roadmarking – NZTA P30
What is the Problem with Our Lane Markings?

40% of lane markings do not comply with NZTA P30 – 150 mcd/m²/lx
RRPM Hiding Lane Line

Driver Observation Angle $\angle 2.29^\circ$

RRPM

20mm

Line Length

Hidden

Lane Line 2.9 m

0.5m
ATP Hiding Lane Line

Driver Observation Angle $\angle 2.29^\circ$

ATP lump at 0.25 m spacing

0.25 m

10 mm
RRPM and ATP Hiding Lane Line
What do we propose?
Benefits

• Annual estimated cost saving $63,000
• Retroreflectivity measurement cost saving
• Traffic management cost saving
• Better RRPMs maintenance
Trial Location

- Selected from reseal programme
- Minimum site length 300m
- Minimum 3 lanes
Trial Layout

Existing marking configuration with line

Trial marking configuration without line
Driver Survey
Video Survey Results - Delineation Effectiveness

- Left Lane better: 11%
- Right Lane better: 16%
- No difference: 73%
Video Survey Results - Level of Safety

- No difference: 73%
- Right lane better: 16%
- Left lane better: 11%
Trial Conclusion

• Trial implemented over one year
• Same level of delineation effectiveness and safety delivered
• No safety or maintenance issues during trial
• Cold Applied Plastic ATP used in trial
• New configuration is recommended
What does this relate to the rest of NZ?