



Newmarket Connection Viaduct Replacement Project

Slow down over Newmarket
Using Technology to Change the Way People Drive

NZ TRANSPORT AGENCY
FULTON HOGAN
LEIGHTON CONTRACTORS
VSL NEW ZEALAND
BECA INFRASTRUCTURE
URS NEW ZEALAND
TONKIN & TAYLOR
BOFFA MISKELL

Introduction

- Project overview + risks
- Risk mitigation strategy adopted
- How we used technology
- Success of the strategy
- What's next for NGANewmarket

Project Overview

- \$215m
- 4 years
- 160,000 veh/day



- Innovative Thinking
- Innovative Technology
- Benefits to Traffic Safety
- Transferability
- Problem Solving

Significant Risks to Project

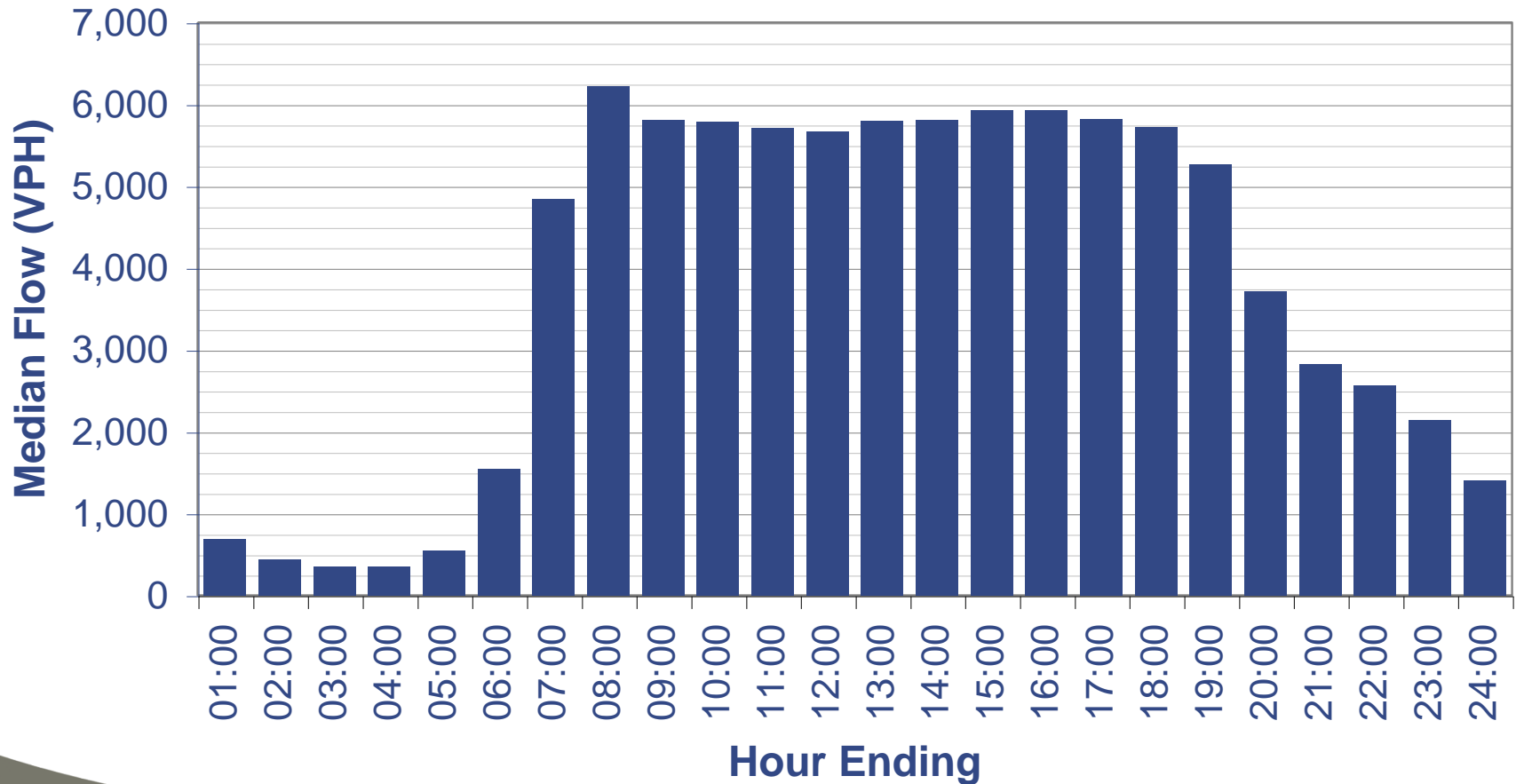
- Proximity
- Congestion
- Accidents



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SH1 Southbound Newmarket Viaduct

Jan 2008 - Mar 2009 Median Southbound Flow



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Strategy Developed

- High standard road
- Minimise speeds
- Minimise severity of accidents



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Develop Strategy

Specially designed TL-4 barriers

High performance line marking (cold applied plastic) – a first in NZ for work sites

70 km/hr speed limit

Installation of project variable message sign and tailor a region-wide driver education campaign

Comprehensive communications

Best-practice COPTTM signage

Develop an enforcement strategy

Challenge: Find a way to improve continuously

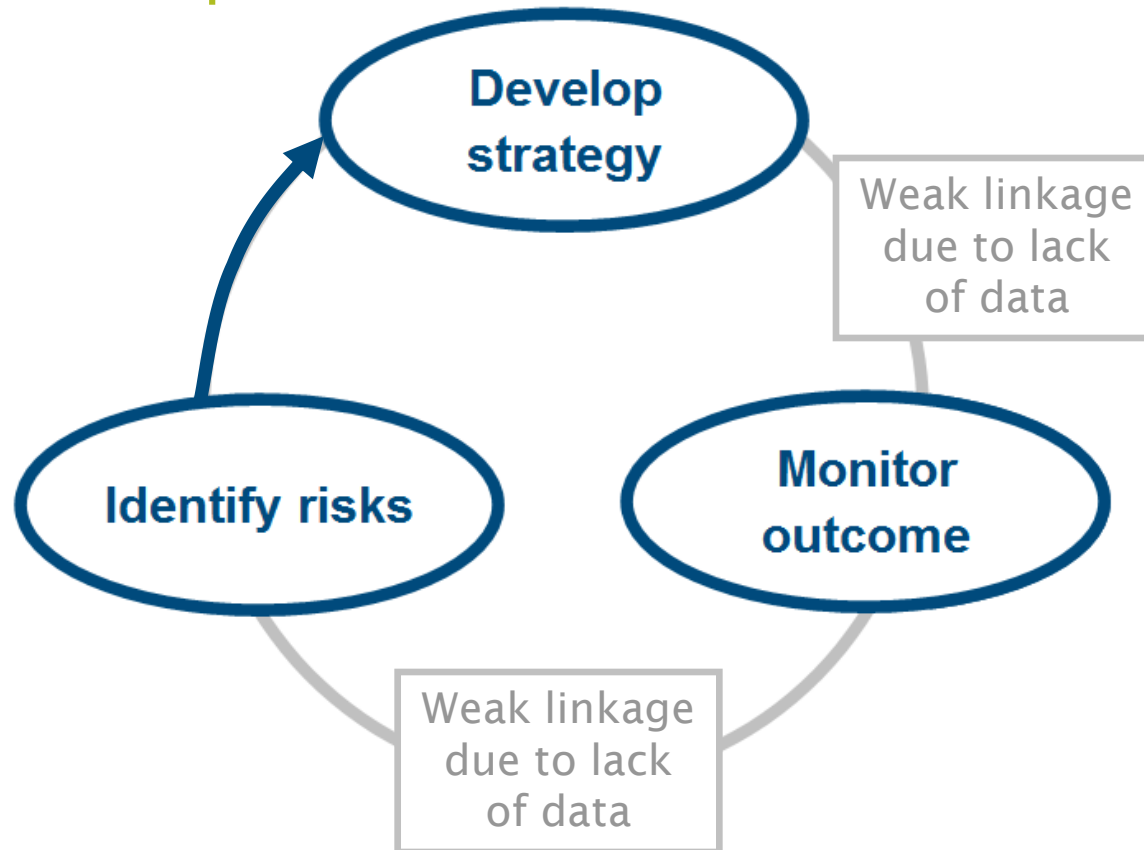
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Continuous Improvement



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Continuous Improvement



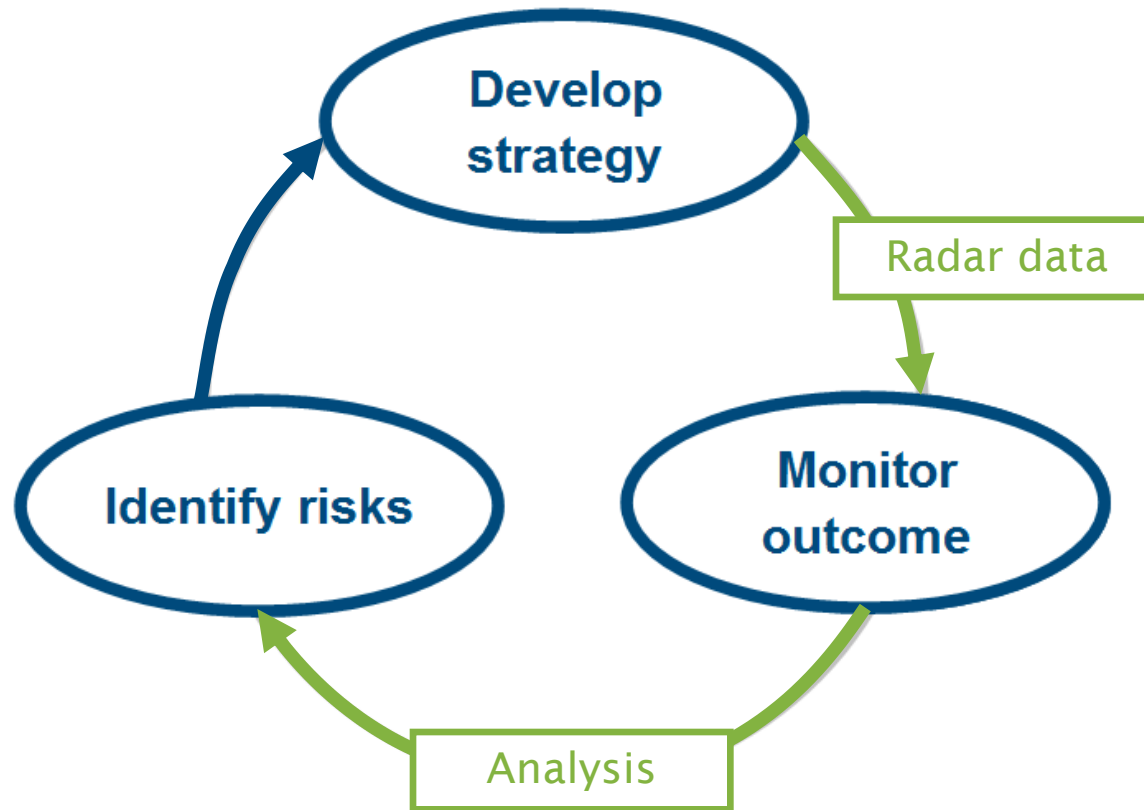
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Radar Technology



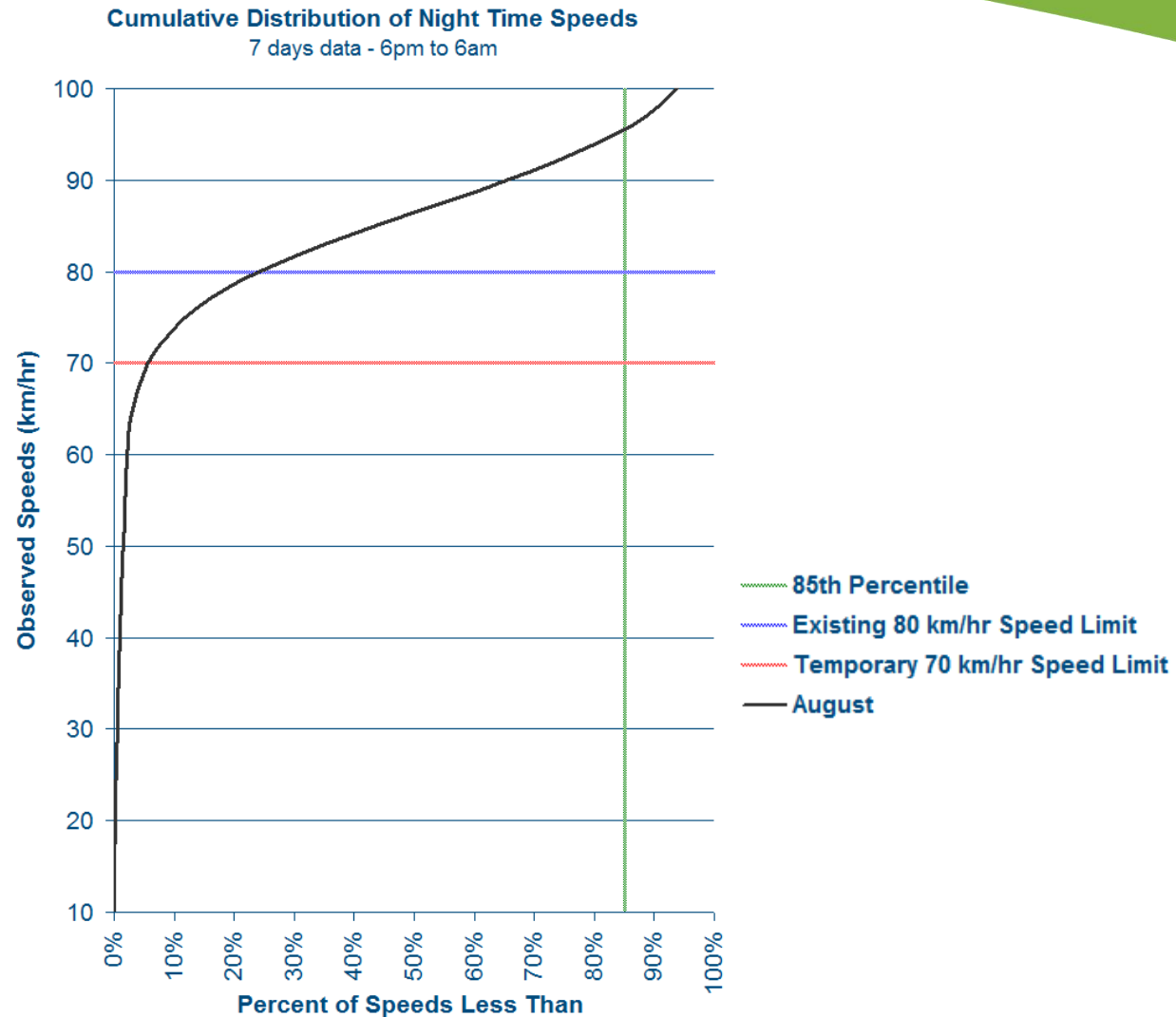
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Radar Closes the Loop



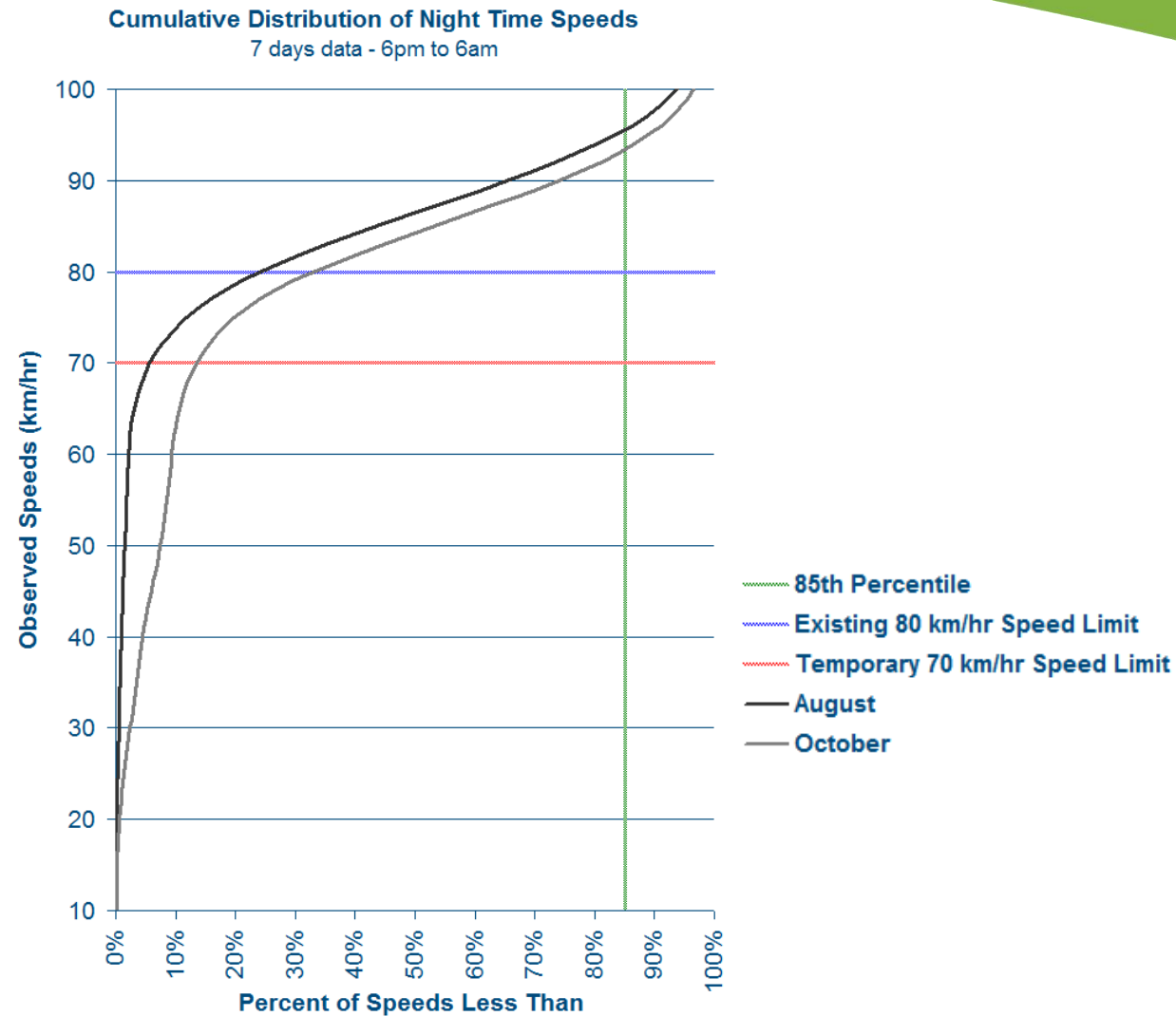
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Outcome of Initial Strategy



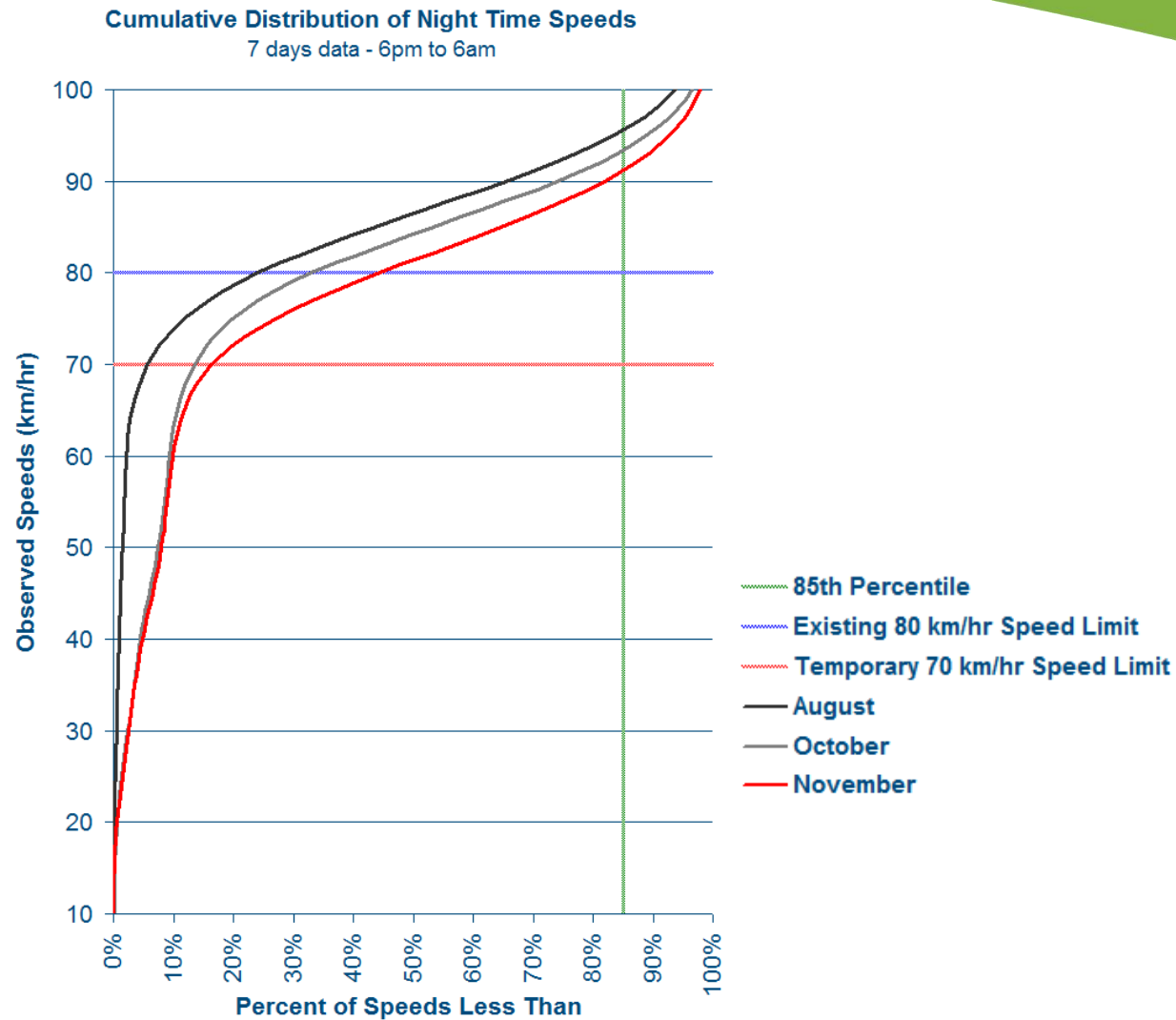
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Outcome of Initial Strategy



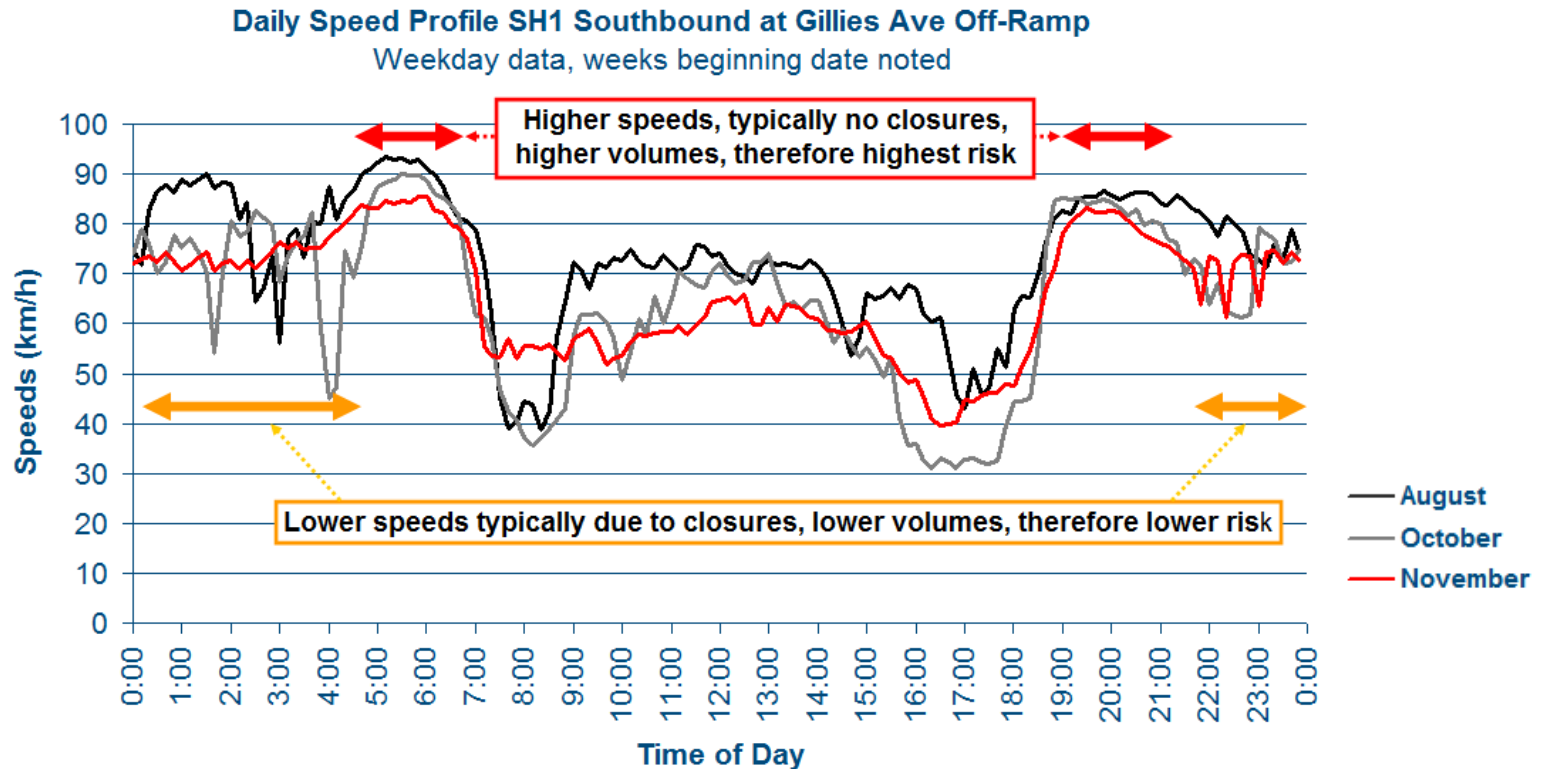
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Outcome of Initial Strategy



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Risk Groups Identified



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Refined Strategy Developed



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Refined Strategy Developed



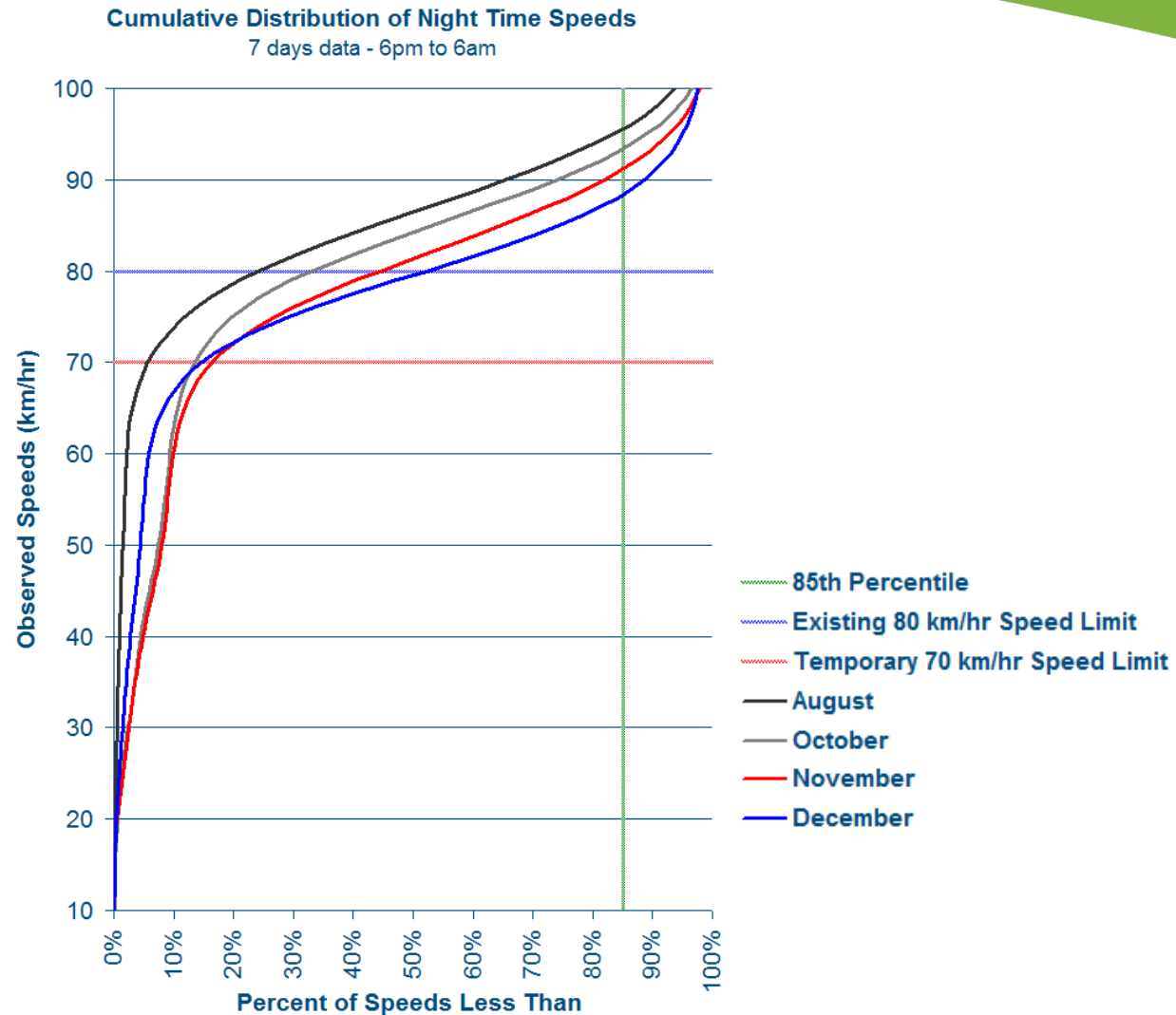
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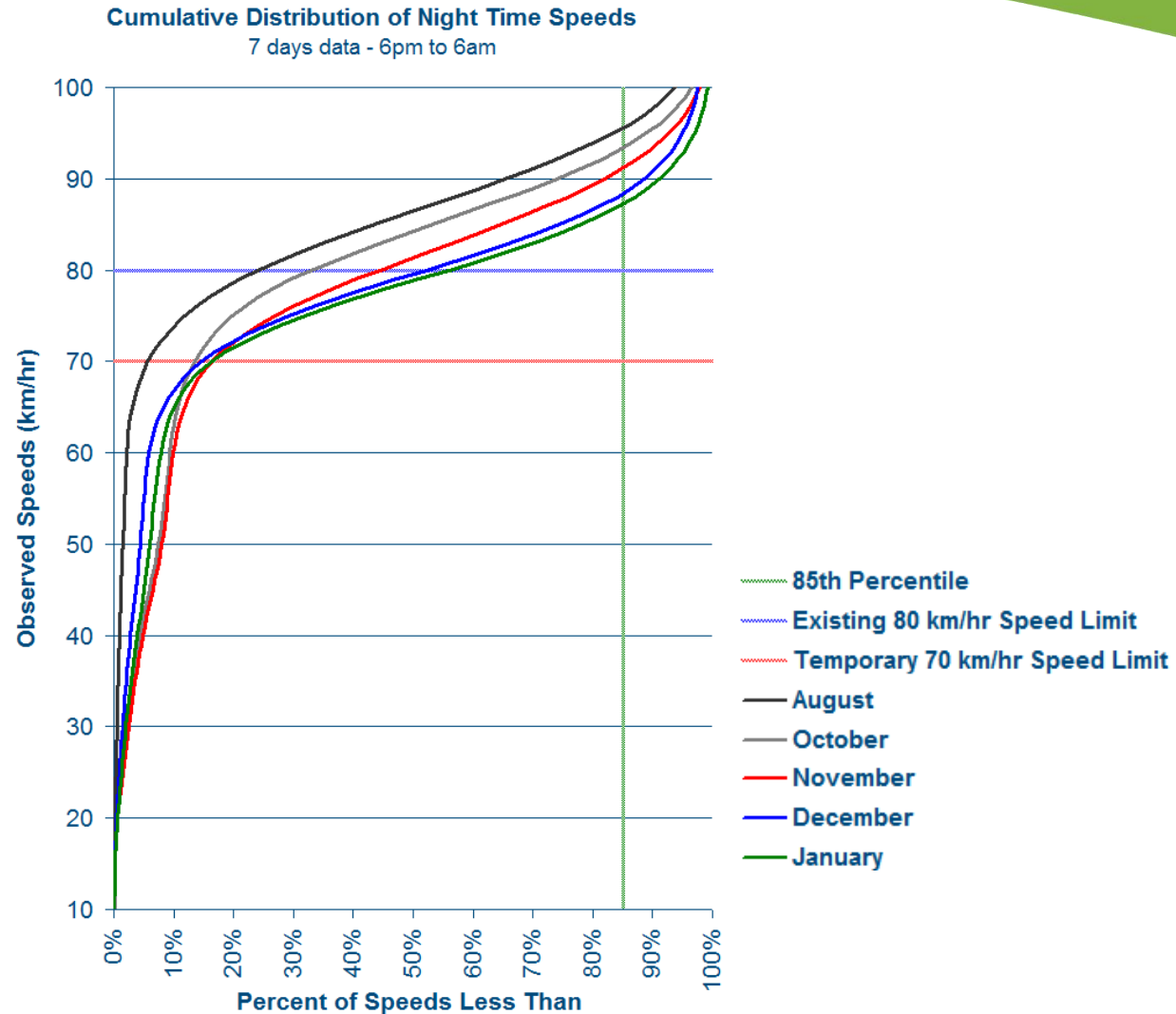
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Success of Refined Strategy



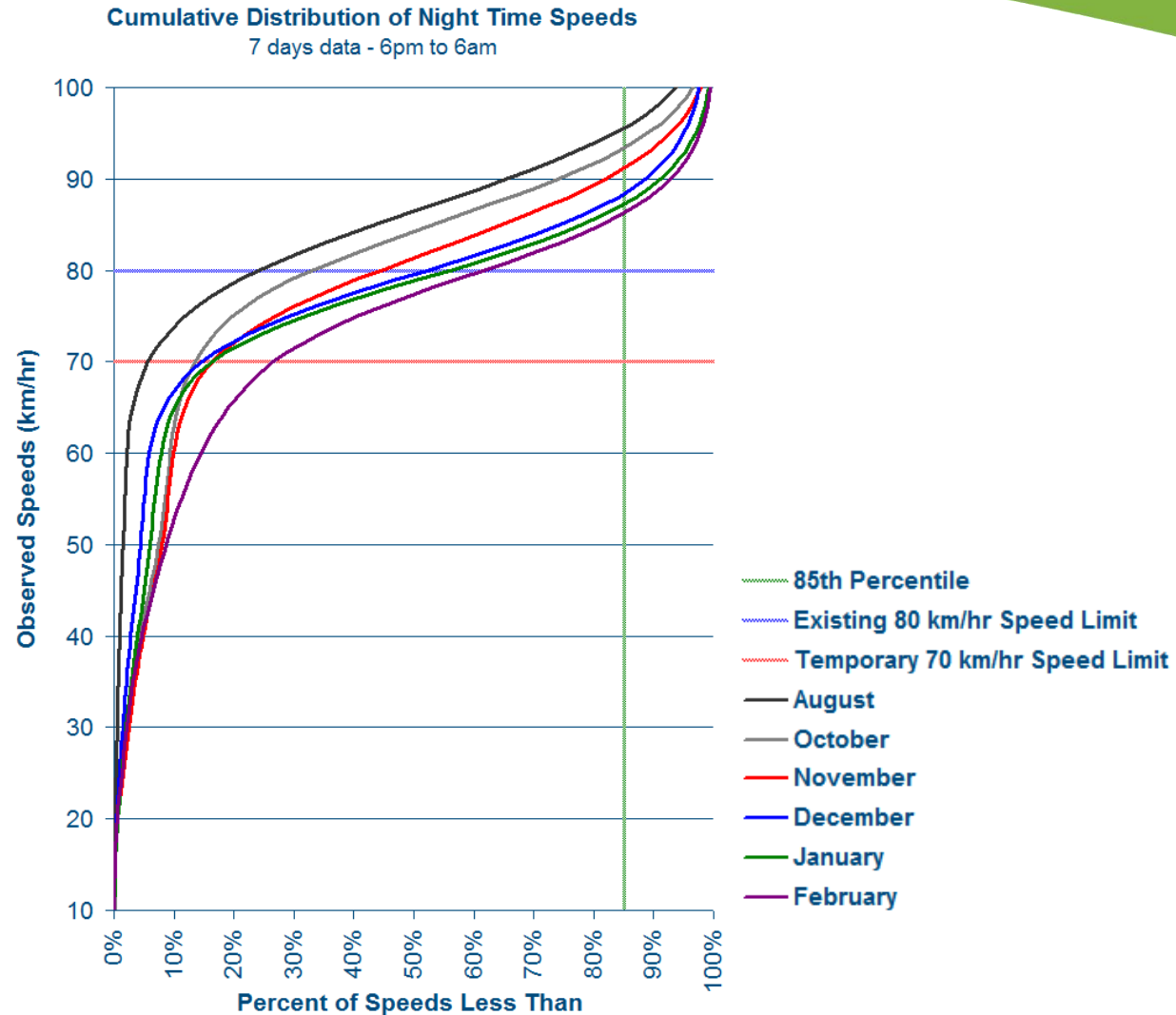
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Success of Refined Strategy



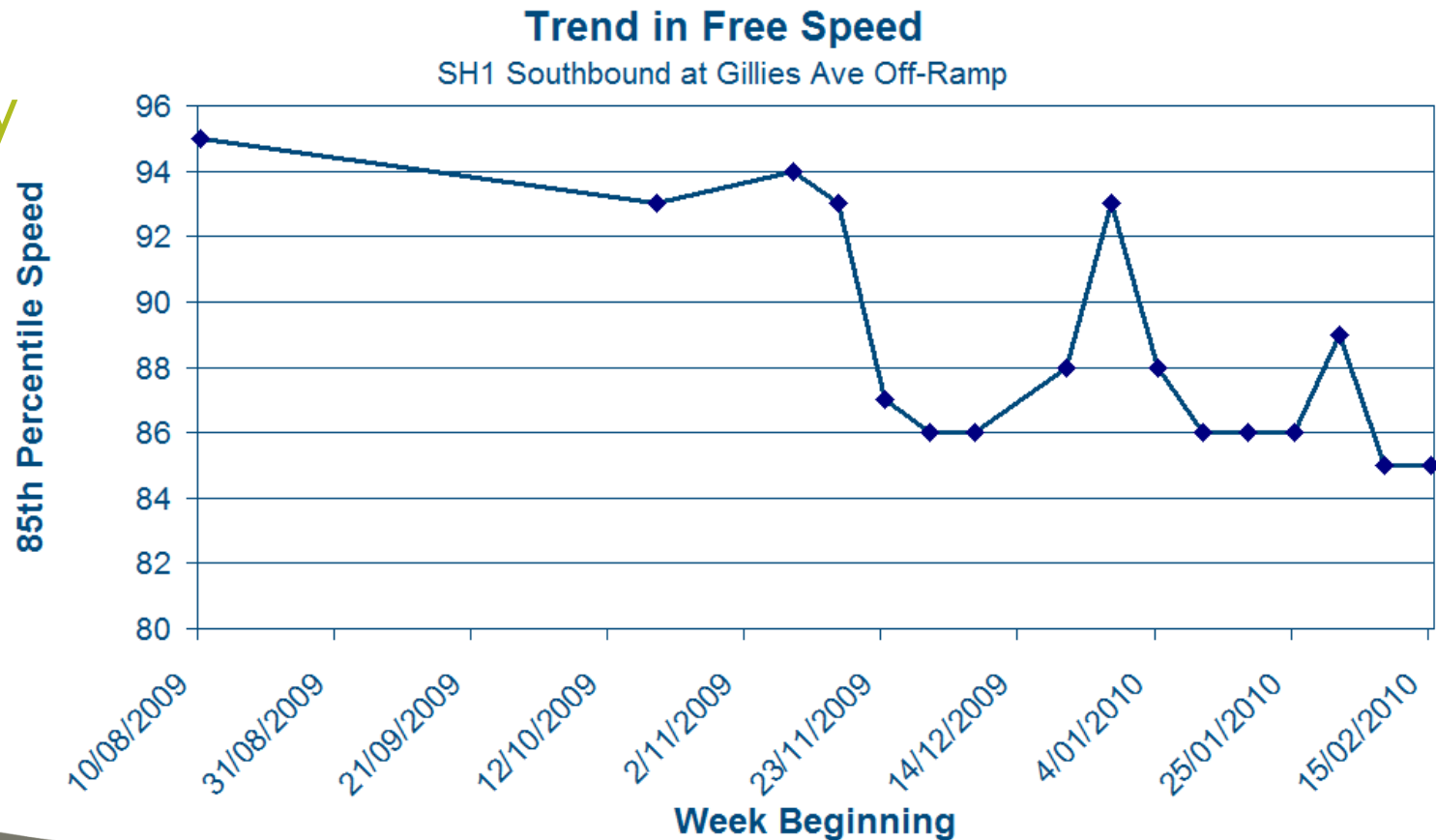
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Success of Refined Strategy



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Safety Benefits

- Lower speed = fewer accidents
- Lower speed = lower accident severity
- Confident the methodology will deliver further reduction in speeds

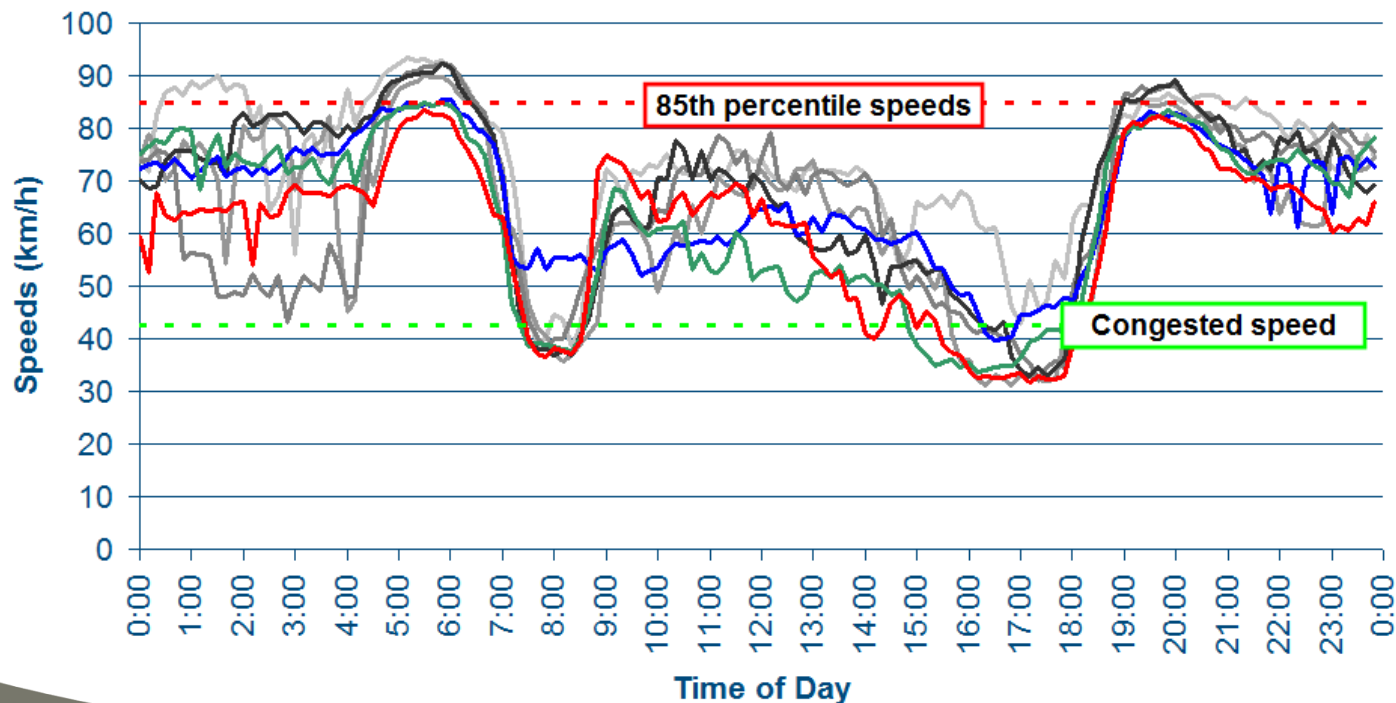
Success of the Strategy

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What's Next for NGA Newmarket

Daily Speed Profile SH1 Southbound at Gillies Ave Off-Ramp

Weekday data, weeks beginning date noted



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