

The Safety Effectiveness of the Audio Tactile Profiled Markings Programme



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Introduction

Background

Crash Analysis

**Summary and
recommendations**



INTRODUCTION

Audio Tactile Profiled Markings (ATP)

- Successful trials in 2007 (Waikato/BoP)
- Intensive installation 2008/09 with economic stimulus funding
- approx. 3,000 kilometres installed as at end of 2010



BACKGROUND

Crash reductions claimed from ATP research

- Shoulder rumble strips reduce:
 - “run off road” injury crashes by 32%
 - “run off road” fatal crashes by 42%
- Centreline rumble strips reduce:
 - “head-on” and “sideswipe” crashes by 21% - 37%
 - ARRB studies – 23% crash reduction



BACKGROUND

NZTA Business Case

- 15% crash reduction rate
- BCR of 7.2
- ATP replacement every 4 years (10 years on lower volume highways)
- High risk corridors targeted (e.g SH1 Auckland to Hamilton)
- 2,000 km (18% of rural SH network)

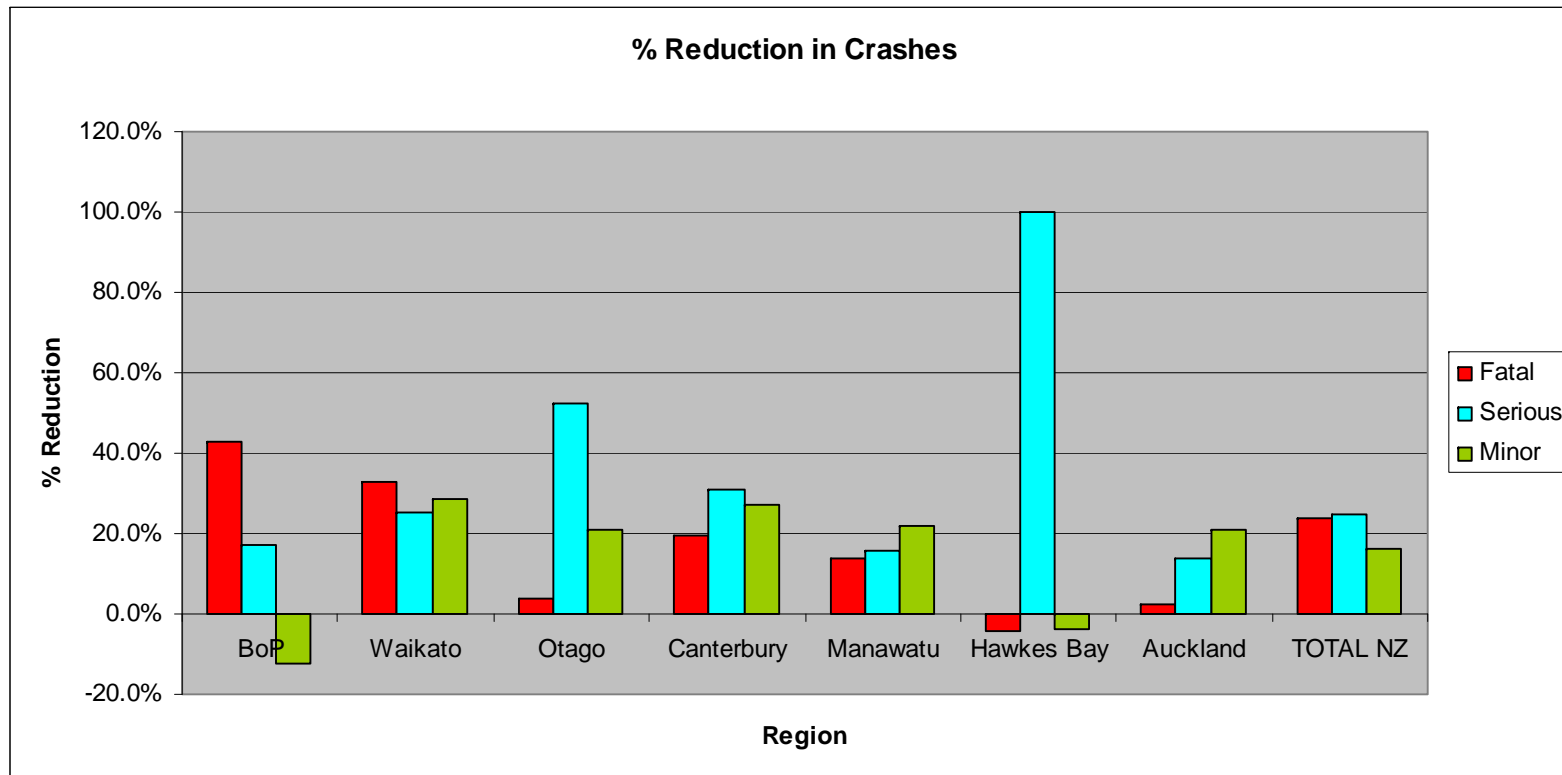


CRASH ANALYSIS

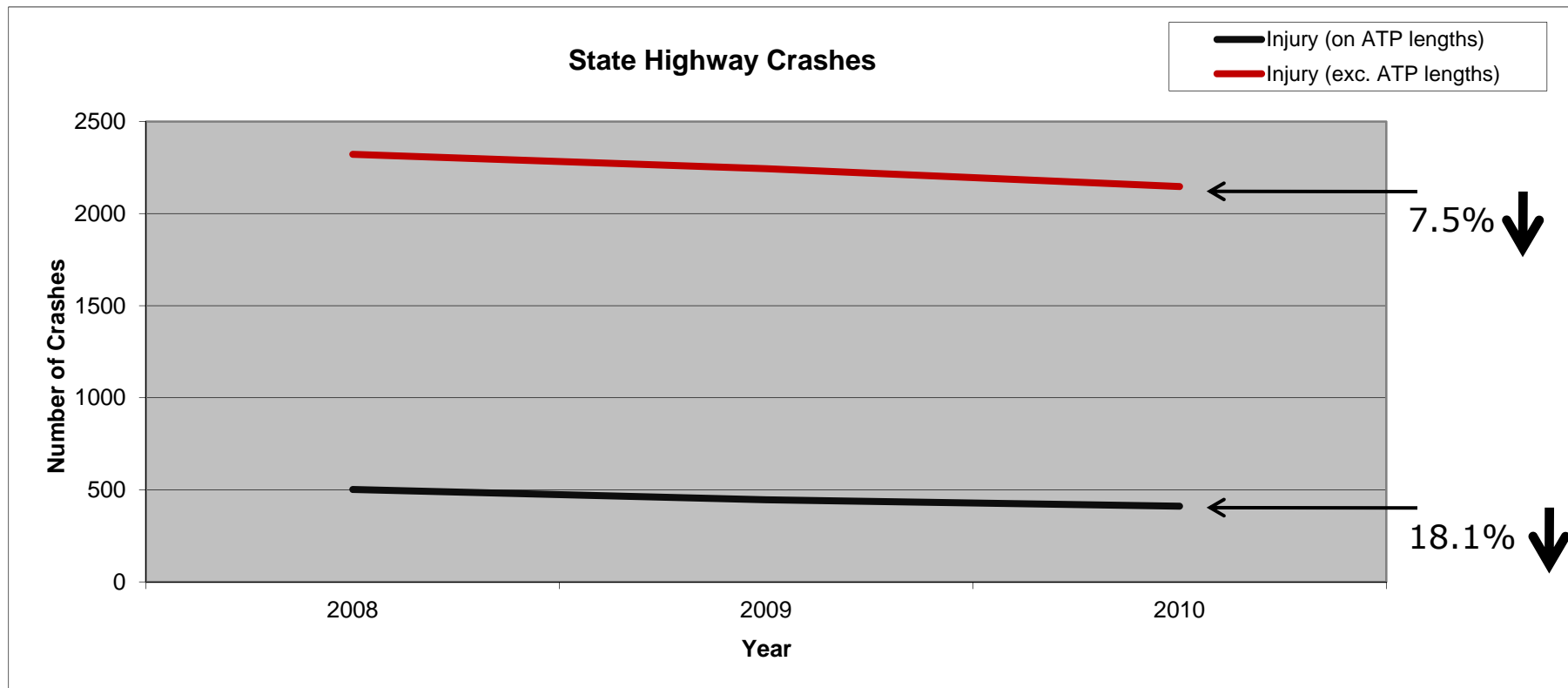
Assumptions

- At least 50% of route station has ATP
- minimum 1 year post-installation data
- Injury crashes from 2003 onwards
- Minimum of 3 years "Before installation"

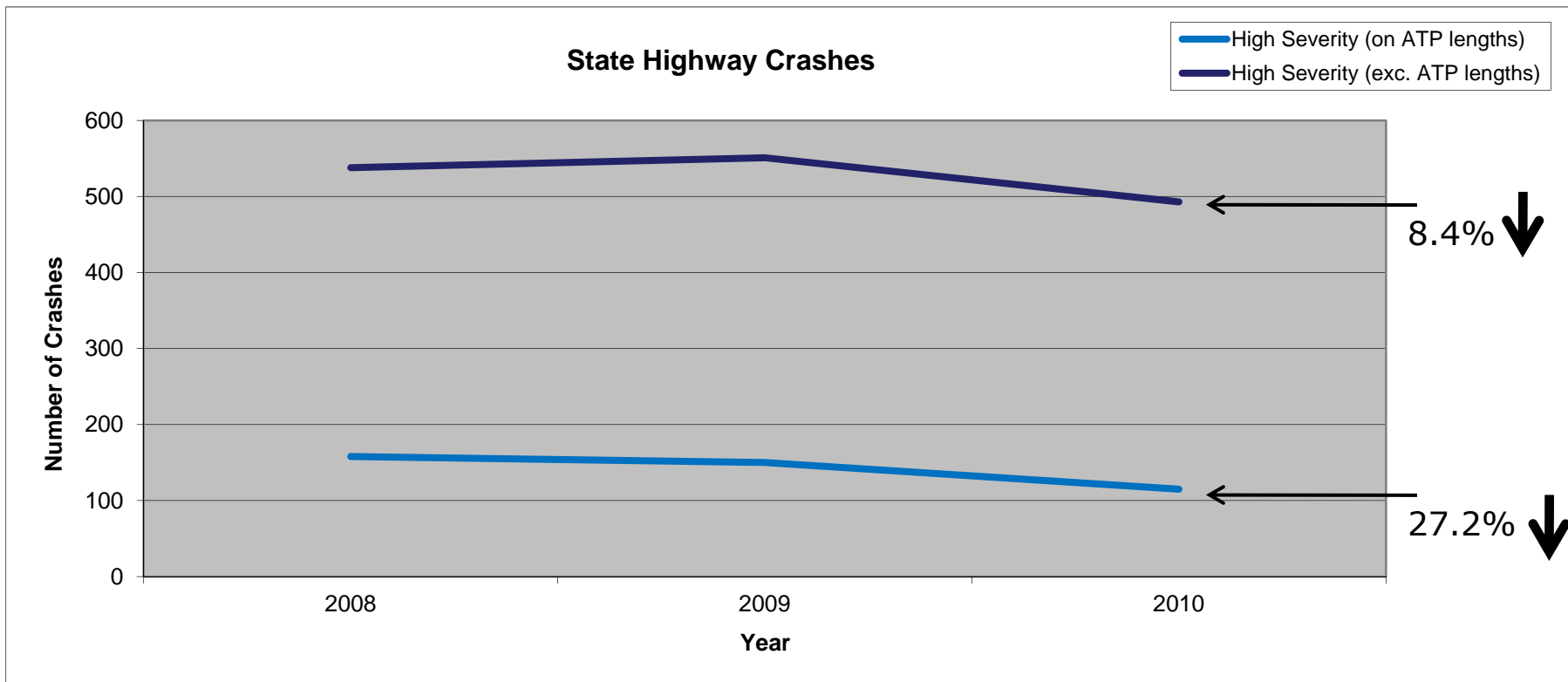
CRASH ANALYSIS



UNDERLYING CRASH TRENDS



UNDERLYING CRASH TRENDS



SUMMARY

- Injury crash rate reduction 18% (7.5% without ATP)
- High Severity crash reduction 27% (8% without ATP)
- Reduced fatal/serious casualties – Safer Journeys focus
- Recommend results shared with NZTA operational managers

