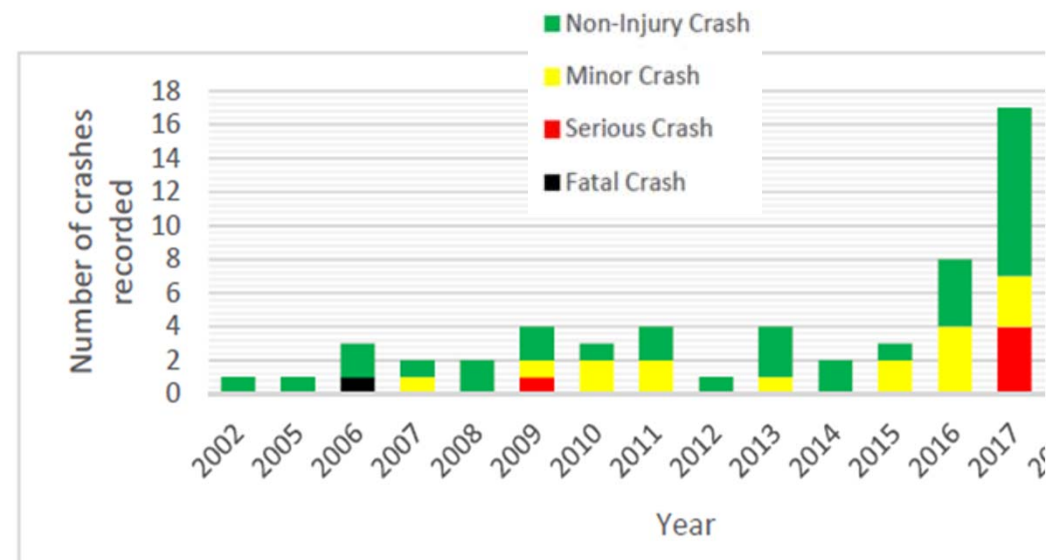
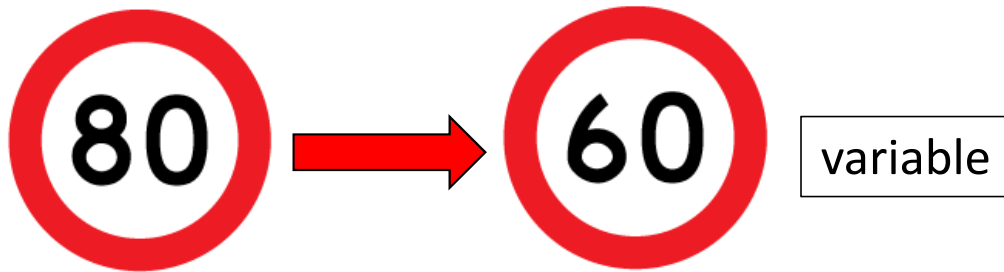


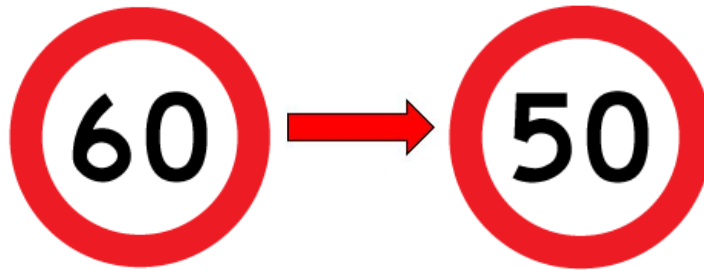


Gordonton / Thomas Intersection Safety Improvements

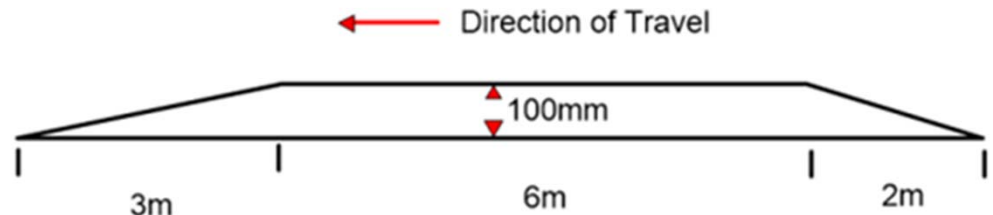
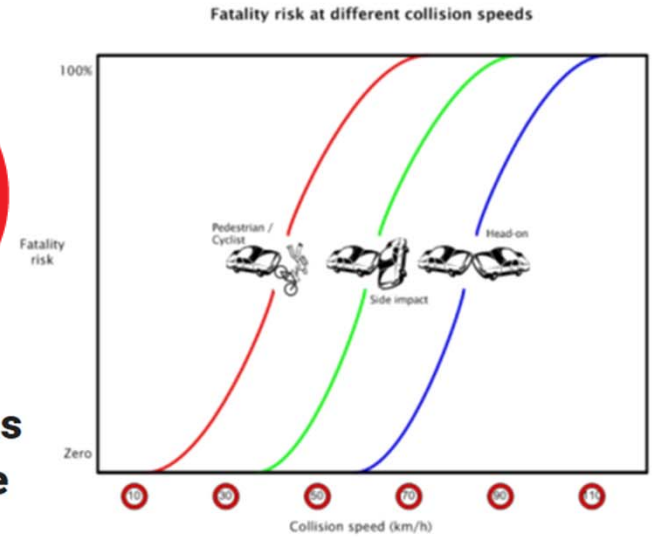
3M Transportation Awards, March 2020

Need for Innovation





Victim of Thomas Rd fatal crash was passenger in front seat impact zone



Raised Safety Platform

Collaboration



Client: Hamilton City Council

Robyn Denton: Network Operations and Use Leader
Simon Crowther: Senior Network Engineer (Safety)
John Kinghorn: Transport Systems Engineer



Advisors: NZ Transport Agency National Safer Intersections Working Group

Fabian Marsh: Lead Advisor Safety



Post Construction Research Analysis: Mackie Research

Hamish Mackie: Director/Principal Researcher



Contractor: Infrastructure Alliance

Willem Ferreira: Project Manager



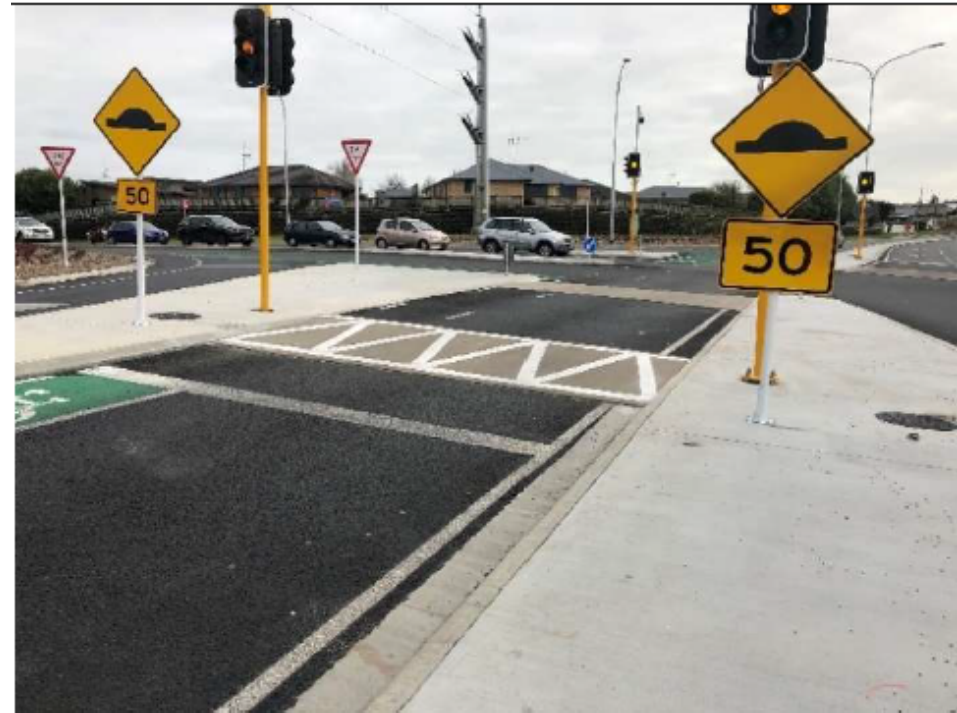
Consultant and Designer: WSP

Mike Meister: Project Manager
Letitia Garmonsway: Transport Engineer



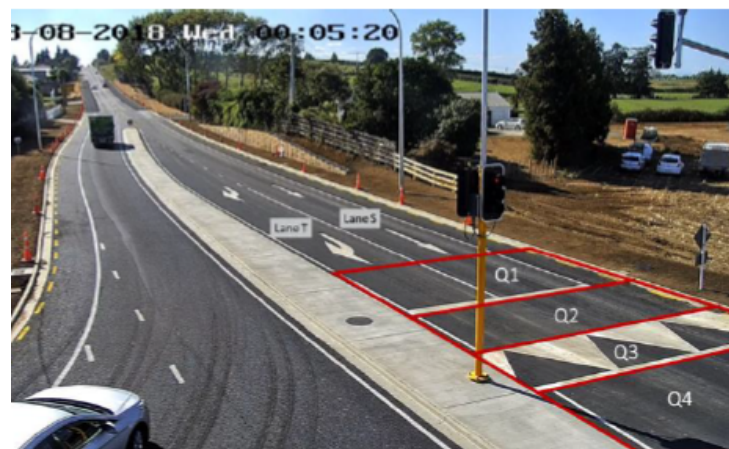


After



	Dimension	Satisfactory Performance?
Safety Improvement	DSIs	Too early
	Intersection Speed	✓
Associated Safety	Braking on approach	✓
	Stopping at limit line	✓
	Red light running	✓
	Vertical acceleration	✓
	Perceived safety	✓
Delivery and operation	Impact on VRUs	not enough data
	Traffic flow	✓
	Community Buy-in	✓
	Delivery/operational issues	✓

8: Quadrants 1, 2, 3 and 4 for stopping at intersection video analysis



Monitoring and Evaluation

RAISED SAFETY PLATFORM EVALUATION

GORDONTON AND THOMAS ROAD INTERSECTION, HAMILTON

Hamish Mackie | Michael Blewden | Rebekah Thorne | Lily Hirsch

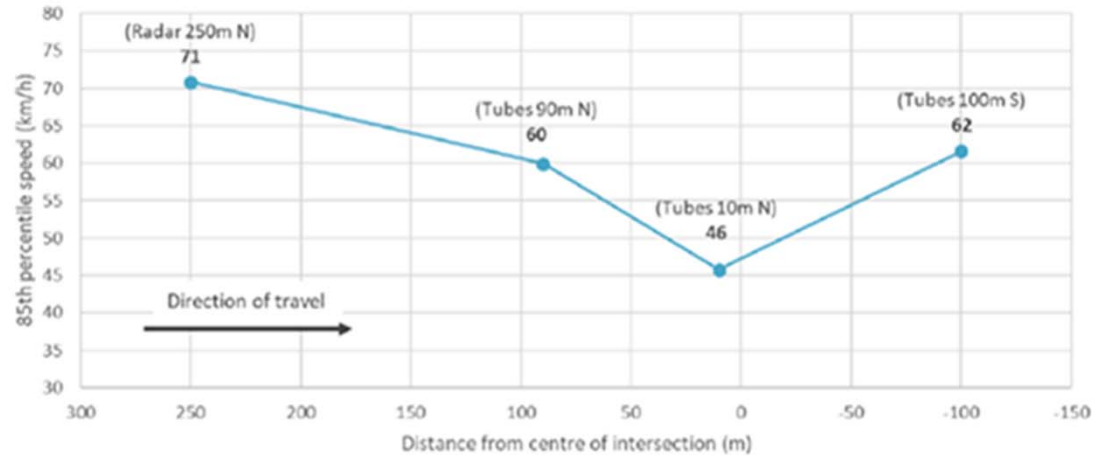
27 AUGUST 2019

MACKIE  **RESEARCH**
OPTIMISING HUMAN SYSTEMS

Results

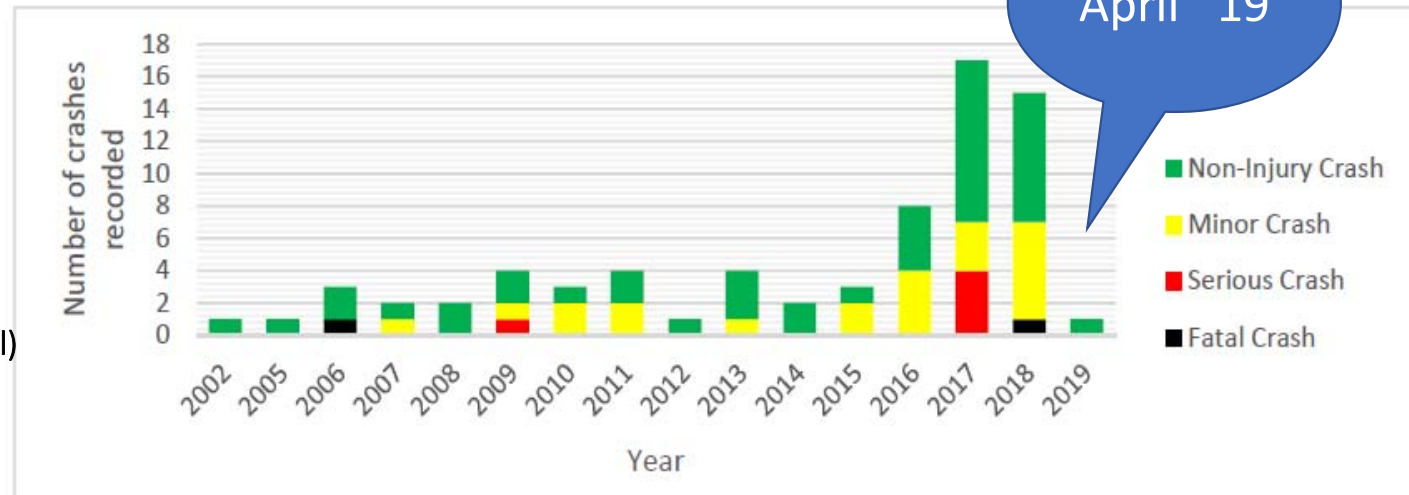
Significant overall speed reduction on approach:

- daytime 65km/h to 30km/h
- night time 75km/h to 35km/h.



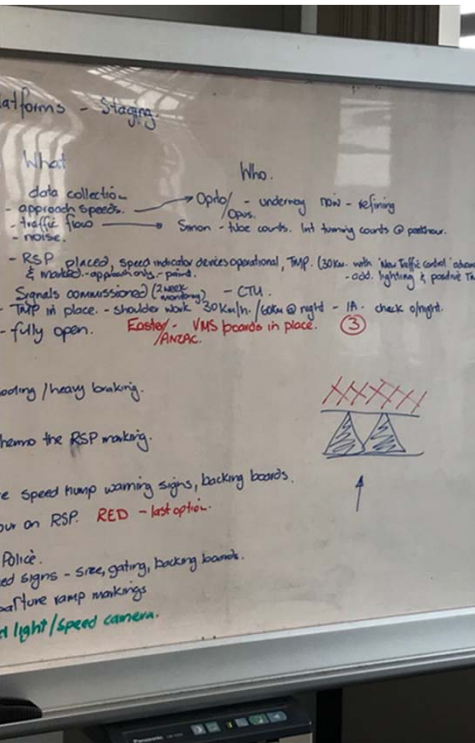
Expected 85% reduction in total crashes at the intersection

(using the NZTA Economic Evaluation Manual)





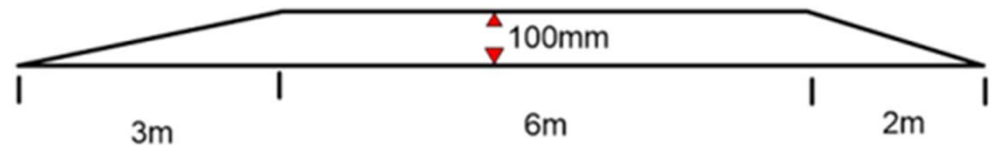
NZ's first Safe System Traffic Signals



Planning and Delivery



— Direction of Travel



Raised Safety Platform