

Project context

Annual Crash Remedial Programme (CRM)

Cluster Site Programme



3yrs collision data

Junctions Programme



Junction specific, 10yrs collision data

Route Programme



Segmented by road section. 5yrs collision data

Basis for analysis is reactive

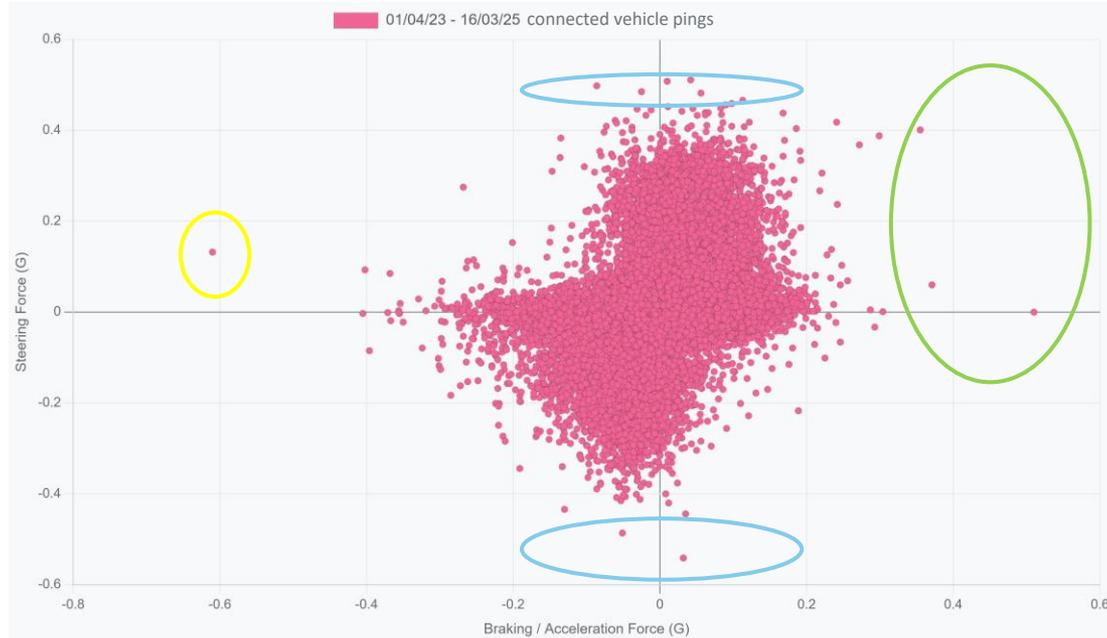
Near Miss Analysis

Proactive (pre-crash event) and risk focused.

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Road Safety Intelligence Team Leader
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What is a “near miss”?

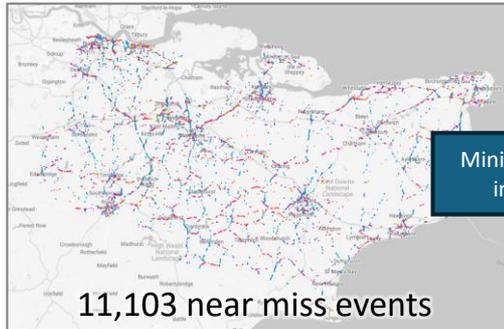
An occurrence involving a rapid evasive manoeuvre (from braking or steering or combination of both).



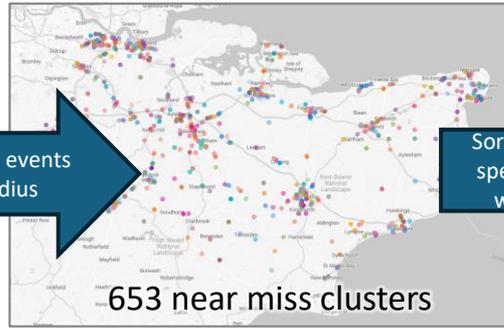
Driving Maneuver	Target g-force
Cornering	
Mild Left	0.2 - 0.3 G's
Moderate Left	0.3 - 0.4 G's
Hard Left	0.5 - 0.6 G's
Mild Right	0.2 - 0.3 G's
Moderate Right	0.3 - 0.4 G's
Hard Right	0.5 - 0.6 G's
Braking	
Mild	0.4 - 0.5 G's
Moderate	0.5 - 0.6 G's
Hard	0.6 - 0.7 G's
Acceleration from stationary position	
Mild	0.2 G's
Hard	0.3 - 0.4 G's

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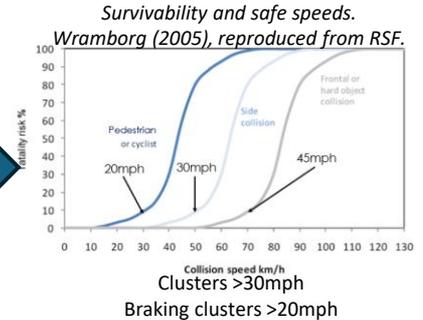
Methodology



Minimum 3 events
in set radius



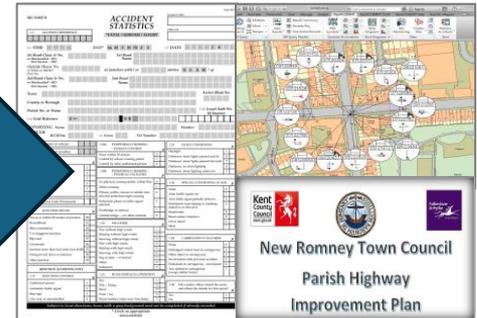
Sorted by average
speed of vehicles
within cluster



Remove clusters off
highway or with
existing mitigation

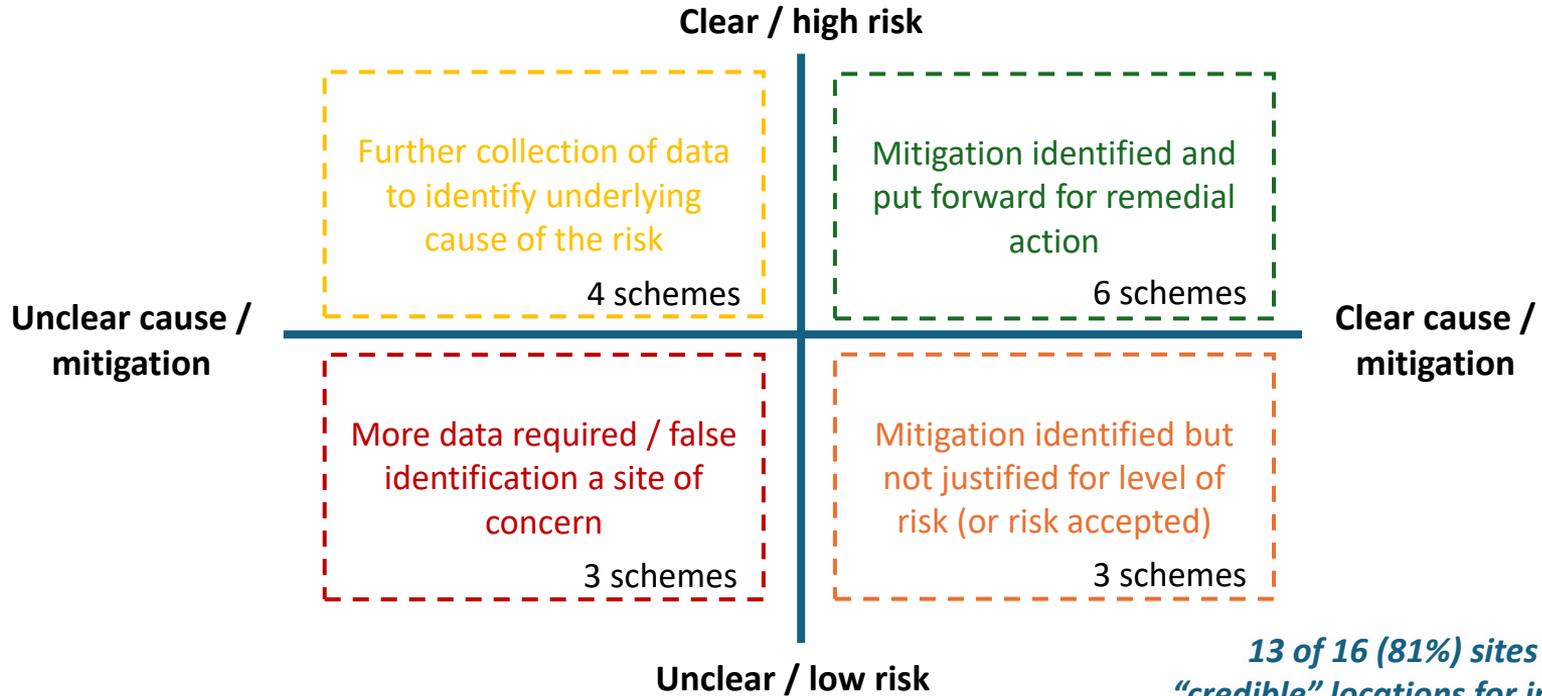


Submitted for
engineer
investigation



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Findings

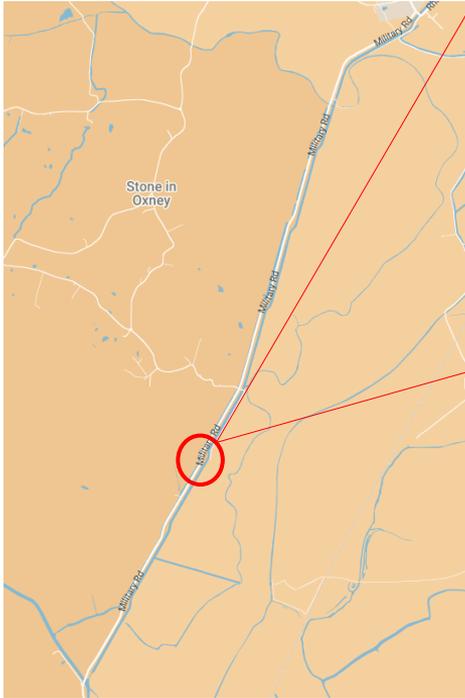


13 of 16 (81%) sites considered “credible” locations for intervention

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Identified Site: Military Road, Ashford



Near miss events - steering:

Apr-Dec 2023

Date	Time	Veh type	Speed (MPH)	YAcc	YAcc	Direction
11-Apr-23	13:57:58	LV	58.41	-0.469	Moderate left	Northbound
07-Aug-23	05:52:08	LV	54.06	0.534	Hard right	Southbound
17-Oct-23	11:08:58	LV	54.68	-0.464	Moderate left	Northbound
07-Dec-23	20:23:50	LV	60.00	-0.525	Hard left	Northbound

- **2 serious, 2 slight** collisions in 12yrs
- **All loss of control / run off collisions**

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Military Road – Mitigation & results

Near Misses:

- 10/06/2023 – 21/10/2023: 13
- 10/06/2024 – 21/10/2024: 8
- 10/06/2025 – 21/10/2025: 0
- 22/10/2025 – 23/02/2026: 2

G-forces:

- Reduction of traffic experiencing higher steering g-forces
- On average 27% less traffic experienced steering G-forces (>0.3g)

Speeds:

- Mean speeds reduced between 1.4mph and 3.4mph (3 – 7%)
 - *(baseline speeds were 46.1mph to 50.5mph)*
- Statistically significant reduction in speeds vs control sites
 - *(one tailed t-test, p=0.00026. Intervention n=6, control n=14)*



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Lessons Learned

- The near miss data did produce some credible locations of “unseen” risk.
- Process has helped shift thinking away from outcomes (crashes) to cause (risk).
- The human element of investigation and comparison to ground truth is essential to understand the risks
- CV data has enabled monitoring of the scheme performance.

Next Steps

- Explore approaches to offer insight more systematically rather than point based.
- Develop value for money assessment approaches for competitive funding pots.

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