

# Behavioural approach to rail crossing safety campaigns

National Level Crossing Safety Forum, August 2022

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## Acknowledgment of country

I would like to acknowledge the Traditional Owners of the Land we are meeting on today and pay my respects to their Elders past, present and emerging, and extend that respect to all Aboriginal and Torres Strait Islander people here today.



## What this presentation will cover

The important role of rail safety campaigns and how we can ensure maximum impact on behaviour.

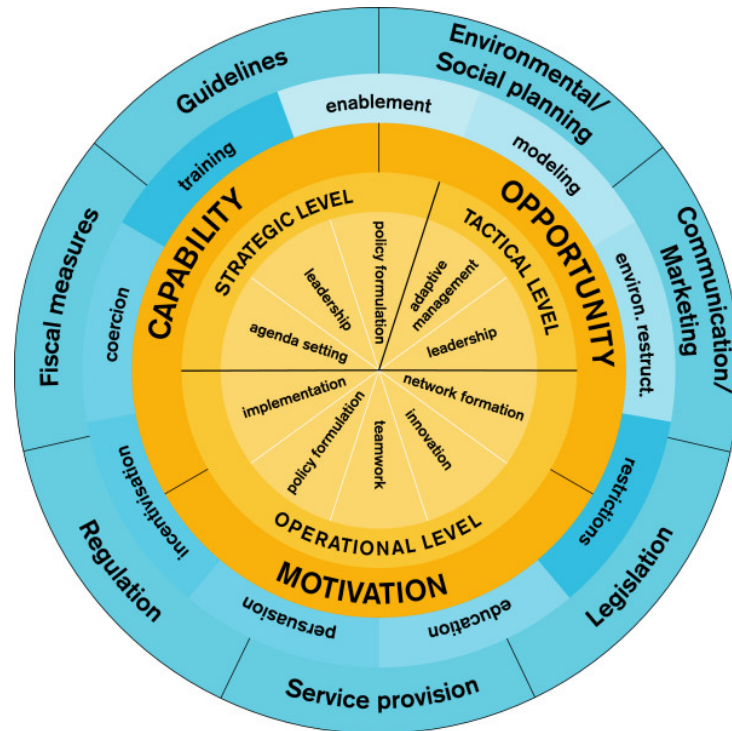
1. The difficult task of changing behaviour
2. Campaign development steps
3. Campaign example

# 1. The difficult task of changing behaviour

## Integrated approach to behaviour change

Behaviour change is complex and requires an integrated and long-term approach.

THE  
BEHAVIOUR  
CHANGE  
WHEEL\*



Rail safety awareness campaigns play a vital role

\* Source: *The behavior change wheel* from Michie et al. (2011).

# 1. The difficult task of changing behaviour

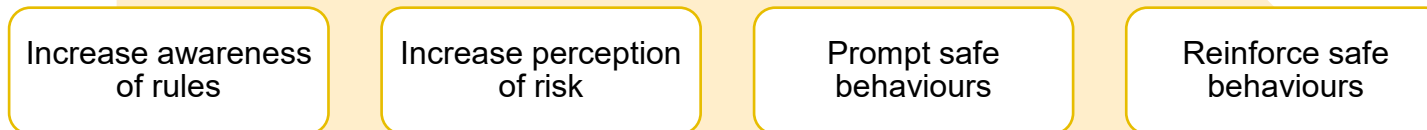
## Campaigns based on behaviour change theory

Research has shown that effective campaigns are based on behaviour change theory\*.

### THE STAGES OF CHANGE\*



### CAMPAIGNS



\* Sources: LN Wundersitz, TP Hutchinson, JE Woolley, *Best practice in road safety mass media campaigns: A literature review*, Apr 2010; and *The Transtheoretical Model of Behavior Change*.

## 2. Campaign development steps

### Selection of campaign appeal

The type of message appeal plays a central role in behaviour change\*.

APPEAL TYPE	EXAMPLES	PROS	CONS
Appeals to reason	Scientific explanations, analogies and simulations	Viewed as credible	Explanations need to be understood and related to one's own driving
Appeals to negative emotion	Showing the horror caused by the crash	Attracts attention Often 'shared' with others	Elicits 'optimistic bias' Offends and stigmatizes
Appeals to positive emotion	Testimonials and personal stories of victims and their family members	Emotionally moving, considered credible and authentic	Focuses on anger at those who caused the crash rather than on one's own safety practices
Threat of enforcement	Messages about getting caught or severity of penalties	Explains the reason for enforcement is protecting members of the community	Ominous and negative image of law enforcement



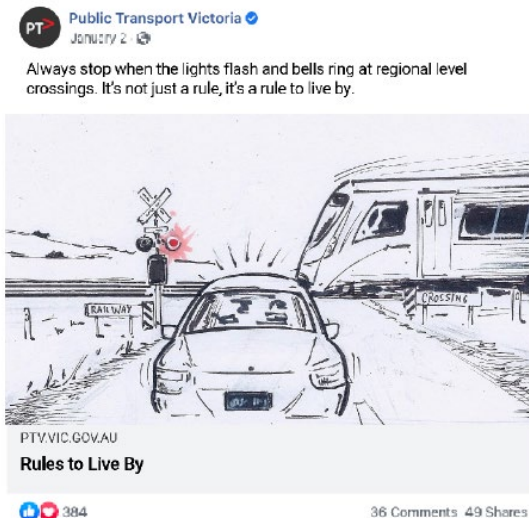
Emotional appeal without showing an incident

\* Source: N Guttman, *Persuasive appeals in road safety communication campaigns*, Nov 2015.

## 2. Campaign development steps

### Behavioural lens review

#### CONCEPT



	<b>Ambiguity Aversion</b> We tend to favour the known over the unknown, preferring known risks over unknown risks.
	<b>Anchoring</b> We often look for a point of familiarity and rely on this point for decision-making.
	<b>Availability Bias</b> People predict the probability of an event based on how easily an example can be brought to mind.
	<b>Optimism Bias</b> The tendency to be over-optimistic about the outcome of planned actions.
	<b>Hot and Cold Empathy Gap</b> We can plan to act in one way in a COLD (low stimulus, reflective) context, but in a HOT (high-stimulus, tempting) context we act differently.
	<b>Licensing</b> People allow themselves to do something bad after doing something good.

## 2. Campaign development steps

### Audience testing

#### CONCEPT



A man approaches a level crossing in the country.



He looks a little complacent, cruising along casually with the radio playing. He slows down a little bit, but it looks like he's probably going to roll through.



As he gets close, he notices the stop sign and thinks better of driving straight over the tracks, and quickly stops.



Suddenly, a train zooms past.



The man looks shocked and relieved.

**SUPER:** Stop when the lights flash and bells ring.

**VO:** Always stop when the lights flash and bells ring.



We see a shot of the stop sign at the crossing. A super appears.

**SUPER:** Rules to live by.



#### What worked

- This is a powerful message
- Obvious reminders of not doing risky behaviour at train tracks
- Everyone can relate to the rush feeling and fear of being close to a moving train



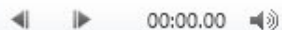
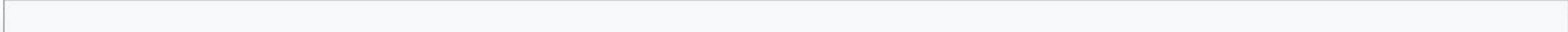
#### What didn't work

- The focus should be the call-to-action rather than the tagline
- The hefty fine is a realistic threat, which should be more prominent





Link: [Stop on the Red Signal - YouTube](#)



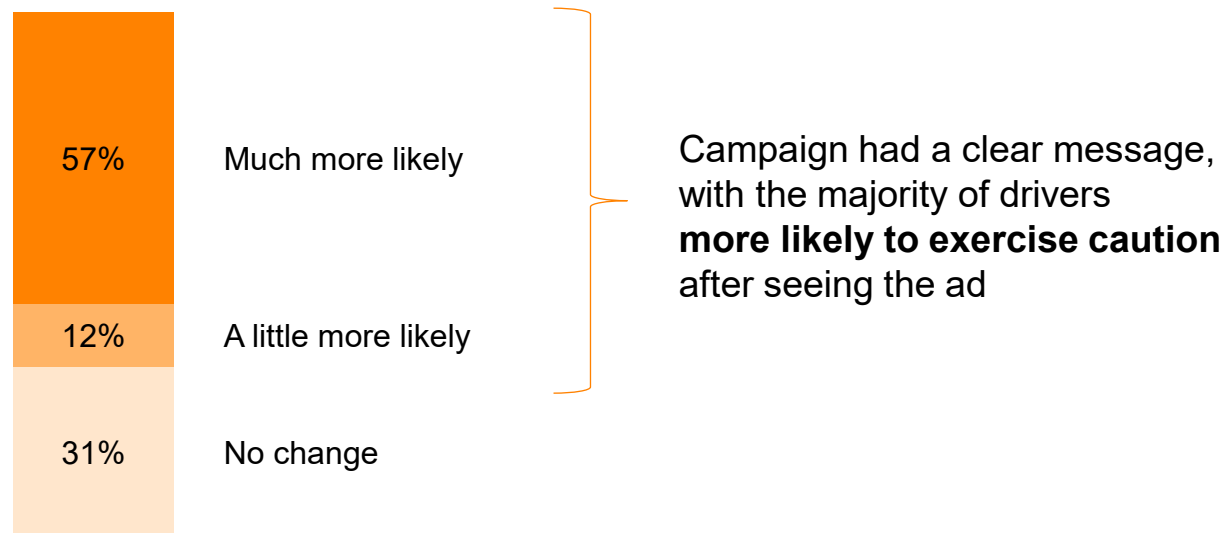
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### 3. Campaign example

#### Behavioural intention has improved

POST CAMPAIGN EVALUATION SURVEY

Increased likelihood of undertaking behaviour after seeing ad

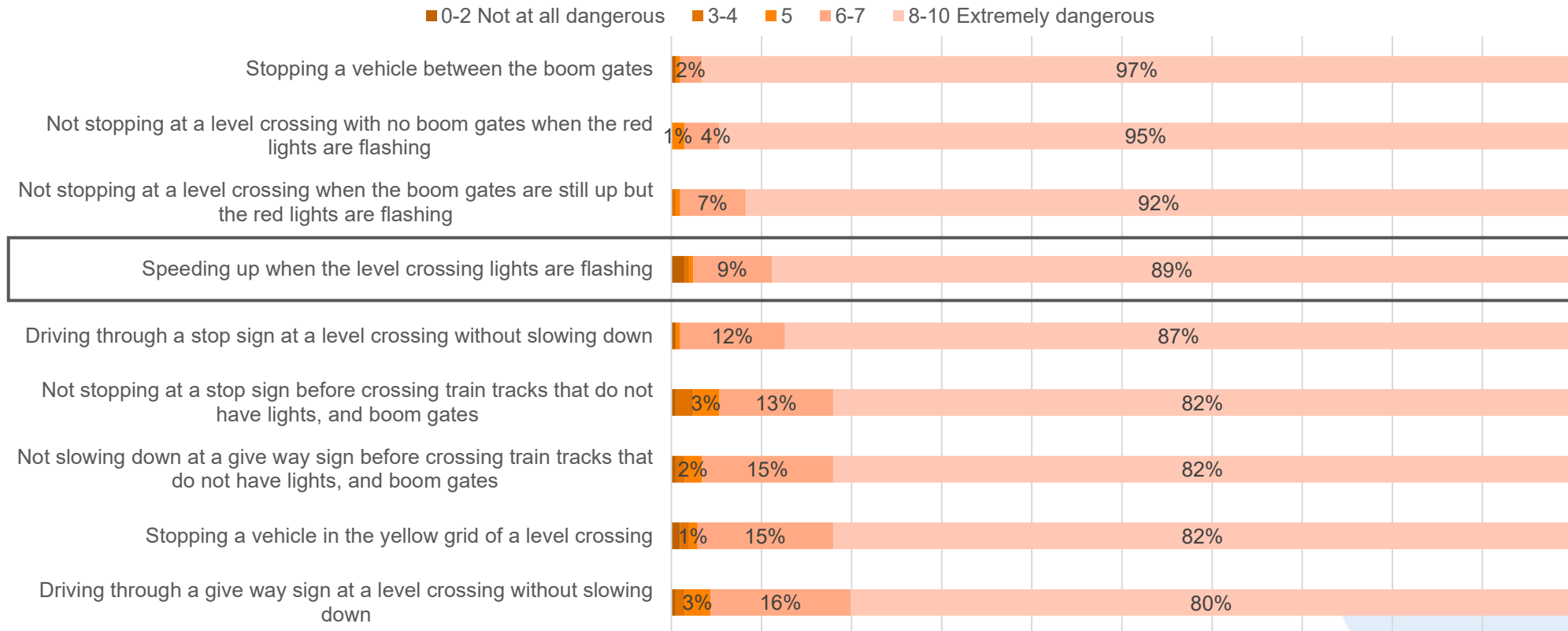


*\* Source: Level Crossing Stop on Red Signal Post Campaign Evaluation Report, March 2022 (n=339 drivers).*

### 3. Campaign example

#### But we're just starting

##### Perceived risk of behaviour



**11% of drivers still don't perceive behaviour as risky**

## In summary

Our future plans:

- Continue to run our existing campaigns
- Launch our new passive level crossing campaign
- Develop new campaigns to target different audiences such as:
  - Teenagers
  - Heavy vehicle drivers
- Refresh our pedestrian crossing campaign

In summary, we plan to continue to increase rail safety through **campaigns that are based on behaviour change theory and an integrated long-term approach.**

Questions?