Safe Roads
Virtual Reality for Safe Systems Design

5\textsuperscript{th} March 2019
The Problem

- Sign fades into sky background
- Lack of warnings when approaching level crossing on long straight State Highways at night – how can we assess ‘on road pavement markers’ connected to train alarms
Developing the Safe Systems VR Model
Optimising the Design through VR

Can we keep the lights out of here?
Pedestrian Safe System VR Model
Summary – Why use VR?

VR builds upon other design tools to enhance and improves designs;

1. Assess options via a ‘human factors’ approach as we can enhance safety as VR enables to focus on the human interaction with treatments;
2. Once model set up, repeatability of environment means we can efficiently test / innovate design treatments;
3. Multiple user perspectives enhances the designers ability to solve the problem;
4. Be more confident that new ideas will success in a physical trial (cost and time);
5. We can easily engage through 360 VR videos so acquire better feedback
6. Ability to change environment (add traffic, change weather, adjust speed,);
7. Can assess reflectivity, assess effects of increased porosity of signs, etc
Thank you