Building a Safer City



"Towards Zero is Victoria's plan to ensure no one is seriously injured on our roads. It acknowledges that we all face risks on our roads. But our choice to use the road shouldn't cost us our lives. That's why we need to ensure we have a safe transport system in place. Together we can build a system that protects us from our own mistakes and those of others."

You are a city designer and your brief from the Victorian Government is to design a city block redevelopment that will use the Towards Zero principles to build a safer road environment for all road users

Step 1: Go to the <u>Towards Zero website</u>

(https://www.towardszero.vic.gov.au/)

Step 2: Go to EXPLORE SCENE button

In each of the 4 categories (Safe Roads, Safe Speeds, Safe Vehicles, Safe People) click on the Explore Scene button. Write down the design ideas that help improve the safety of the roads in your city i.e. using flexible barriers.



Curriculum Links

Health and Physical Education: Level 5 & 6 - Plan and practise strategies to promote health, safety and wellbeing (VCHPEP108)

Health and Physical Education: Level 5 & 6 - Investigate the role of preventive health in promoting and maintaining health, safety and wellbeing for individuals and their communities (VCHPEP112)

Design and Technologies: Level 5 & 6 - Investigate how people in design and technologies occupations address competing considerations, including sustainability, in the design of solutions for current and future use (VCDSTS033)

Design and Technologies: Level 5 & 6 - Investigate characteristics and properties of a range of materials, systems, components, tools and equipment and evaluate the impact of their use (VCDSTC037)

Design and Technologies: Level 5 & 6 - Generate, develop, communicate and document design ideas and processes for audiences using appropriate technical terms and graphical representation techniques (VCDSCD039)





Step 3: Design and construct a model of your City Block Redevelopment.

You can use any format to design and build your city block including paper and cardboard constructions, dioramas,"Lego", digital technologies (for example "Minecraft" or console games) etc.

The area to be redeveloped currently has four streets with 2 intersections. It is used by pedestrians, cyclists, cars, trucks and buses. The existing factories are to be removed and it is planned that there will be a mix of retail (shops), offices and housing with some open spaces.

In your design and model you need to include at least 3 of these design elements:

- safe places for people to walk and to cross the road (wide footpaths or pedestrian only areas, overpasses, underpasses, skybridges or crossings)
- safe places for people to cycle (separate cycling lanes)
- safe places for vehicles (wide roads, speed humps, roundabouts, separated bus lanes and bus stops)
- signs and barriers (speed limits, divided path indicators)
- sustainability and safe leisure areas (solar or wind power, water tanks, rooftop or vertical gardens, green spaces)



Overpass - bridge for pedestrians and cycllsts over roads.



Underpass - tunnel for pedestrians and cyclists under roads

Step 4: Share your design.

- Take a photograph or a screenshot of your city block redevelopment.
- Label the different safety elements of your city block clearly.
- Think about the design ideas, tools, equipment and techniques that you used.
- Share your design and the reasons for your choices with your classmates.



Don't forget to use your imagination - it doesn't have to look like today's city.