INTRODUCTION

People enter and move around our campuses in different ways. Where there are vehicles like cars, trucks or bikes there is a chance they may collide with each other and/or pedestrians with a potential risk of fatal or serious life changing harm.

People who work near or share access ways and roads are most at risk, visitors and members of the public may also be at risk.

This critical risk standard has been developed to provide information to our people about how we plan and manage the risk associated with pedestrians, plant and vehicle interaction at Massey University. It applies to all our people (staff, students and others) who access Massey University premises.

This standard should be read as the minimum standards that apply for campus traffic and pedestrian management. It is acceptable to add controls at a local level, beyond what is prescribed here – however at no point may controls be removed or substituted without the express written permission of the relevant SLT member and the Director Health, Safety and Wellbeing.

CRITICAL RISK SCENARIOS

The following scenarios have been identified for this critical risk:

- Collision (vehicles vs. people vs. buses vs. cyclists vs. animals)

MINIMUM CONTROL REQUIREMENTS

Planning and Design

Massey University shall ensure that there is a safe and effective Campus Traffic and Pedestrian Management Plan (CTMP), location maps and Apps in place that show:

- Access and exit points for all users
- Shared spaces
- Cycling routes
- Traffic flow and direction
- Traffic calming controls
- Parking including disability parking
- Delivery and service loading and unloading areas,
- Emergency service routes
- Layout changes
- Exclusion zones

CTMP’s shall be reviewed regularly and specifically when traffic/user volumes concerns are notified, when major construction work alters the CTMP and/or immediately following a traffic incident.

When designing any new or modified traffic areas on campus:

- The principles of health and safety in design (HSID) shall be incorporated,
- Wherever possible physically separate vehicles and pedestrian spaces,
Traffic and pedestrian flow analysis shall be undertaken to identify peak times, congested areas, and how the spaces are being used.

- Shared spaces should be easily identifiable using signage, surface material changes, or other means so that users are aware they have entered a shared space.
- Where possible, one way systems shall be used to reduce the need for vehicles to reverse on site, or include reversing/turn-around areas/mirrors on blind spots.
- Accessibility for large vehicles and emergency vehicles shall be provided for,
- Security cameras and speed detector placement,
- Campus roadways must be of sufficient width for delivery, service, and emergency services vehicles,
- Temporary control of access to shared space areas may be required at times i.e. construction activity requiring pedestrian exclusion,
- Drainage should be incorporated to prevent flooding, erosion, and slippery surfaces,
- Avoidance or management of trenching or other works that may impact the roots of existing trees, which could weaken them
- Alternative options involving vehicle use considered,
- Communication, consultation and co-ordination with key stakeholders planned.

**Traffic calming, marking and signage**

Traffic calming devices shall be used to separate and direct traffic and pedestrian interfaces these, may include the use of the following:

- Road narrowing
- Traffic islands or chicanes
- Speed humps or cushions
- Barriers
- Bollards
- Crossings
- Road markings and rumble strips
- Vehicle restrictions or access controls

Campus entrances and exits must be clearly signposted to assist users and emergency services in locating specified entrances. Signage shall be used to give clear, advanced warning/instructions to all users.

 Provision shall be made for extra signage to promote clear way finding following changes in traffic and pedestrian areas to assist users to navigate the new layout and during extreme weather conditions.

Traffic controls selected for use in pedestrian areas must be suitable for people with physical disabilities.

**Infrastructure Maintenance**

All Massey University campus traffic and pedestrian infrastructure shall be maintained.

Massey University must have a system to ensure a regular monitoring and maintenance programme for all campus traffic and pedestrian areas.

Massey University shall maintain procedures and systems to ensure that all campus traffic and pedestrian areas are regularly checked and maintained for example:

- road, footpath and cycle lanes surface conditions
- user visibility at entrances and exit points
- tree and vegetation management
- fencing, particularly where there is potential of animals/stock to access the campus grounds
- drainage and flooding
- lighting levels and visibility
- signage and surface markings in good condition
Campus Traffic and Pedestrian Monitoring

Regular observation and monitoring of user behaviour shall be undertaken. The monitoring data analysis may be used for:

- General ‘all staff and student’ reminders on expected behaviour,
- Information and training needs analysis,
- Disciplinary procedures,
- Make evidence based changes to the CTMP,
- Enforcement activities i.e. controlling speeding and unsafe parking or blocking thoroughfares,
- Support the provision of additional infrastructure and equipment i.e. signage and traffic calming devices.

Temporary Traffic Management

Temporary mechanisms should be in place for restricting areas to just one user group when hazardous work or other activities are being undertaken e.g. loading/unloading, before/during/after events, construction activity, and stock movement.

All activities that affect campus traffic or pedestrian flow shall be set up and operated in accordance with the Code of Practice in Temporary Traffic Management (COPTTM).

Traffic management/minimisation options should be covered as part of event planning process (i.e. park n ride).

Costs for traffic and pedestrian management must be allowed for and included in the tender/contract process for all work impacting pedestrians or traffic.

Regular reviews of the Temporary Traffic Management Plan (TTMP) must be carried out during construction work that affects campus traffic and pedestrian access and flow.

Collaboration among all stakeholders is required to ensure TTMP’s are fit for purpose and adhered to during construction and/or events. Each campus operations team must have a process for approval of TTMP’s.

Massey University shall ensure there are processes in place to manage stock crossing roads and shared spaces and farm fencing in these areas is secure and maintained.

Where possible deliveries should be scheduled to avoid peak times. If this is not possible, consider isolating the area with temporary traffic management equipment, or using a spotter to guide the delivery truck safely around other traffic/people, particularly when reversing.

Incident Management Procedures

Campus security shall be notified if emergency services are called so they can meet at an entrance and guide them to the scene. Massey University shall ensure that access ways are kept clear for emergency vehicles using signage and have processes in place to monitor.

Massey University shall ensure there are processes to manage incidents on campus and the rehabilitation of staff and sufficient trained first aiders present at all campuses.

Emergency Equipment

Emergency equipment must be available at strategic locations around campus traffic and pedestrian areas so that users can prevent further harm or environmental damage e.g.

- Temporary traffic and pedestrian management equipment (barriers and bollards)
- First aid kits
- Suitable fire control equipment
- Containment equipment (spill kits)

Emergency equipment must be up-to-date and maintained, and checked at intervals recommended by the equipment manufacturers.
Reporting

All incidents involving traffic and pedestrians must be reported using the University’s online health and safety reporting system, regardless of severity.

Concerns about campus traffic and pedestrian areas must be reported to the campus Facilities Services team.

Property and infrastructure damages must be reported.

Insurance

Massey University shall ensure there is appropriate insurance to cover property and infrastructure damage.

RELEVANT LEGISLATION OR POLICY

- Land Transport Act 1998
- Health and Safety at Work Act 2015
- Massey University Health, Safety and Wellbeing Policy.

OTHER REFERENCES

- NZTA Health and Safety in Design Minimum Standard.

DEFINITIONS

Code of Practice in Temporary Traffic Management (CoPTTM): is the standard reference for all temporary traffic management on state highways and local roads.

Critical Risk: Any risk that carries the potential for a fatal or serious, life-altering injury.

Critical Control: Any control which is essential for the prevention or mitigation of a critical risk.

Health and Safety in Design (HSiD): is a process that integrates hazard identification and risk assessment methods early in the design process.

Shared spaces: are where pedestrians have legal priority over other traffic.

Traffic: includes any person or vehicle that is moving through campus.

Users: All people using (stationary or moving) campus traffic areas e.g. pedestrians, cyclists, buses, drivers, animal herders, scooter riders etc.