Pedestrian Safety in car parks

Designing for safety
or just parking provision compliance?

Luxmoore Parking Consulting

A division of

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Terms of reference

- the current rules and standards that apply to pedestrian safety in car parks
- potential measures that relevant authorities should consider to improve safety for pedestrians
Background

As car parks are generally low speed environments, the severity of incidents is minor, however, fatalities occur.

The extent of pedestrian incidents in car parks is both under reported and statistically lost as it is often incorporated with other ‘off-road’ areas.

Car parks are effectively ‘shared zones’ with the balance of favour skewed towards cars instead of pedestrians.

Serious outcomes generally involve the more vulnerable in our community – the elderly and children – car parks are inherently dangerous for children.
Standards


This document sets out design principles and minimum design requirements for OFF-ROAD car parks.
Cross referencing many other applicable standards (signage, road marking etc)

(b) Austroads Guide to Traffic Engineering Practice Part 11 – Parking

Provides limited additional advice
Development codes

Local Council Development Control Plans (DCP’s)

“to provide applicants who require car parking as a part of their development with information and specifications on ways to design their car park

• physically attractive
• visually and functionally subservient to the buildings they serve and the environment in which they are set
• meets the needs of users functions efficiently
• and are safe”
Impact of parking provision rates

Local Council parking provision codes

• Often still fixed in ‘predict & provide’ model mindset
• Developers seek to maximise parking by implementing minimum standards
• Pressure to provide the required number of bays does not provide scope to improve amenity of pedestrians and other user groups (disabled, bicycles)
• Widespread failure of planners to see that parking management systems (boom gates, paid parking) substantially remove the need for parking provision

This is the key area where reform could improve pedestrian safety outcomes
Most common design failure

• Entry and circulation lanes immediately front entrance to facilities
Typical site assessment report

• The development of a signage, road marking and vehicle and pedestrian way finding hierarchy and style guide for consistent application to ALL car parks

• **Highlight lift wells, access/egress points and the safest pedestrian routes leading to them**

• Where possible, the implementation of other initiatives (eg: deployment of bollards) should be used as an opportunity to increase the deliberate turning actions of drivers to reduce speed

• **Make speed limit and related signage consistent throughout ALL car parks** by “10km/h Shared Zone’ signage and an associated promotion of what a ‘shared zone’ is

• Speed hump placement with more contemporary and standard compliant units near all pedestrian crossing points

• Consideration of PA system and announcements throughout car park (or lifts);

• **Installation of pedestrian prohibition signage on ramps**

• Separation of loading functions
Best practice
Best practice
Best practice
Pedestrian behaviour

• Line of desire

• Despite best efforts in design, you cannot ‘install’
  • Patience
  • Awareness

• Children’s behaviour in car parks is learnt
Improving pedestrian safety

• *Remove emphasis of approval authorities parking provision codes from quantity to quality*

• *Educate motorists that whilst they are driver’s they are also pedestrians*

• *Encourage developers to engage independent consultants before design approval by consenting authority*