



## Better Best Practice Note

### Carparks and Environment

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Car parking is a major land use known to occupy over 30% of the ground area of many cities<sup>1</sup>.

With population growth and climate change it is no longer acceptable to continue with sprawling carparks that are very often not at full capacity, and quite often even empty.

Carparking reform is needed to respond to this challenge. In the meantime, and starting today, there are valuable changes that urban designers and engineers can make on every surface carpark that will create better outcomes for the environment and local communities.

#### Step 1. Design surface carparks to provide multiple community and customer benefits

##### Layout

If car spaces cannot be located directly by business doors, the next best thing from the user's perspective is to make the walk from the car spaces to the door as painless as possible. This is also an opportunity to break away from the traditional layout of carparks. For example:

- Apply user-based footpath design to ensure they are connected and smooth for easy use<sup>2</sup>. Paths should be located between the noses of cars so the reversing vehicle risk to pedestrians (particularly young children) is minimised in terms of safety and exposure to pollution from car exhausts.
- Ensure the journey is shaded; ideally by trees as they reduce stress and benefit the environment<sup>3</sup>.

- Provide convenient bicycle access and parking, including cargo bike facilities<sup>4</sup> to help increase visits that do not need a car space. Incrementally changing car spaces to bike spaces has been shown to improve economic outcomes for clothing, food & drink and specialty retailing areas<sup>5</sup>.

*Action: Apply a suite of above layout and design techniques to help car users feel more agreeable to parking slightly further away from their destination.*

##### Functionality

Carparks are sized to cater for peak user times, which means there are often times when parts of the carpark are not needed for cars. Find ways to make use of this valuable land for other purposes.

- Design carparks to support markets, pop up stalls, or open-air performances in the evenings of other quiet times. This can include use of moveable planter boxes, bollards, fences or awnings.
- Support use of some carpark areas for casual ball activities like downball or tennis walls via use of signage, marking and seating. These spaces provide valuable social and active outlets for young people, and a positive relationship can be cultured. Contact your local Council who may give guidance and risk strategies on design.
- Parents of young children know there are very few spaces for children to ride their bikes. Ground markings can help children grow their cycling skills in underused areas of the carpark. It could even be possible to loan removable keylock bollards to a signed-up community group for coordinated cycling times.

*Action: Review your carpark use to understand peak demand times, and ask your community if they would like to work with you to make some of your carpark available for multiple uses some of the time*

<sup>1</sup> Ben-Joseph, E. (2012). *ReThinking a lot: The design and culture of parking*. Cambridge, MA: MIT Press.

<sup>2</sup> Pikora T, Giles-Corti B, Bull F, Jamrozik K, and Donovan R (2003) *Developing a framework for assessment of the environmental determinants of walking and cycling*. *Social Science and Medicine* 56 1693-1703

<sup>3</sup> Tzoulas K, Korpela K, Venn S, Yli-Pelkonen V, Kazmierczak A, Niemela J, James P. (2007) *Promoting ecosystem and human health in urban areas using Green Infrastructure: A literature review*. *Landscape and Urban Planning* 81 167-178

<sup>4</sup> Schliwa G, Armitage R, Aziz S, Evans and Rhoades J (2015) *Sustainable city logistics – making cargo cycles viable for urban freight transport*. *Research in Transportation Business & Management* 15 50-57.

<sup>5</sup> Lee A & March A (2010) *Recognising the economic role of bikes: sharing parking in Lygon Street, Carlton*. *Australian Planner* 47:2 85-93





