

Parking, cities, transport: So what, who cares?

Bicycle Victoria
April 2019



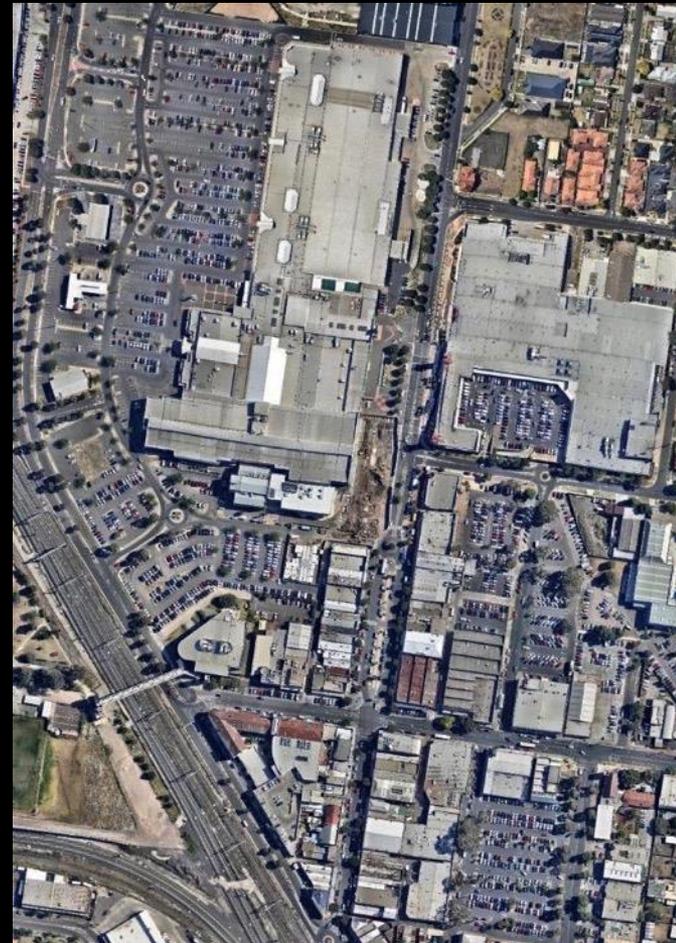
Dr Elizabeth Taylor
Senior Lecturer in Urban Planning & Design
Monash University MADA

Parking: essential, unnoticed

Cities remade around parking (Carlton, Vic)



Or designed around it (Sunshine, Vic)

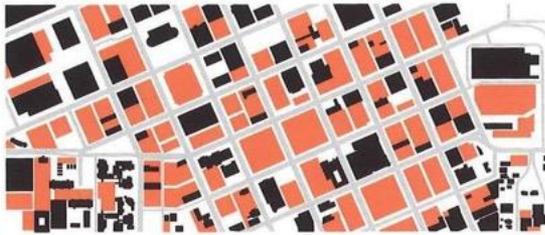


“We demand convenient parking everywhere we go, and then learn not to see the vast, unsightly spaces that result”.

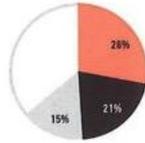
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- Eran Ben-Joseph, (2012), *“Rethinking a Lot”*, Cambridge, MIT Press

There is often a lot of parking



MIDTOWN/
DOWNTOWN
TULSA, OK

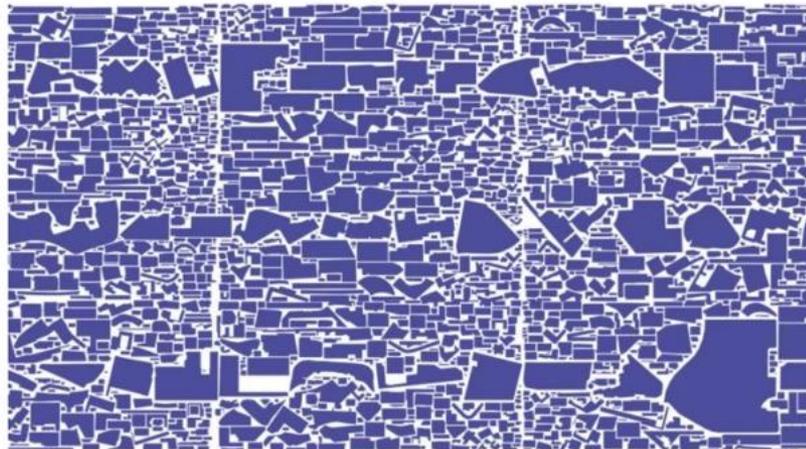


SUBURBAN STRIP
ORLANDO, FL



See Just How Much Of A City's Land Is Used For Parking Spaces

In Los Angeles, for example, car parking takes up 17,020,594 square meters of land.



1/6 What the Street? inventories parking lots in 23 cities around the world, along with the space used for roads, rail lines and rail yards, and bike paths and bike parking. This chart represents LA. [Image: courtesy Moovel Group]

1.10

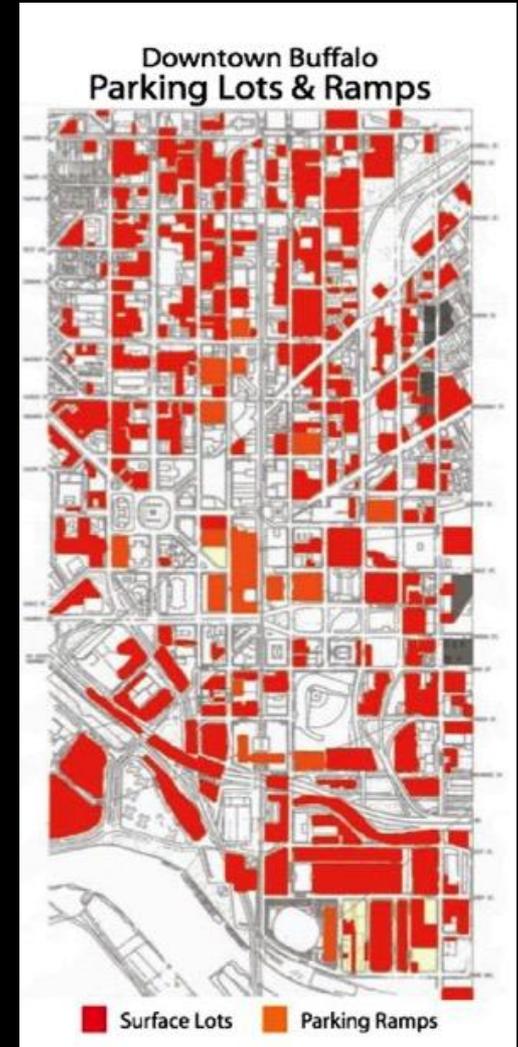
Diagrams showing typical urban core States and surface parking lots' cov

Orange: surface parking
Black: building's footprint
Gray: roads
White: unpaved areas

© Stephen Kennedy

*Tulsa & Orlando
("Rethinking a
Lot")*

Los Angeles (What the street? Moovel Lab)



Downtown Buffalo
Parking Lots & Ramps

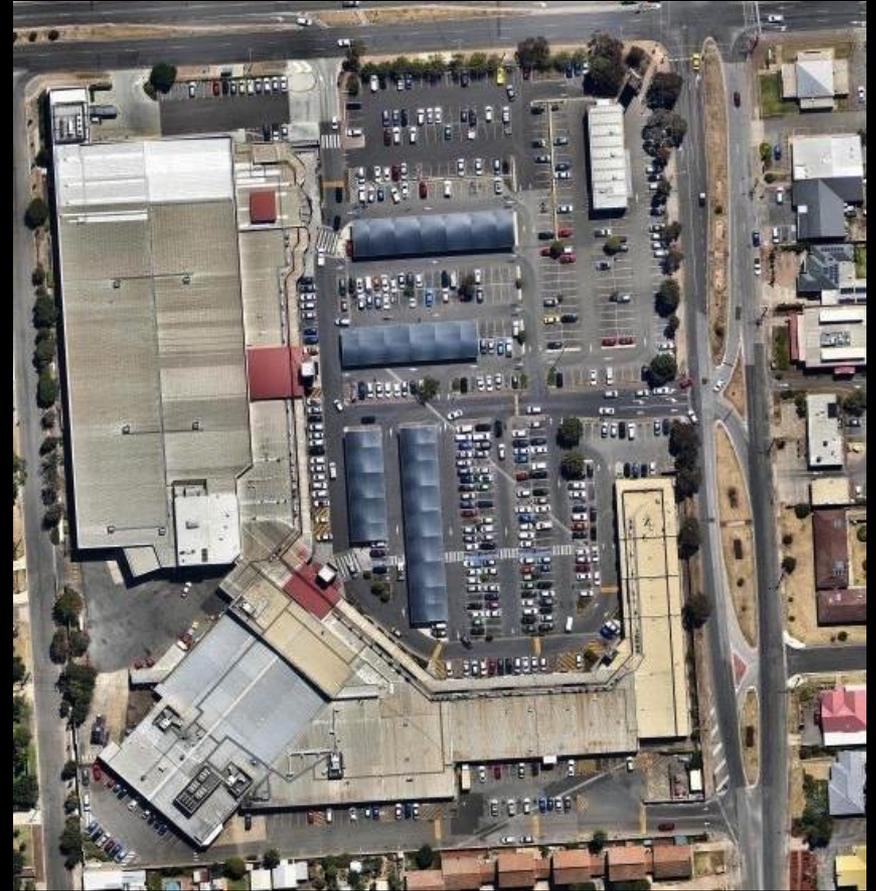
Red: Surface Lots Orange: Parking Ramps

Buffalo

Most parking is planned



Elizabeth, SA

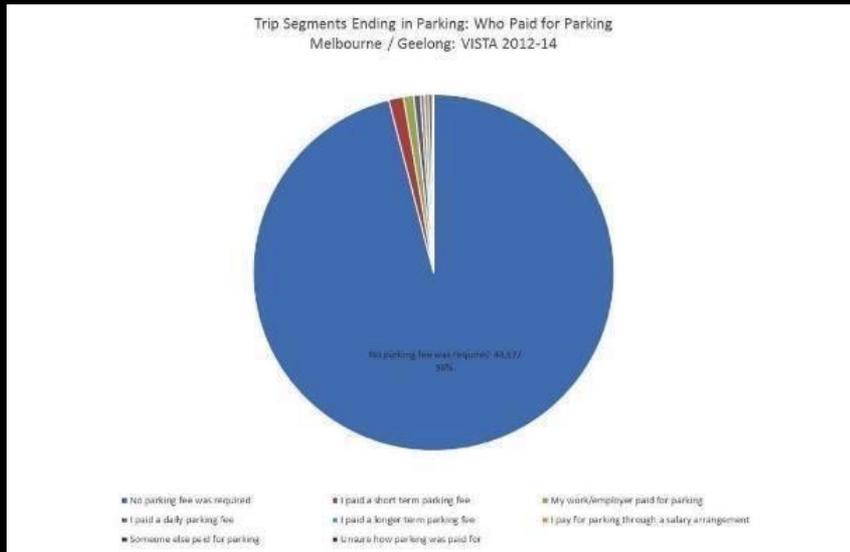


Morphet Vale, SA

Most parking appears 'free'

Who paid for parking? (No fee = 96%)

Despite underlying parking space and costs



Melbourne - VISTA travel survey 2012-2014

Type of parking	Land per bay	Land cost / m2 \$2 000 - \$3 500	Floor area per bay	Constructi on cost per bay	Estimated total cost per bay
Off-street surface (at-grade)	35m2	\$70,000 - \$122,500	35m2	\$3,500	\$73,500 - \$126,000
Deck - 2 level	16m2	\$32,000 - \$56,000	32m2	\$31,000	\$63,000 - \$87,000
Deck - 4 level	8m2	\$16,000 - \$28,000	32m2	\$34,000	\$50,000 - \$62,000
Basement - 2 level	8m2	\$16,000 - \$28,000	32m2	\$39,000	\$55,000 - \$67,000

Austrroads Guide to Traffic Management Part 11: Parking, 2017

Because of conventional parking policies



- 'Predict and provide'
- Minimum off-street requirements
- Low priced on-street parking
- Widespread from mid 20th century
- In response to rapid motorisation

(Illustration by Rebecca Clements)
(Based in part on Barter, 2015)



“The relationship between transportation and land use is real, powerful, and straightforward. It can be stated as follows:

Governments give drivers free land;
People as a result drive more than they
otherwise would.

That’s it. The rest is commentary”.

- Michael Manville, (2017), Travel and the Built Environment: Time for Change, *Journal of the American Planning Association*, 83:1.

Issues with conventional policies

Hidden costs of parking



Opportunity costs



(Illustrations: Rebecca Clements)

- Disguise real demand for and cost of parking
- Oversupply parking at expense of other land uses
- Subsidise car use and storage
- “Pseudo science of planning for parking” (Shoup 2005 *The High Cost of Free Parking*)

Parking as flash point



Elon Musk Has an Awkward Problem at Tesla: Employee Parking

With more employees competing for limited spaces, cars are often jammed diagonally in spots, propped up on curbs or left on gravelly medians; 'you're getting your tires slashed'

By [Tim Higgins](#)
April 11, 2017 11:57 a.m. ET

Billionaire entrepreneur Elon Musk is reimagining the future of transportation by attempting to build self-driving cars, invent a supersonic railway and launch private citizens into outer space.

What keeps him up at night, though, is the parking lot outside his office window.

Recommended Videos

1. [Film Trailer: 'Atomic Blonde'](#)

'Arab spring' in Yarraville: Victorian councillor punched in parking meter uproar

Activist compares opposition to paid parking in Melbourne against Middle East dictatorships, as council meeting eru...



[Residents slam 'nonsensical' bike route through their 'hood](#)
The Age - 30 Mar 2019
Caulfield North residents have slammed plans for a bicycle ... There is a bike path here [marked bike lanes along Inkerman Road], and perhaps ...

[Inkerman Rd safe cycling proposal sparks tensions among neighbours](#)
Herald Sun - 8 Apr 2019
Plans for a massive bike highway in Caulfield North have sparked a war ... Dandenong Rd as an option, or a split of two one-way bike lanes on ...

[Trains resume after Sandringham line fatal strands thousands of ...](#)
Herald Sun - 15 Apr 2019
... for upgrades, forcing pedestrians on to roads and into bike lanes. ... Monash University at Caulfield, as weary commuters were diverted back ...

[Mega bike highway between Dandenong and Melbourne blasted](#)
Herald Sun - 8 Mar 2019
A proposal to create a mega bike highway linking Dandenong to ... the new elevated rail shared path in the Caulfield activity centre and St Kilda ...

Historical commitment to parking



"The formidable problem ..."

“By contemporary American standards this provision would be inadequate, but it is much in advance of what is available today in Melbourne”.

“Parking spaces should not only be adequate in number, but if they are to properly fulfil their purpose must also be located convenient to the shops because shoppers do not want to carry their purchases a long way to their cars.”



Modern American shopping centre — Framingham near Boston, Mass.

1954 Melbourne Planning Scheme

1959

such as... such plan clearly indicate on the ground the boundaries of all such car spaces and access lanes.

TABLE TO CLAUSE 23

COLUMN 1	COLUMN 2
Apartment House	1 car space to each two habitable rooms.
Residential Building	1 car space to each four lodging rooms.
Flats	1 car space to each flat.
Industry	1 car space to each 1,500 square feet of floor area of the building.
Warehouse or Store	1 car space to each 3,000 square feet of floor area of the building.
Office or Bank	1 car space to each 1,000 square feet of floor area of the building.
Place of Assembly other than a Public Hall	1 car space to each 200 square feet of floor area of the building.
Place of Worship or Public Hall	1 car space to each 10 seats.
Hotel	1 car space to each 20 square feet of bar floor space available to the public and 1 car space to each 50 square feet of lounge or beer space available to the public.

2/5/2016 Nightingale faces fresh challenge | ArchitectureAU

Nightingale faces fresh challenge

News | Words [Linda Cheng](#)



The Nightingale apartment development in Brunswick designed by Breathe Architecture.

The architect-led Brunswick apartment development Nightingale is facing a new objection from the owner of the neighbouring property, Chaucer Enterprises.

Last year, Chaucer Enterprises successfully challenged the planning approval given to Nightingale by Moreland City Council in the Victorian Civil and Administrative Tribunal (VCAT), on grounds it did not provide adequate car parking. VCAT ruled in favour of Chaucer and revoked Nightingale's planning permit, which led to its proponents, including the building's architect, Breathe Architecture, submitting a new planning application with car parking.

2016

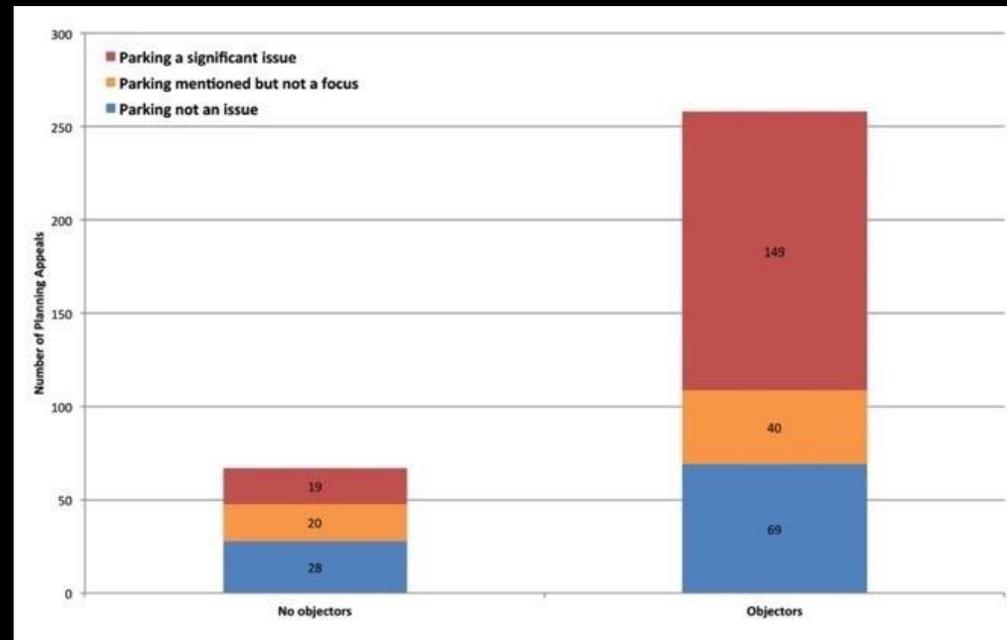
Table 1: Car parking requirement

Use	Rate		Car Parking Measure
	Column A	Column B	
	Applies the standard rate to all zones	Only applies where specified in a schedule to the Parking Overlay	
Amusement parlour	4	3.5	To each 100 sq m of net floor area
Art & craft centre	4	3.5	To each 100 sq m of net floor area
Betting agency	4	3.5	To each 100 sq m of leasable floor area
Bowling green	6	6	To each rink plus 50 per cent of the relevant requirement of any ancillary use
Child care centre	0.22	0.22	To each child
Cinema based entertainment complex	0.3	0.3	To each patron permitted
Convenience restaurant	0.3	3.5	To each patron permitted To each 100 sq m of leasable floor area
Convenience shop if the leasable floor area exceeds 80 sq m	10	3.5	To each premises To each 100 sq m of leasable floor area

Minimum standards: remain, but under strain

“Fight the towers! Or kiss your car park good bye”

- Car parking the focus of 80% of planning appeals in Victoria
- (Thousands each year, mostly about new apartments)
- Existing residents assert rights to on-street parking
- Blame parking pressures on new apartments with insufficient parking
- Pressure to meet or exceed statutory minimums



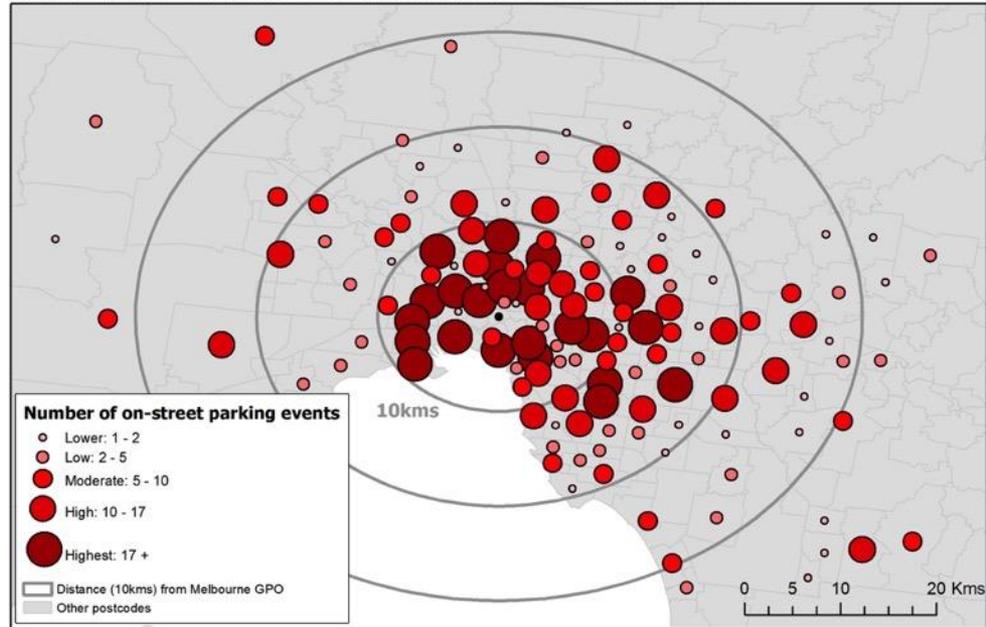
Taylor, E. (2014). “Fight the towers! Or kiss your car park goodbye”: How often do residents assert car parking rights in Melbourne planning appeals?. *Planning Theory & Practice*, 15(3), 328-348.

Who's been parking on *my* street?

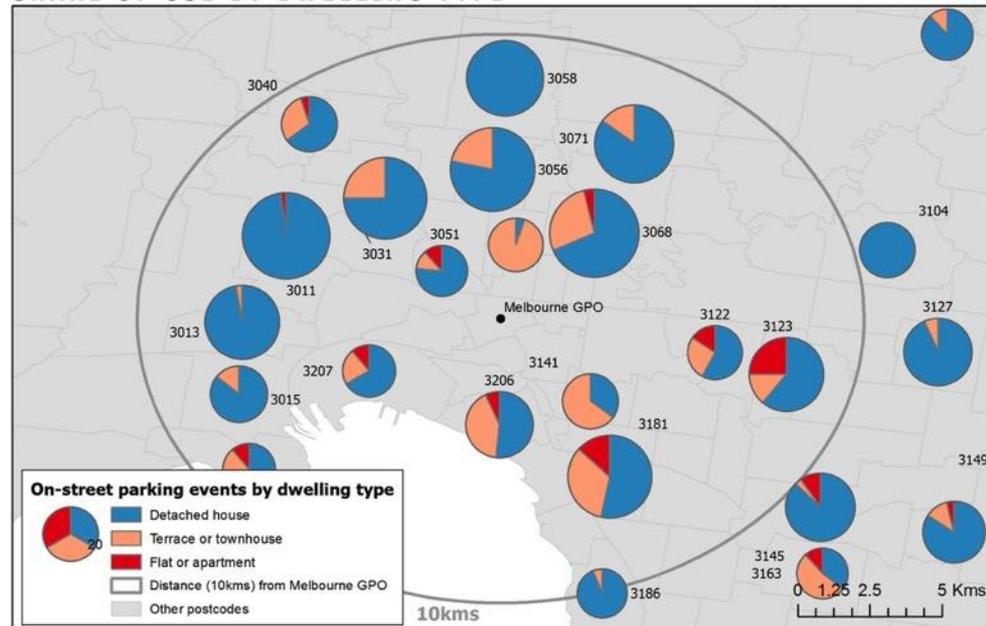


- Who's been parking on *my* street? The politics and uneven use of residential parking space
- Asserted rights to space
- Garages of 'stuff' vs empty apartment lots
- <https://www.sciencedirect.com/science/article/abs/pii/S0264837718309104>
- Also:
- <https://theconversation.com/empty-car-parks-everywhere-but-nowhere-to-park-how-cities-can-do-better-99031>

**RESIDENTIAL ON-STREET PARKING
(TRIPS HOME ENDING IN ON-STREET PARKING) (N=1,645)
VISTA SURVEY 2012-14, MELBOURNE, BY POSTCODE**



**POSTCODES WITH HIGHEST LEVELS OF ON-STREET PARKING:
SHARE OF USE BY DWELLING TYPE**





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