

Japanese parking approaches



The persistence of
wanting “more”
parking and thinking
“enough” parking exists



Urban impacts of parking

- Induces excessive driving (*Weinberger, 2012; Shoup, 2005; Hamre & Buehler, 2014; Pierce et al, 2015; Christiansen et al, 2017*)
- Entrenches car dominance (inhibiting other transport modes)
- Subsidises car use
- Costs spread throughout urban life (*"The Hidden Cost of Free Parking"*)
- Housing affordability (inc. renting)
- Equity and future adaptability issues
- Skewed view of "demand"



Where are we?



- Remove MPRs
- Investigate and unlock decoupling initiatives
- Deal with conflicts

Urban areas vastly dominated by surface parking

Up to 30-40% of downtown areas



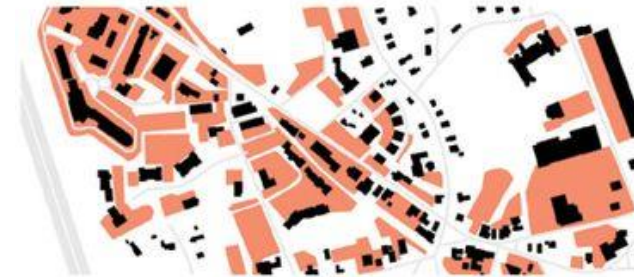
Surface parking

Buildings

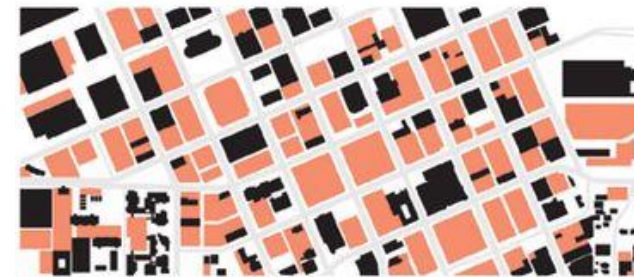
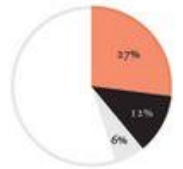
Streets



SMALL TOWN MAINSTREET
PULASKI, VA



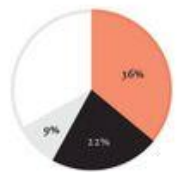
NEW ENGLAND TOWN CENTER
CHELMSFORD, MA



MIDTOWN/DOWNTOWN
TULSA, OK



SUBURBAN STRIP
ORLANDO, FL



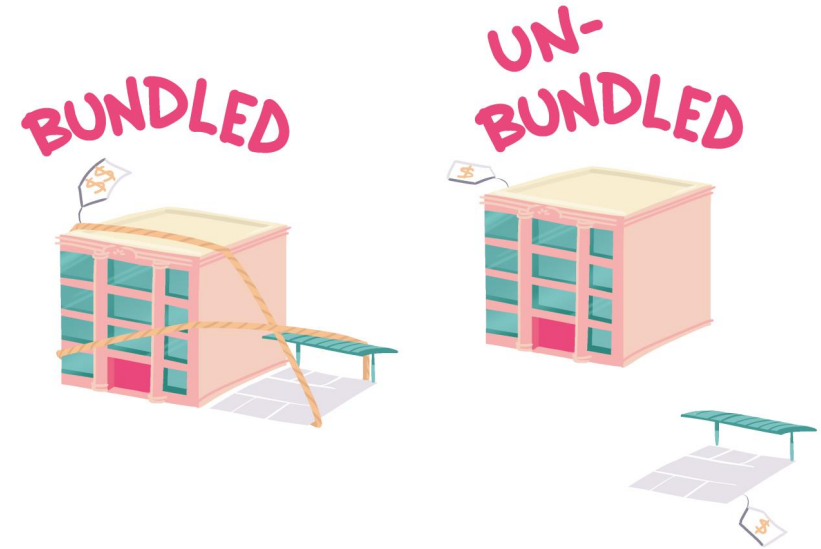
Towards parking policies that empower communities



MARKET / “RESPONSIVE” / “WALKABLE” PARKING

Most parking is:

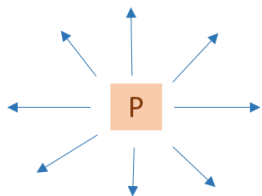
- Priced (“the right price” – Performance-based dynamic pricing)
- Responsive to market signals (common in CBDs)
- Unbundled (not locked-in to single-site ownership)
- Publicly-shared (not locked-in to single-user use)



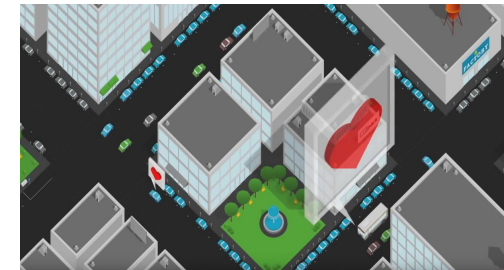
Park once districts



Instead of parking on every site



Parking serving many sites within an area



e.g. SF Park

Dynamic pricing targeting 85% occupancy



Target price range

Unbundling parking

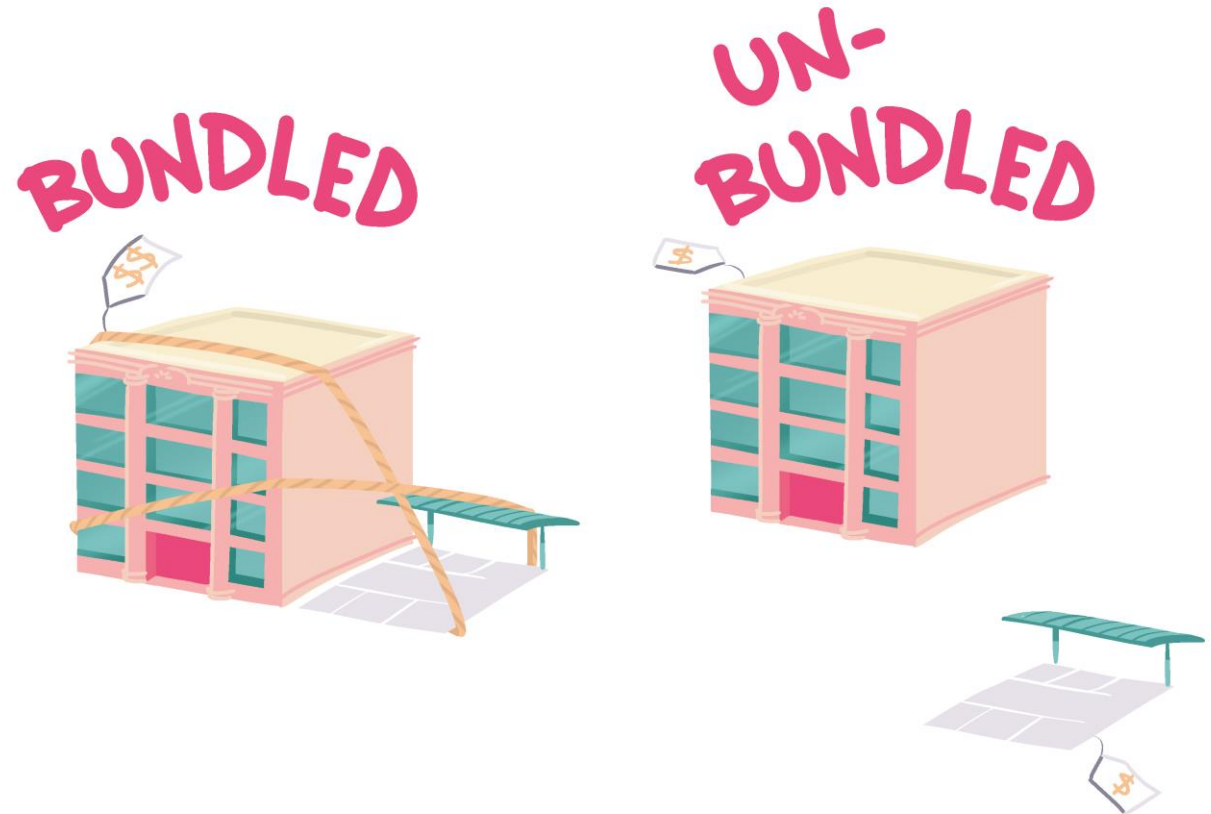
Unlocking land use from parking space user

- Individuals (leasing an existing space if they need one)
- Real estate agents (seeking leasing arrangements within the neighbourhood)
- Via sharing companies (e.g. ParkHound)

Creating conditions for diverse use

- Existing hourly lots may convert some spaces to monthly rentals

Stop forcing supply



Shifts the conception of parking

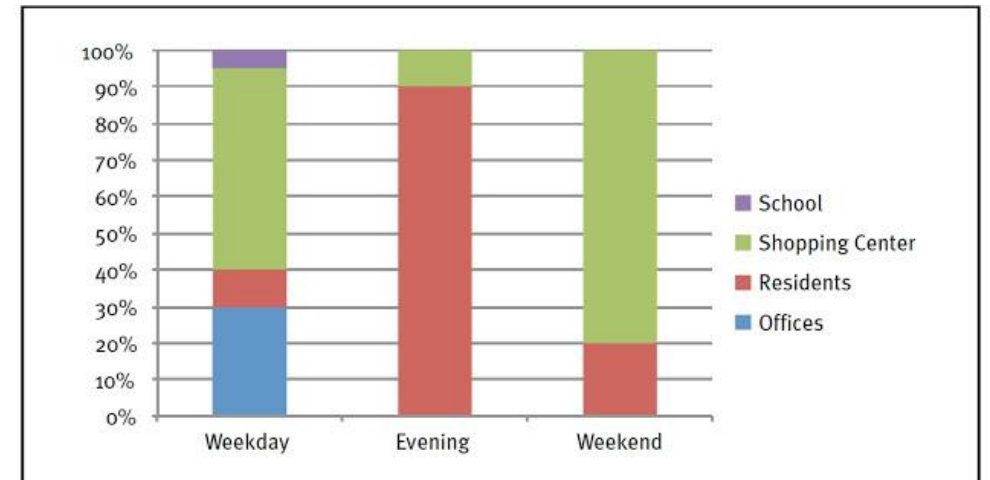
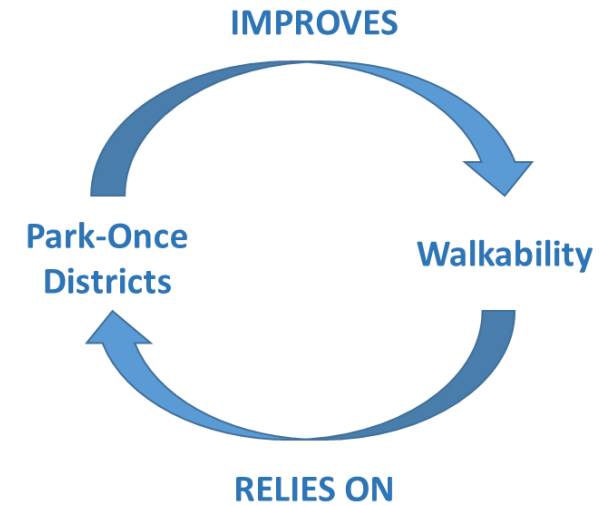
"Adaptive Parking: A Flexible Framework for Parking Reform" by Paul A. Barter
for the SITCE 2013 Conference, Singapore.

	Every site should have its own parking	Parking facilities serve whole neighbourhoods
Parking is "infrastructure"	1. Conventional	2. Parking Management
Parking is a "real-estate based service"	<i>no examples</i>	3. Responsive (including Adaptive Parking)

Figure 1 A simple framework for categorising parking policy alternatives

Gets us into a virtuous cycle of walkability

- Promotes walkability
- Reduces traffic
- More efficient use / less parking needed
- Politically easier to remove MPRs
- Pool of public parking removes spillover concern
- Changes mindsets around site-based parking
- Speeds transition to efficient supply
- More likely to be actively managed (private operator motivation)
- More responsive to demand
- More value per space



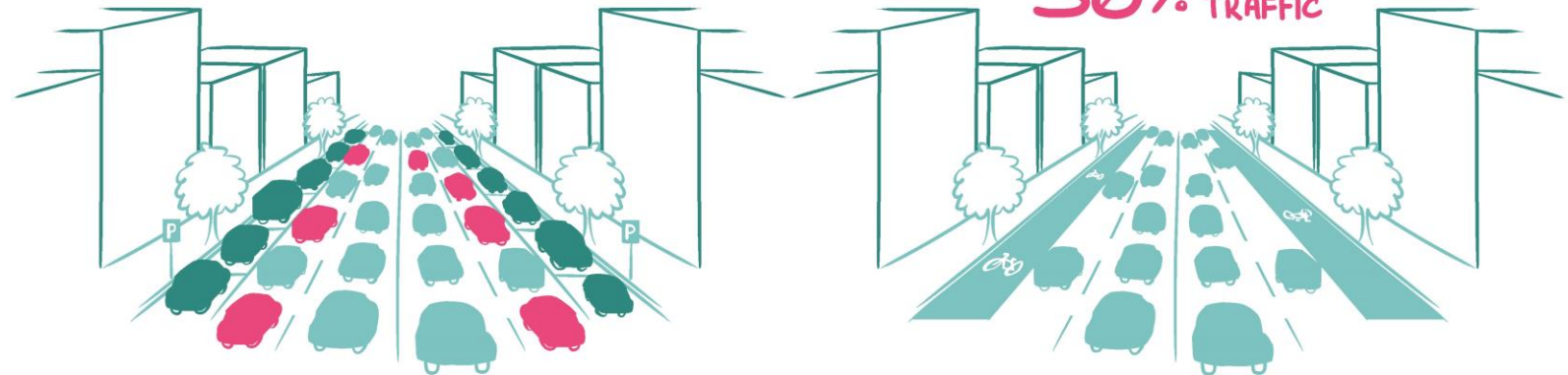
The table illustrates how 100 parking spaces in a mixed-use district can be distributed based on usage at different times.

On-street parking problematic

- Particularly problematic for commercial areas
- Generates additional traffic/congestion as drivers access parking, and “cruise” for spaces (Shoup, 2005)
- Even one space can inhibit a whole street lane
- Entrenches sense of rights to parking spaces



Cruising for Parking



Opportunity for alternative urban space

TRAFFIC
FLOW

BIKE
LANES



WIDER
PEDESTRIAN
SPACES

TREES AND
GARDENS

WATER
SENSITIVE
URBAN
DESIGN

A very different alternative: The example of Japanese cities

JAPANESE ADAPTIVE PARKING

Long-standing regulated parking market since mass motorisation

KEY FEATURES

- Almost no on-street parking (+ strict enforcement)
- Proof-of-parking law (parking space must be secured by user before car registration)
- Exceptionally low parking minimums (many exemptions for small buildings)
- Small plot off-street parking typologies (e.g. Standalone car stacking facilities)
- Market pricing and largely market-based provision of public parking
- Minimal government parking provision and subsidies (market-price parity)
- Parking as a real-estate based service





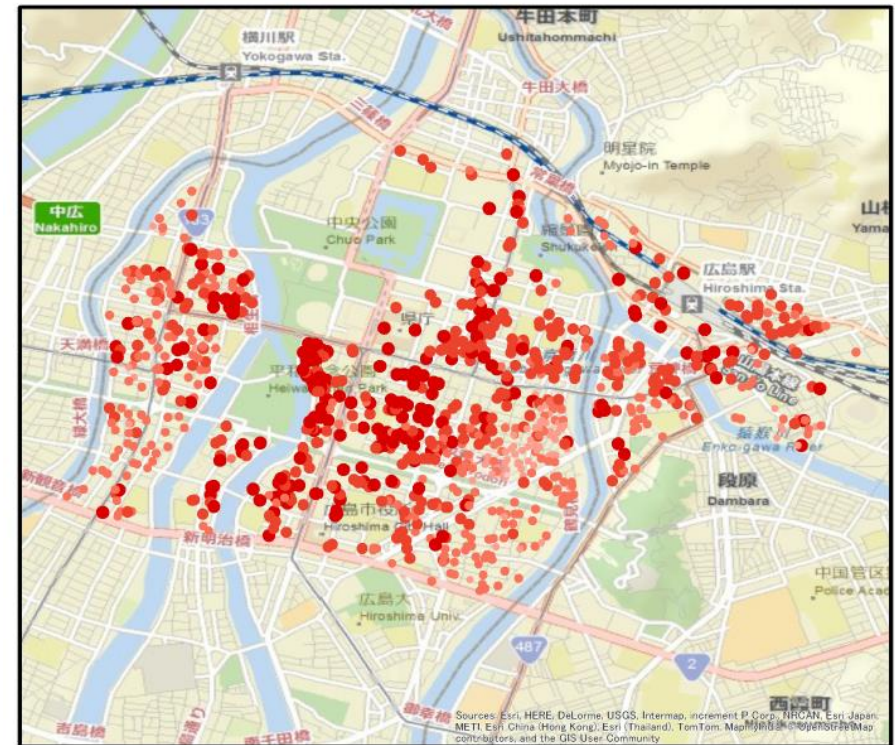
Coin parking (hourly)
Public parking
(private firms, some govt)



Diverse apps for users



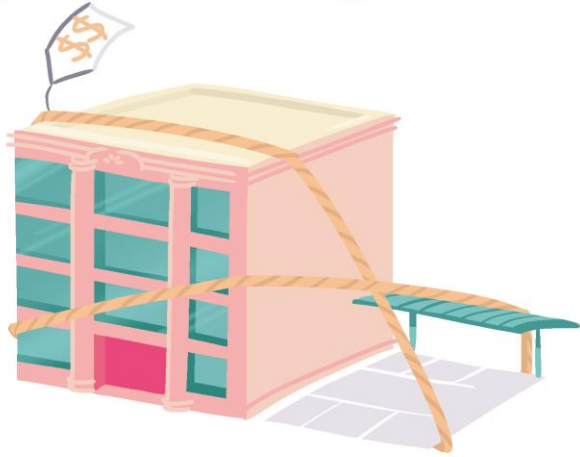
Usage data for researchers (and business)



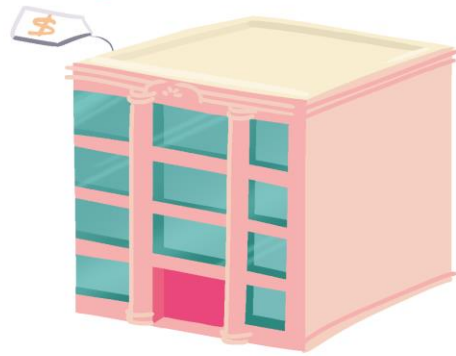
Monthly parking lots

Managed by real estate firms/communities

BUNDLED



**UN-
BUNDLED**



Monthly parking lots

Managed by real estate firms/communities



RANGE OF TYPOLOGIES

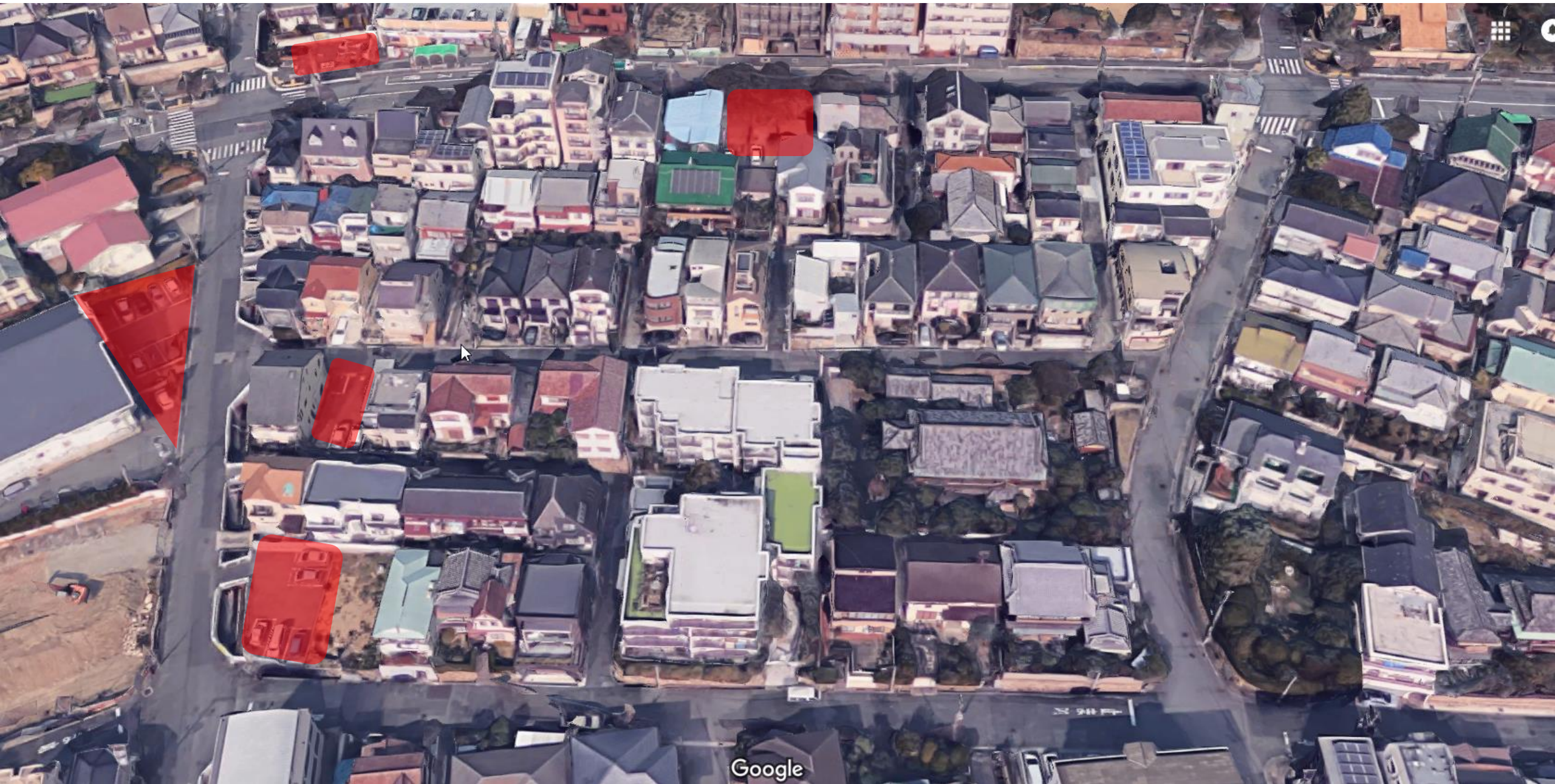
BASED ON SPATIAL CONTEXT AND LAND VALUE

Car stackers and larger public garage forms (activity centres)

Small-scale, simple neighbourhood lots

Medium-scale cheap/efficient stackers

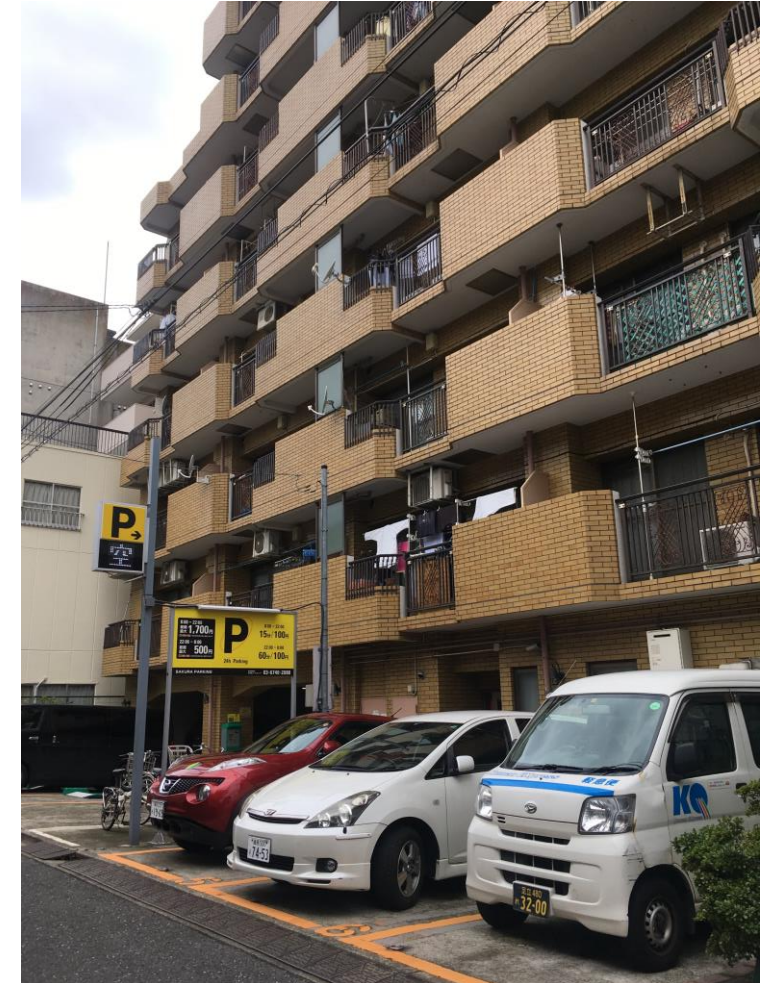




LOW / NO MPRs

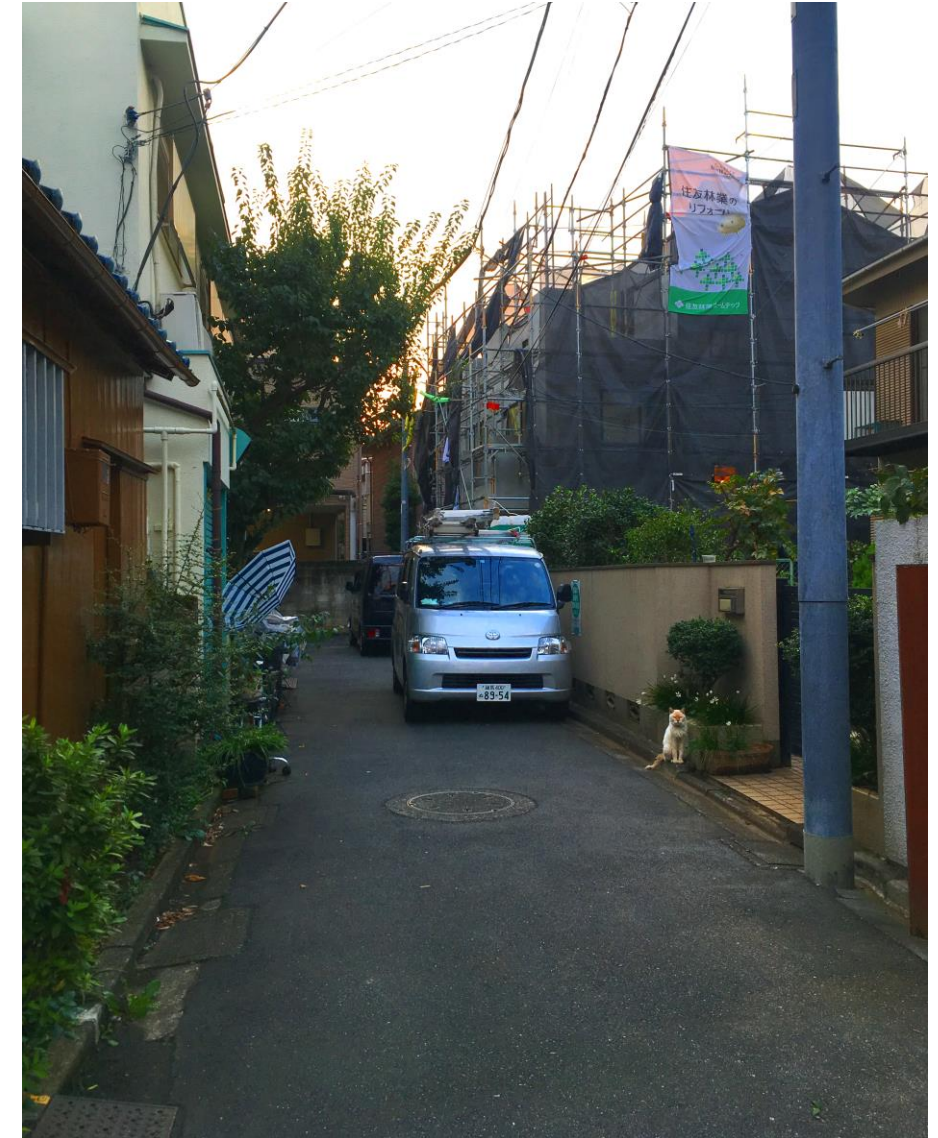
RESIDENTS CHOOSE PARKING BURDEN

MED DENSITY APARTMENTS OFTEN HAVE NONE / ONLY 1-2 VISITOR SPACES



Various approaches to VISITOR PARKING

Often informal in neighbourhoods



Home parking spaces Change use over time



As do public market spaces



Low traffic streets – most streets shared

Almost all children walk to school independently

It is common for people to walk on and use the street space

Cars typically move for people



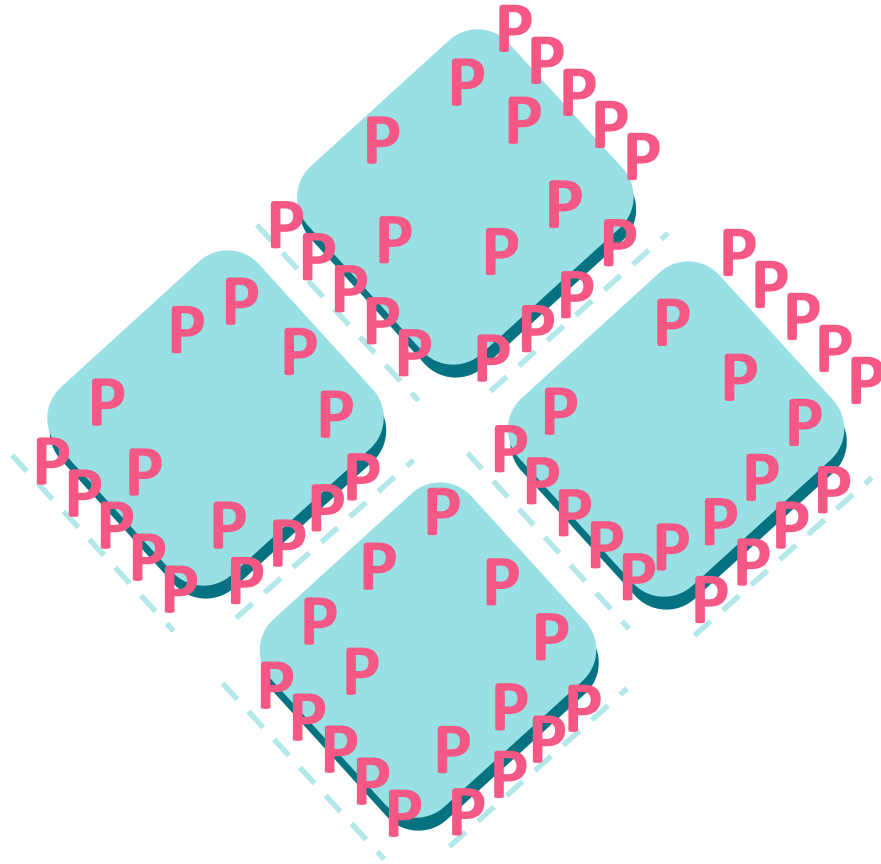


More (cat and) pedestrian-oriented streets



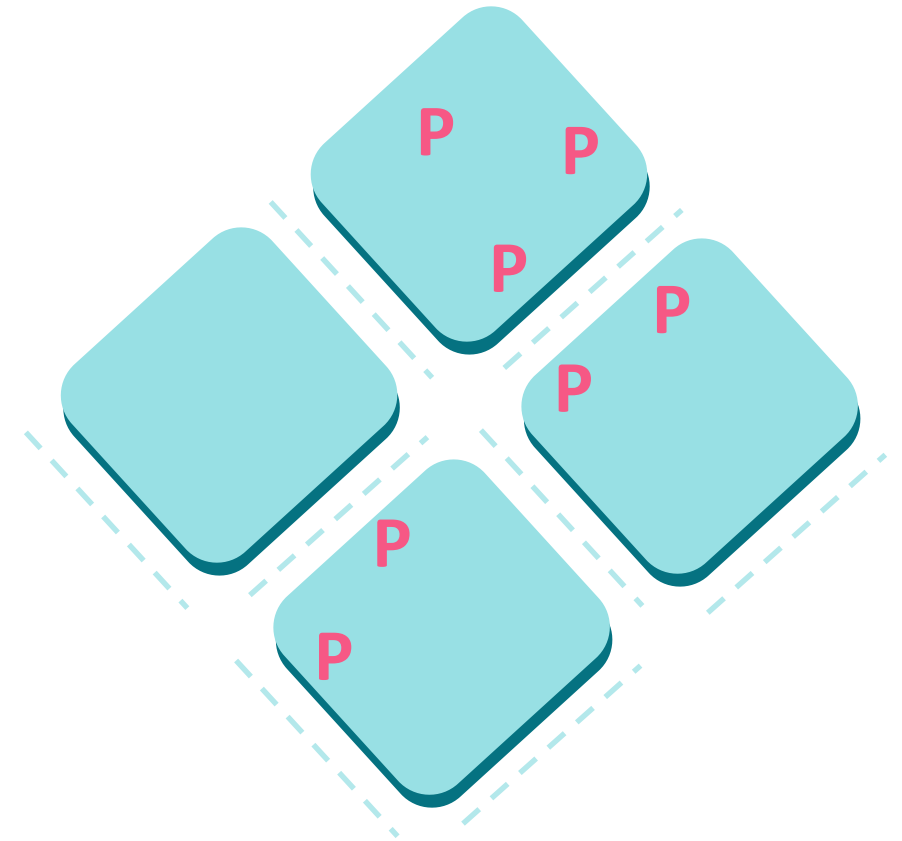
Conventional parking

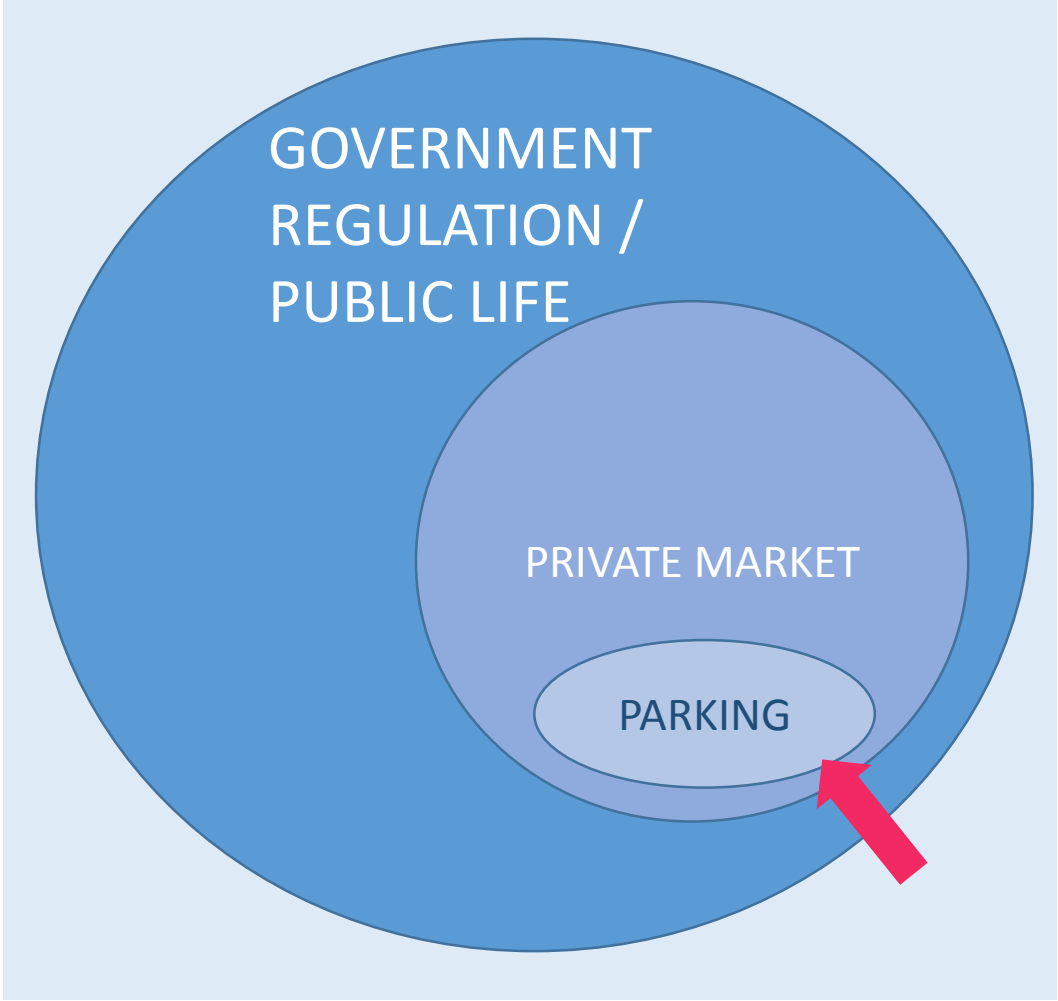
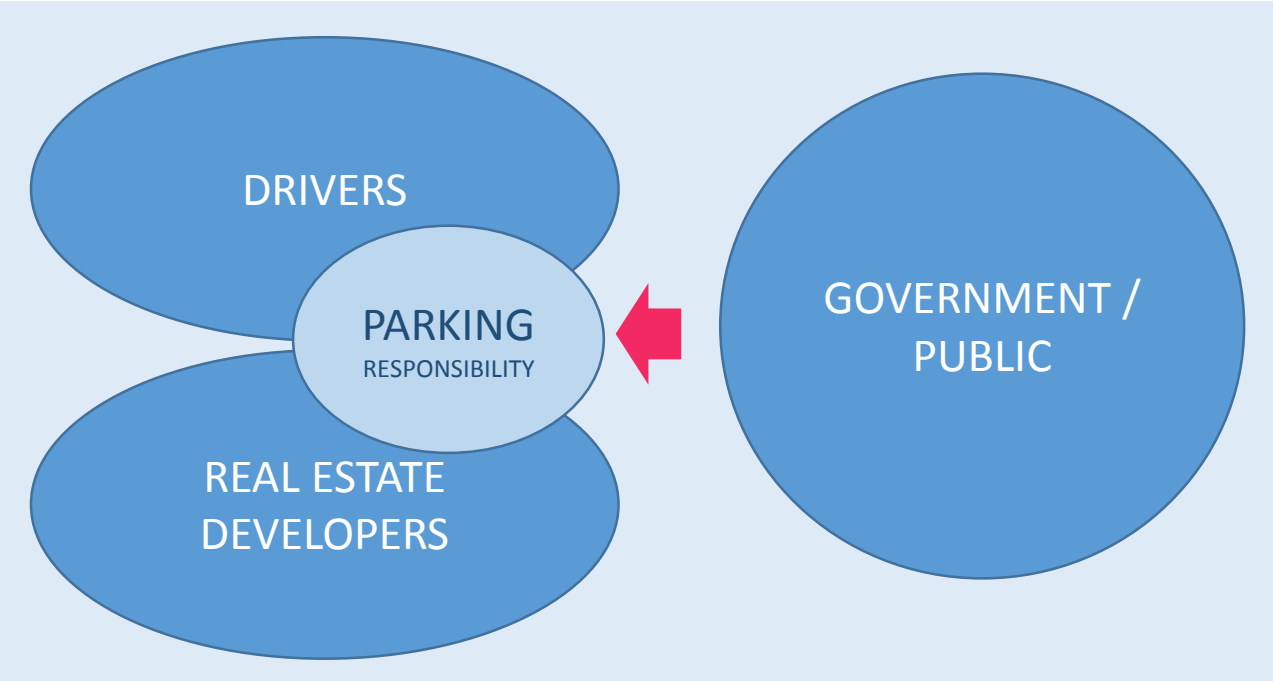
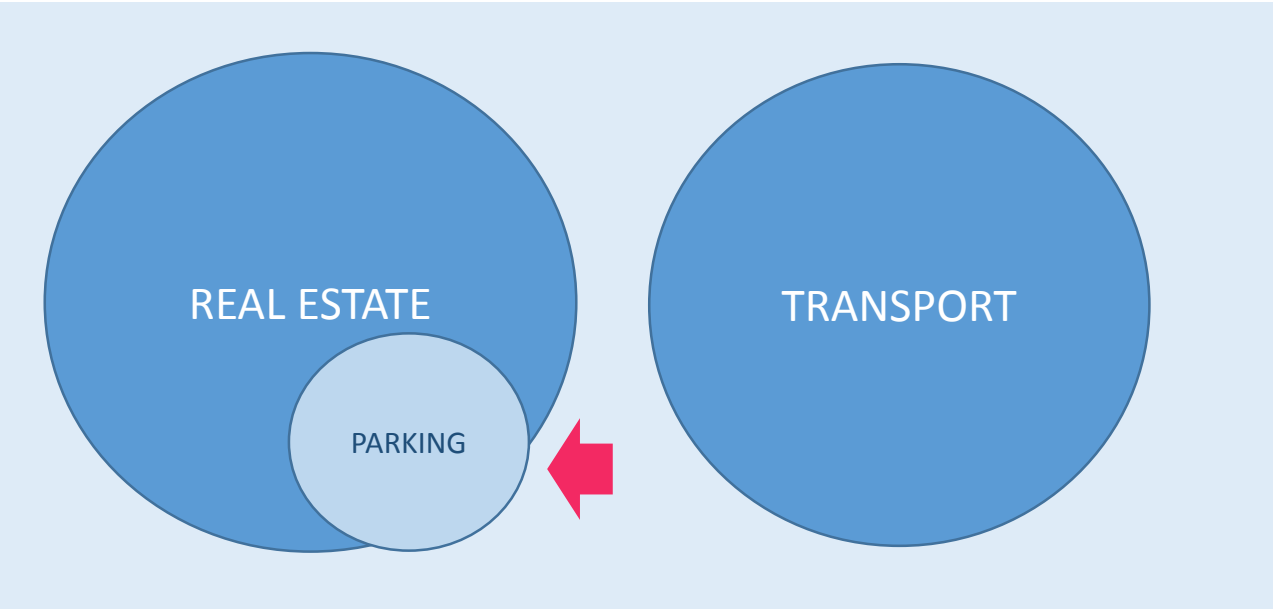
US/Australian cities



Adaptive parking

Tokyo





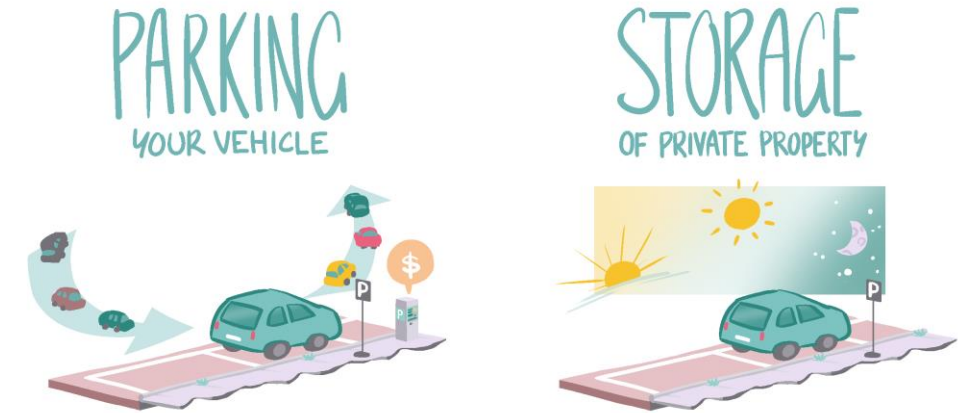
Opening up the debate, creating new possibilities



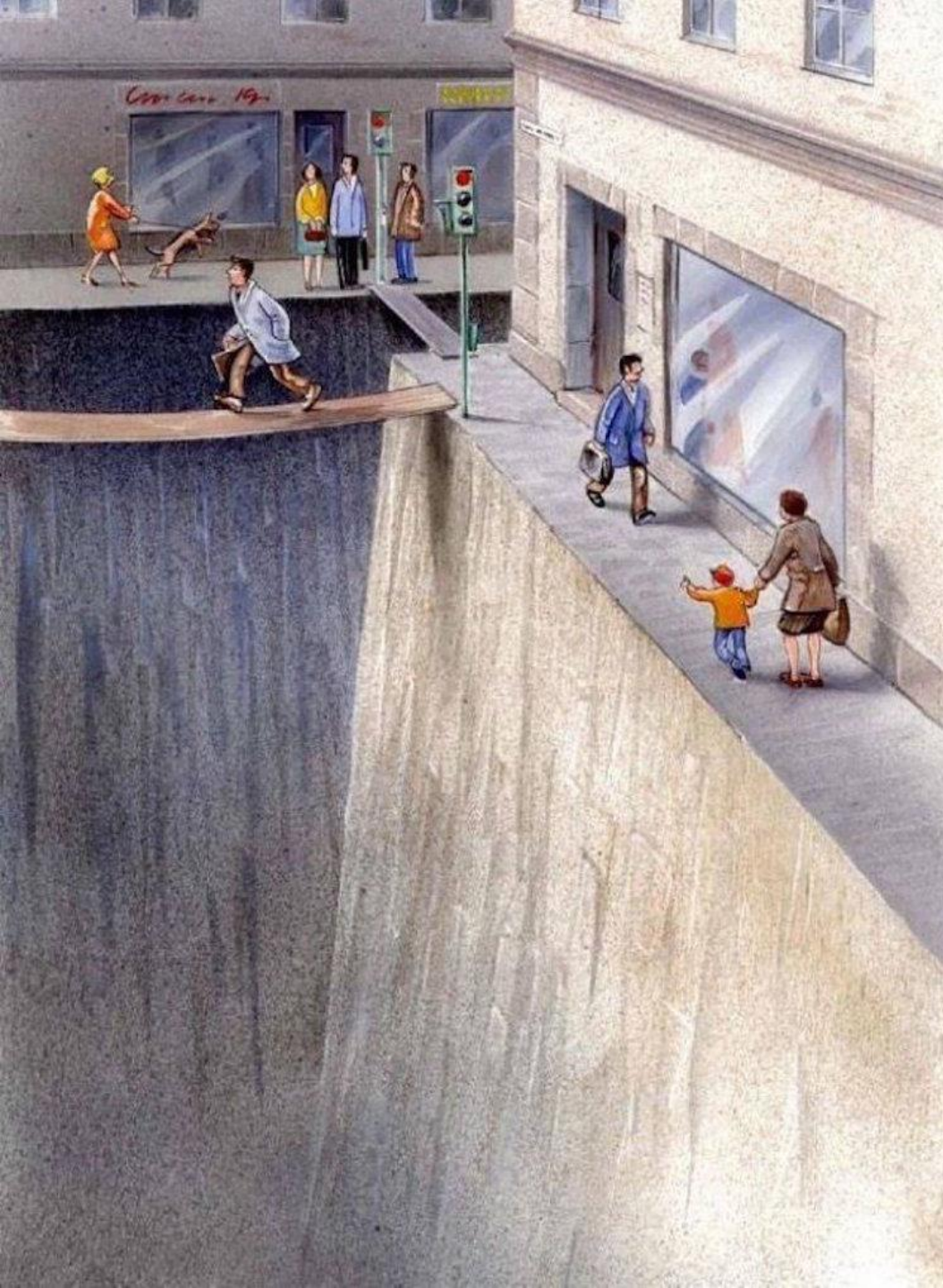
Key: Changing our characterisations & discourse

(of parking, “demand”, and relationships)

- **MOBILITY vs CAR USE**
What kind of transport access is needed?
- **PARKING vs STORAGE**
Is it a temporary stop? Or storage of private property in public space?
- **PARKING SPACE vs OPPORTUNITY COST**
- **NEEDS vs CONVENIENCE**
Is removing on-street parking space inhibiting necessary access? Or just inconveniencing drivers to a degree (correcting a power imbalance)?
- **DEMAND vs CONSTRAINED ALTERNATIVE OPTIONS?**
Is the apparent “demand” an artificial one based on constrained options? Is more “invisible” demand going unmet?



An individual storing their private property within the public street, inhibiting other opportunities



Priority for who?

Who and what is the space between our buildings for?

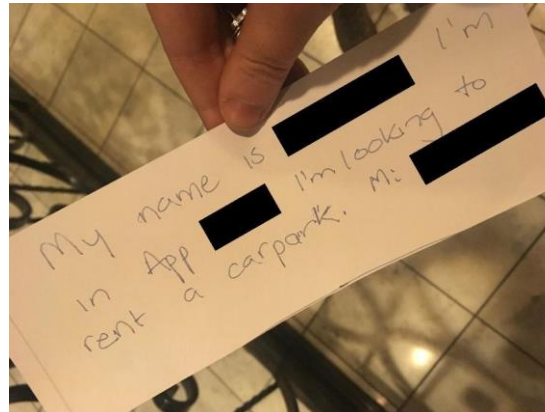
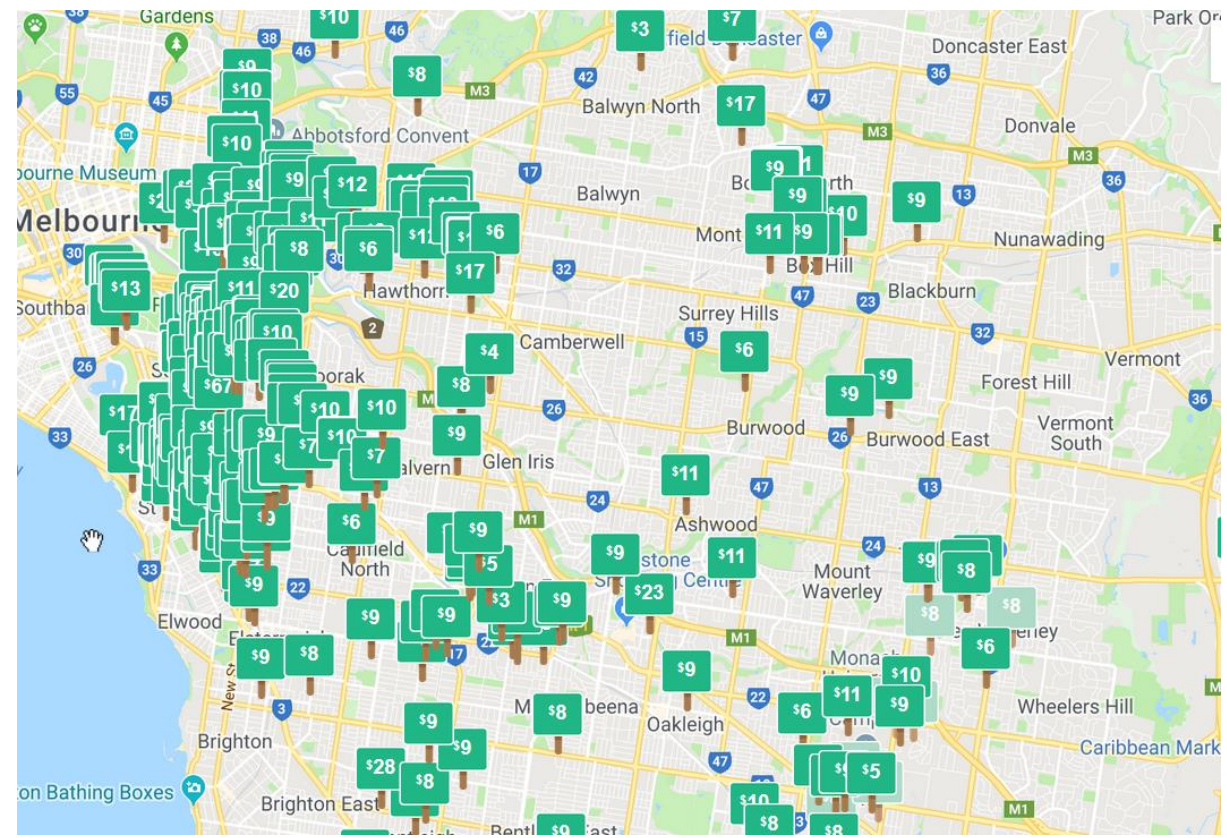




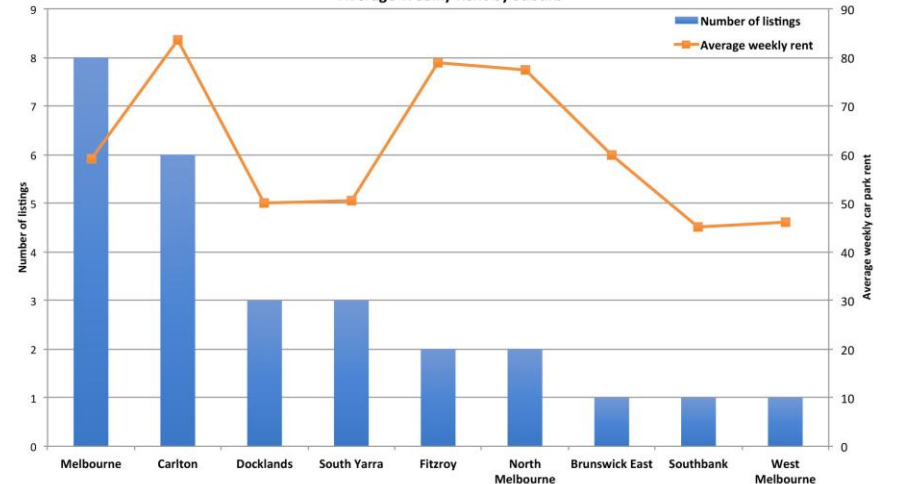
Emerging informal markets

Research w Dr Liz Taylor (RMIT)

- Predominantly in areas with restrictive parking conditions
- Via real estate firms, third party sharing econ, renters/owner-occupiers
- BUT clearly possible all over metropolitan area if facilitated



Sampled Car Park Listings, Melbourne - Average Weekly Rent by Suburb



Reimagine

Park(ing) Day

Since 2005, by REBAR in San Francisco

In 2009, 700 installations in 21 countries and 140 cities



TRAFFIC
FLOW



BIKE
LANES



WIDER
PEDESTRIAN
SPACES



TREES AND
GARDENS



WATER
SENSITIVE
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DESIGN

Thankyou.