

PROMISING URBAN PARKING POLICY INNOVATION

**International policy agendas and trends of possible
relevance for German cities**

Paul Barter

www.reinventingparking.org

@ReinventParking

Summary outline

Key themes

Park-Once-and-Walk Planning (“Walkable Parking”)

On-street Enforcement

On-Street Rationing

Parking for Travel Demand Management (TDM)

KEY THEMES

Key themes

Thinking differently about parking

Digital opportunities

Approaches to change (responsiveness to context; market prices;
Improving stakeholder engagement; trials/pilots; incrementalism)

Success without excess

THINK DIFFERENTLY ABOUT PARKING

Parking is **NOT** a “public good” (your use affects mine and we can easily price/exclude)

Better to think of on-street parking as a limited and valuable “commons” that **always needs management** (like village grazing land, fisheries or hunting grounds)

If not managed, it will be over-used. So **manage it!** (design, rationing, enforcement)



THINK DIFFERENTLY ABOUT PARKING

Think of off-street parking as a
real-estate service for each area
(not each site)

Much of the parking open to the public

Delivery as market good by real-estate industry



Tokyo



Seoul

THINK DIFFERENTLY ABOUT PARKING

**Parking is clearly NOT
a Basic Need
or a Merit Good**

(expect possibly in areas planned for almost universal car use where alternatives are awful)



Is parking policy technical or political?

(Overall supply policy? On-street management?)

Overall **MOBILITY** vision is a political question.
Parking supply strategy is part of that debate

- Parking for push-pull/TDM too
- On-street parking design (street design) too
- But politics is messy, so local stakeholders often seek parking steps that contradict mobility vision

But on-street parking enforcement and rationing are primarily technical (there is not much choice about goals really). The political question is how seriously to take them.

POLITICAL questions: debate over goals! Different answers based on different values and interests

TECHNICAL questions: Clear goals widely agreed. But room for evidence-based debate over specific technical methods or tactics to achieve those goals.

Adaptive Parking

Towards municipal parking policy that delivers:

- success without excess
- responsiveness to local conditions and to change
- more value from urban space



RESPOND: Towards Adaptive Parking

Digital Opportunities

To do better

Sensing

Information and guidance

Payments

Enforcement

New matching of spaces with customers

Data stream (from sensing, payments and enforcement) to help:

- set the right prices
- Improve enforcement
- Improve guidance

Benefits from even small or incremental steps on each Adaptive Parking thrust

Don't forget that some decisive policy change actually prompt gradual or incremental changes



RESPOND: Towards Adaptive Parking

PARK-ONCE-AND-WALK PLANNING

“Walkable Parking”

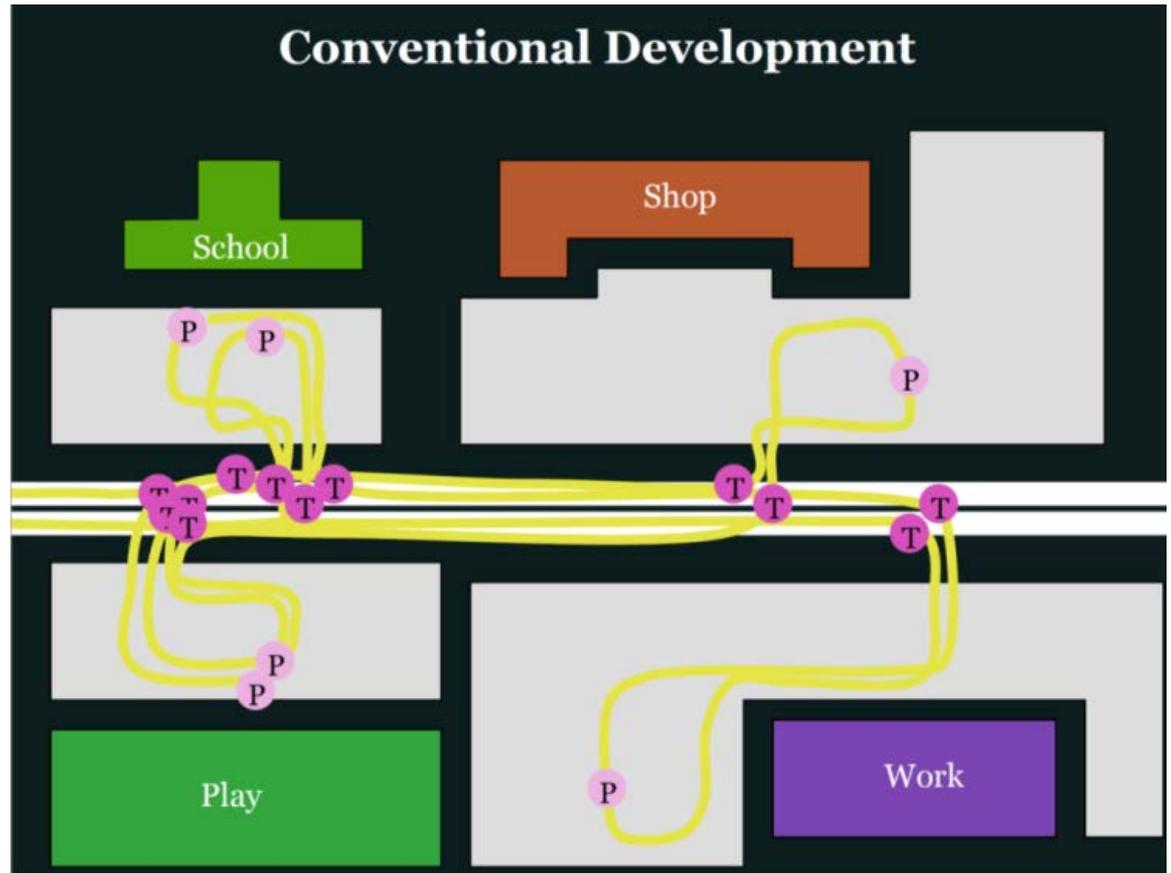
Including trends on off-street parking requirements

Avoid planning for parking inside every destination

In which each site is required to provide enough on-site parking for its own peak parking demand

And visitors to a site are expected to park on site

Graphic by Patrick Siegman of Nelson/Nygaard

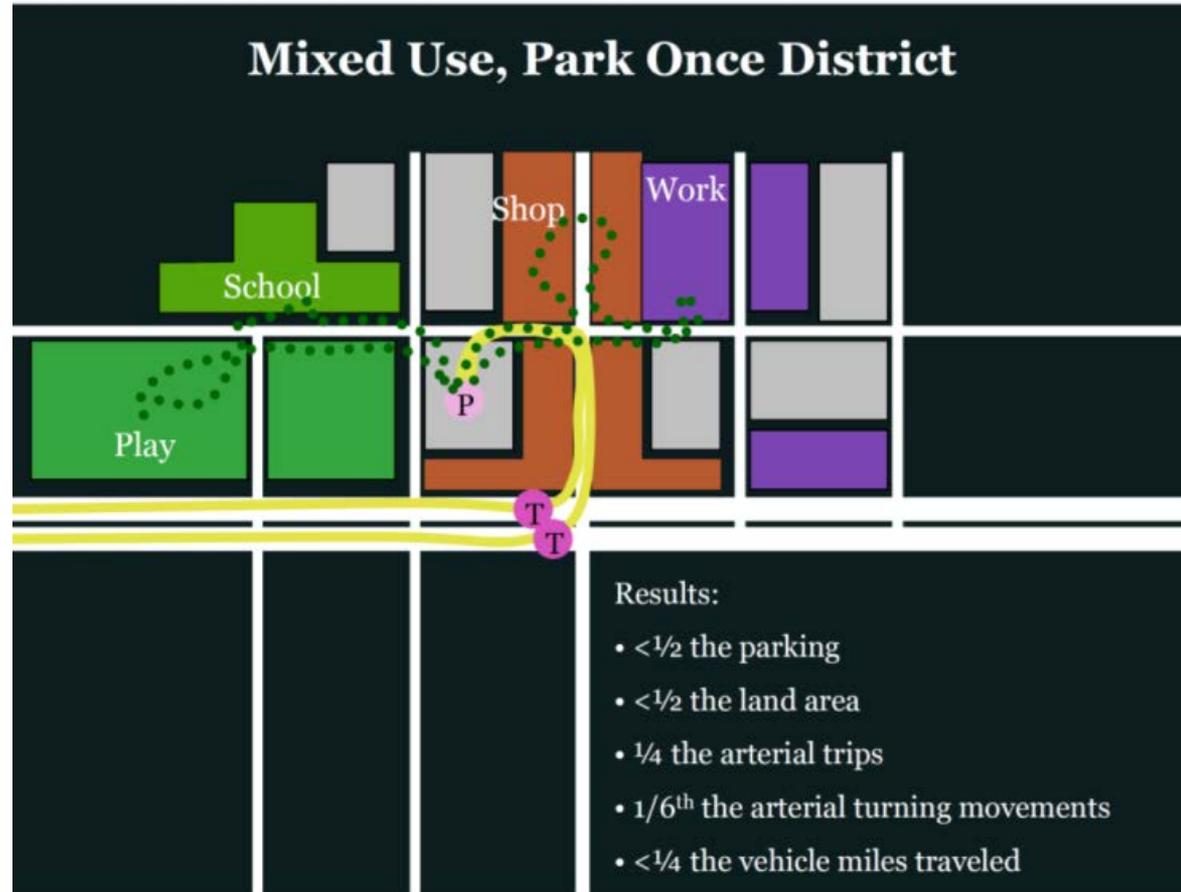


“Walkable Parking”

Plan instead for “park-
once-and-walk” districts

(where most parking is
open to the public) help
foster walkable and
transit-oriented urban
areas

Graphic by Patrick Siegman
of Nelson/Nygaard



	Private property		Public property	
On-street	-	-	Open for public use	Restricted use
Off-street	Private use	Open for public use (and usually priced)	Open for public use	Restricted use

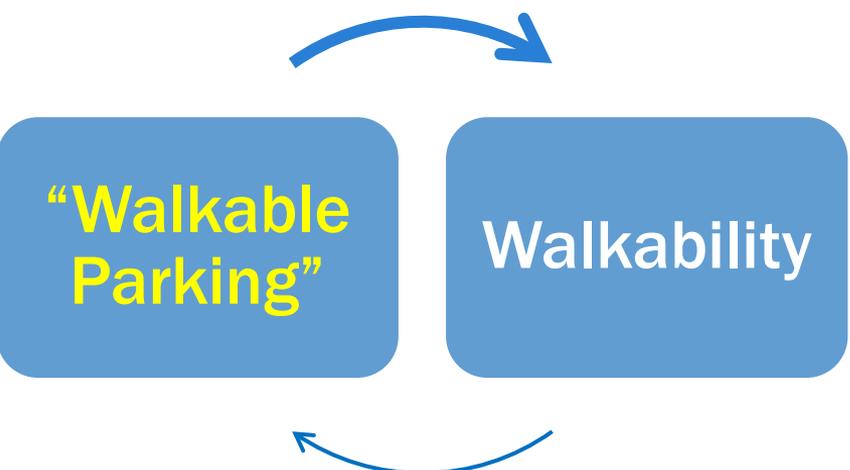
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A diagram consisting of two blue rounded rectangular boxes. The left box contains the text 'Walkable Parking' in yellow. The right box contains the text 'Walkability' in white. A blue curved arrow points from the top of the left box to the top of the right box. A second blue curved arrow points from the bottom of the right box back to the bottom of the left box, creating a circular flow.

**“Walkable
Parking”**

Walkability

Park-Once-and-Walk Districts

**Requires good on-street
parking management**

Most parking is public and priced
(which encourages efficient choices)

Public parking promotes walking
(which promotes street-oriented businesses)

Best with mixed land use
(which helps walkability and resilience)

**Area-wide pool of public parking
eases fear of localised shortage**
(which eases fears over repurposing)

“Walkable Parking” and park-once-and-walk districts

Encourage existing parking and new parking to be open to the public

Help neighbouring private parking sites to merge and become public

Help them set up professional parking management

Stop requiring on-site parking with each development

Focus on design quality not quantity

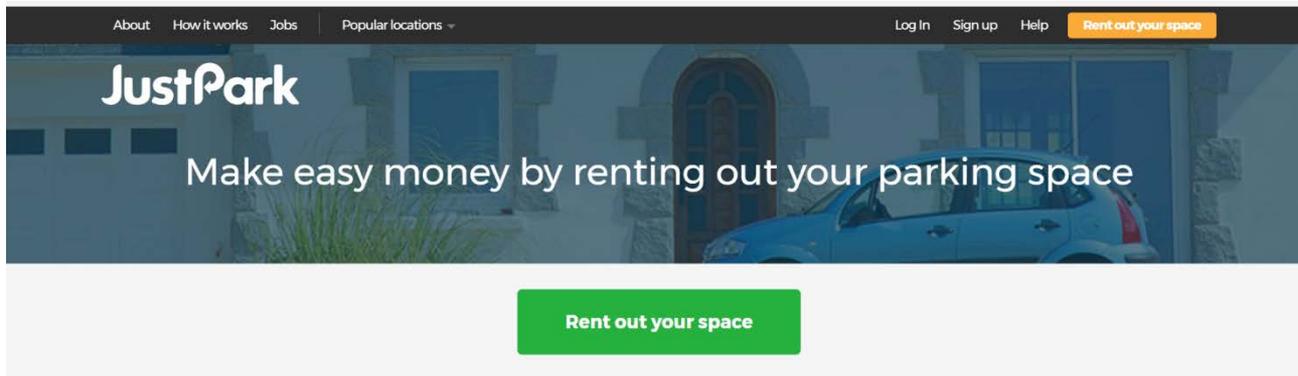
Manage on-street parking well

Parking guidance

Walkability



'Park on my driveway'-style businesses



There are many other similar companies in various countries

How it works



List your space for free

You can add a driveway, [car park](#), empty [hotel](#) spaces or [anything else](#)



Control availability

Only rent out your spaces when it suits you - whether that is from 9 till 5 or all the time.



Get paid

Get regular bookings and payments straight to your bank or paypal account

Walkable parking and parking repurposing

Example: “King Street Pilot”

(Toronto transit priority trial)

Owners of several restaurants objected to the loss of parking

On Twitter, Gil Meslin (@g_meslin) used maps to highlight:

1. huge number of residences and jobs (potential customers)
2. huge number of public parking spaces

within easy walking distance



Walkable parking and parking repurposing



Image by TheTrolleyPole - CC BY-SA 4.0,
<https://commons.wikimedia.org/w/index.php?curid=65441744>



Gil Meslin
@g_meslin

Following

18. These are the parking garages/underground lots within 5 minutes of Restaurant Row. 4,000+ covered parking spaces within a couple blocks.



12:59 AM - 2 Feb 2018

Walkable parking and parking repurposing



Image by TheTrolleyPole - CC BY-SA 4.0,
<https://commons.wikimedia.org/w/index.php?curid=65441744>



Gil Meslin
@g_meslin

Following

19. ...and these are the locations of surface parking lots near Restaurant Row. Another few hundred spaces nearby.



1:01 AM - 2 Feb 2018

8 Retweets 50 Likes



ON-STREET PARKING ENFORCEMENT

Technology is helping

Political obstacles in a technical issue



Beijing,
China



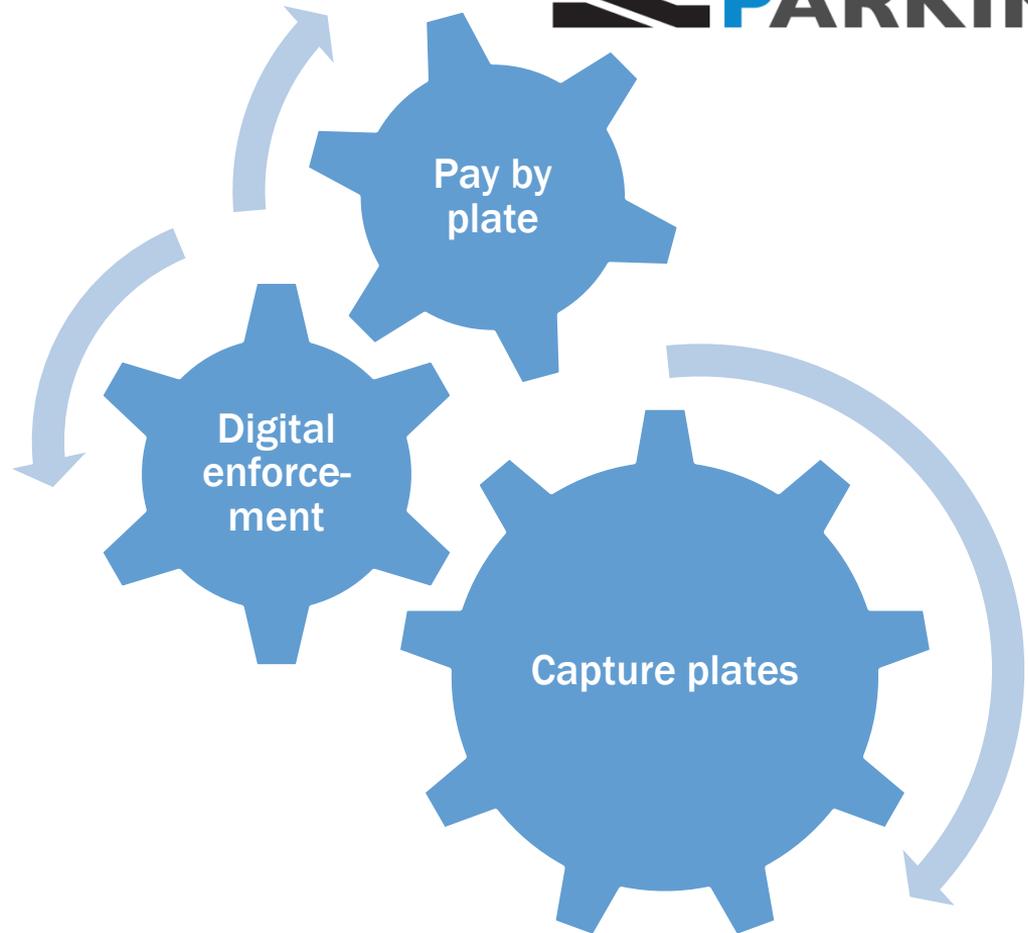
Opportunity:

Digitize enforcement

Including with License Plate Recognition using scan-cars

Links well with digital payment mechanisms

Privacy law obstacles?
Can they be overcome?



Make enforcement less unpopular



People hate to feel they were tricked into a parking penalty.

Washington, DC (Photo by 'Dada1960' in Wikimedia Commons)

Focus on behaviour change not revenue

Make desired behaviour clear

Target habitual violators

Appeal for support from relevant stakeholders

Steady and consistent (not occasional blitz)

Make penalties defensible

Enforcement based on agreed priorities

Enable appeals against mistakes

Parking Ambassadors

PARKING RATIONING

Targeting vacancies versus aiming for turnover

The technology-enabled rise of demand-based pricing

Off-street unbundling at workplaces and homes

The difficult topic of residential on-street rationing

Three SIMPLE GOALS for on-street parking



Vacancies versus turnover as a goal

Only vacancies as a goal can help:

- prevent side-effects of full parking even when demand is very high
- guide price-setting
- guide parking management decisions even in areas where high turnover is not necessary
- achieves enough turnover automatically in streets where turnover is a valuable goal (like shopping streets)

Curb parking prices and cruising

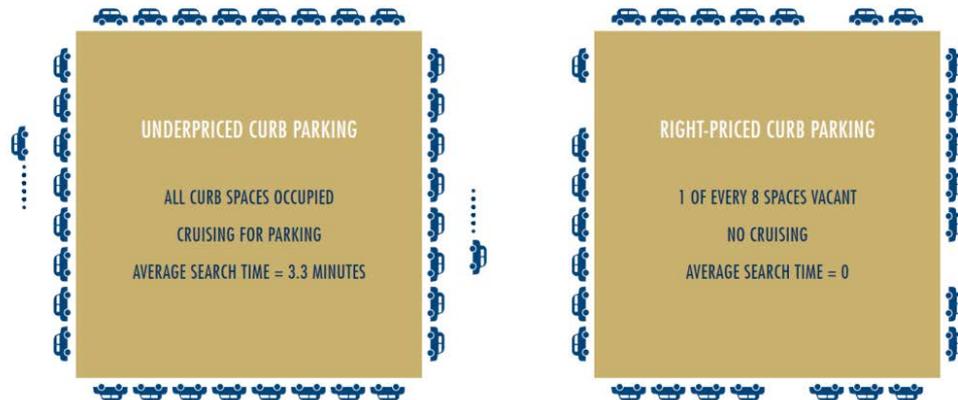


Image source: Donald Shoup, 'Cruising for Parking', Access Magazine, Spring 2007.
<http://www.accessmagazine.org/articles/spring-2007/cruising-parking/>

If motorists say “we have no other choice”

Alternatives to any rationed on-street parking for Commuters or Visitors?

- Other modes of transport
- ~~Not visiting at all~~
- Off-street public parking
- Other on-street parking
- Formerly private parking

Alternatives to any rationed on-street parking for Residents?

- Other on-street parking
- Off-street parking (own)
- Off-street parking (leased)
- Own fewer cars

Choose modern digital fee-collection

Many advantages: robust, no need to predict length of stay, extend parking sessions, payment method options, easy price adjustments, integration with enforcement, data stream

In-street meters plus mobile options

OR

Mobile ONLY payments option



Smart (digital) multi-space meter in Ann Arbor
(Photo by Dwight Burdette via Wikimedia Commons)

Price mechanism criteria

Capital cost and Operating cost (including *transaction costs*)

Convenience for users

Ease of price adjustments

Ease of integration with enforcement

Ease of central data collection

Trustworthiness (robust against theft and leakage)

Robustness/reliability (weather, vandalism, power failures, computing failures, human error)

GOAL: new arrivals find a space

PRICE-SETTING PRACTICE: occupancy targets

Curb parking prices and cruising

For all city-
owned parking

Once pricing
principle is approved,
each price adjustment
is a **technical** matter

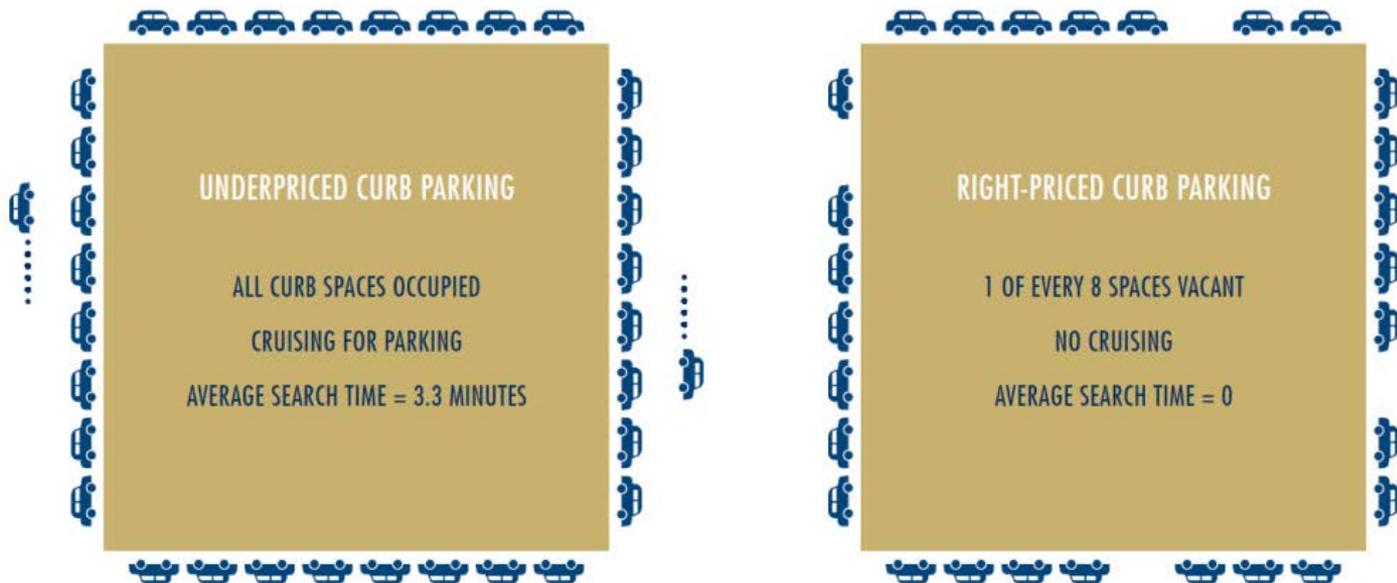


Image source: Donald Shoup, 'Cruising for Parking', Access Magazine, Spring 2007.
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Smart pricing to ensure vacancies

Trial and error approach (based on data)

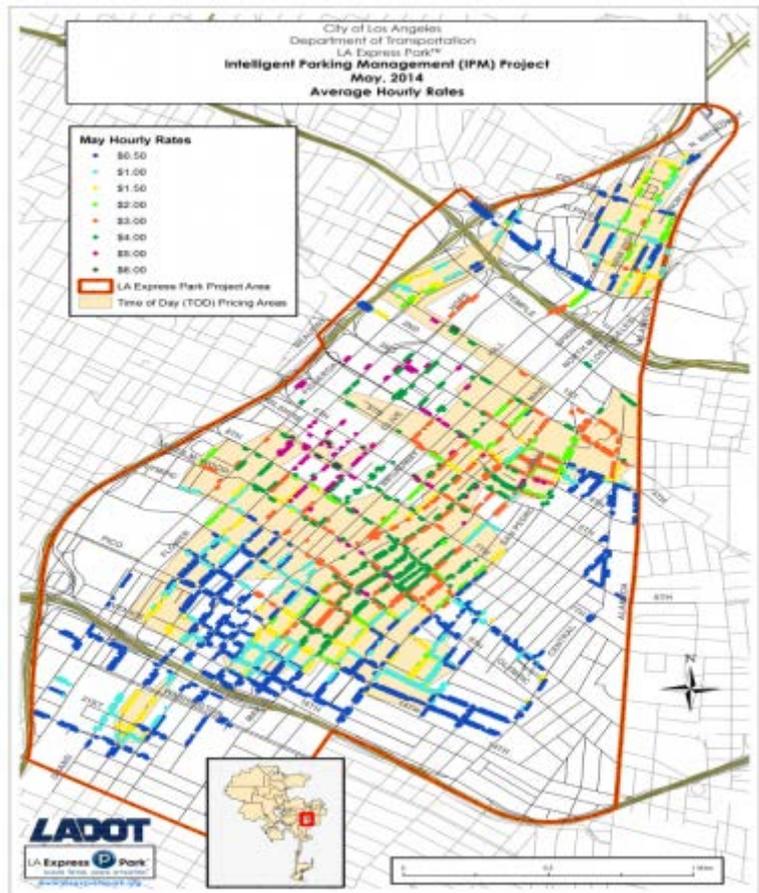
Only where needed

Only when needed

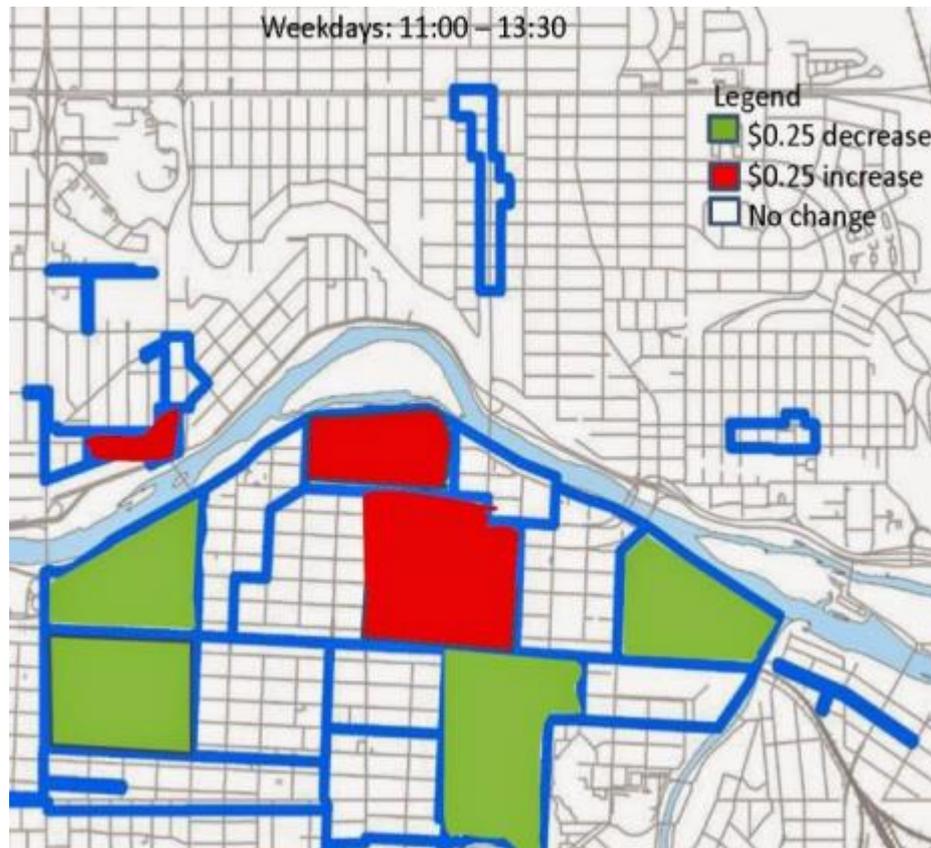
The right prices at the right times and at the right places

Only as high as necessary and no higher

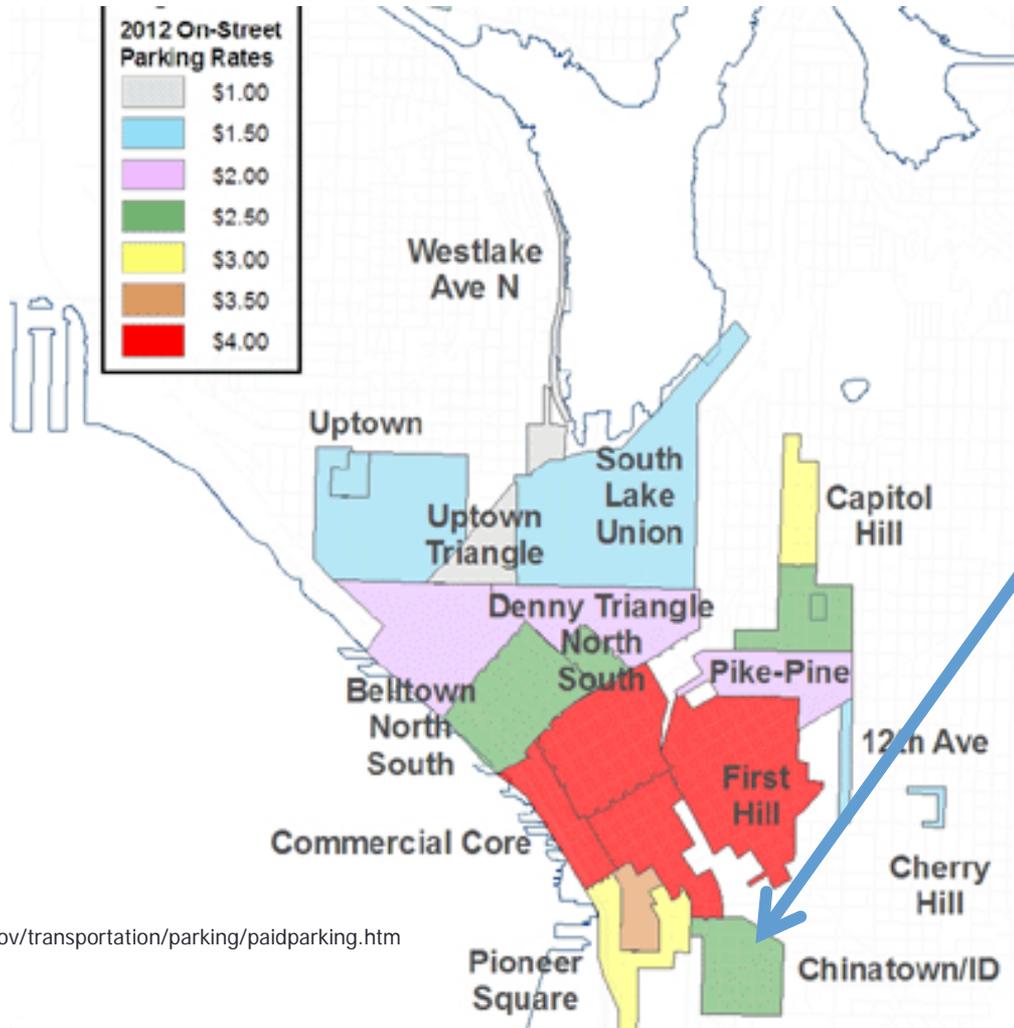
Los Angeles Express Park



Calgary



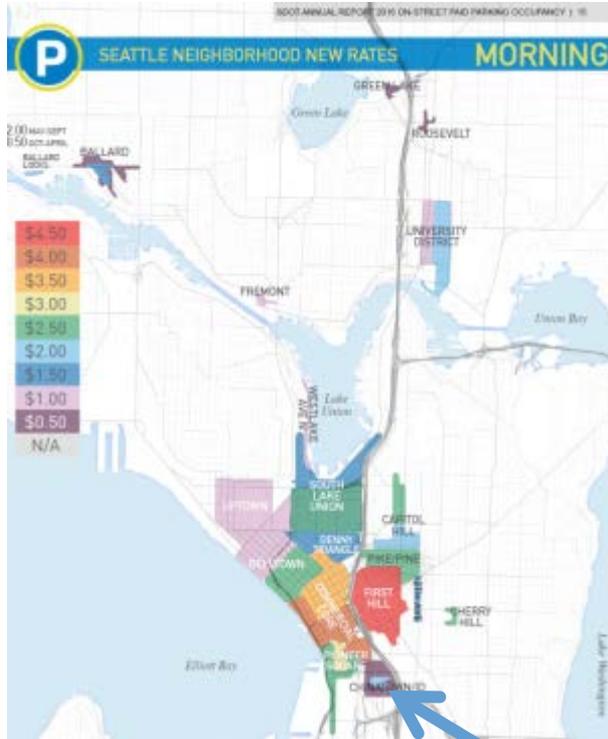
**Price zones:
how big?**



Step-by-step improvements

The case of Seattle's Chinatown/I.D. under the "SeaPark" performance pricing scheme

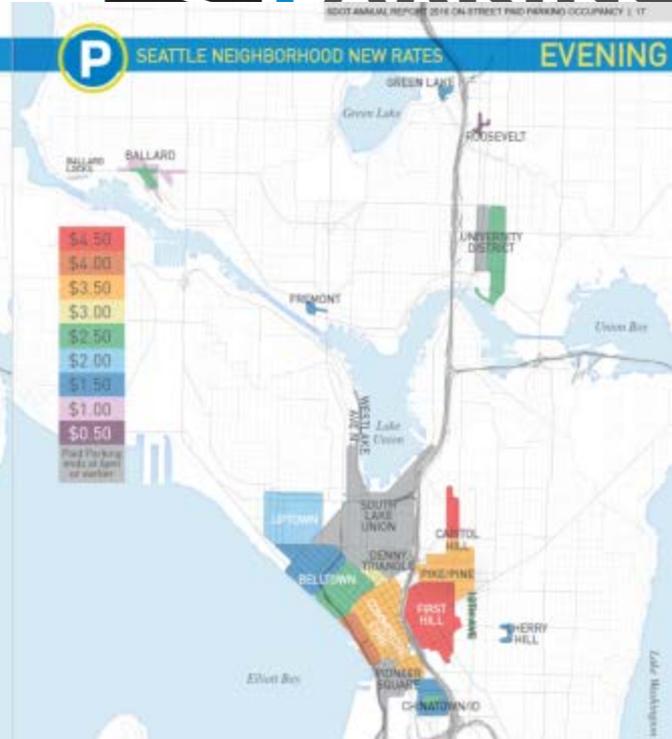
<http://www.seattle.gov/transportation/parking/paidparking.htm>



Now there is a Chinatown/I.D. Core zone and a Chinatown/I.D. Edge zone



New "time-of-day" price differentiation
Also new areas with pricing



CHINATOWN/ID CORE

Chinatown /International District Core includes S King and S Weller Streets between 6th Ave S and 8th Ave S, and 6th, Maynard, and 7th Avenues S between S King St and S Lane St

→Summer 2016 parking regulations: Rate \$2.50/hr (8AM-11AM), \$3.50/hr (11AM-5PM), \$2.00/hr (5PM-8PM), paid hours 8AM-8 PM, time limit 2 hrs.



NEW PARKING REGULATIONS

2016 ACTION

\$2.00 MORNING 8AM-11AM	\$4.00 AFTERNOON 11AM-5PM	\$2.50 EVENING 5PM-8PM
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8AM to 8PM
PAID HOURS

2 hrs
TIME LIMIT

MORNING DECREASE RATE
AFTERNOON INCREASE RATE
EVENING INCREASE RATE

See any problem?

Maybe they will need an additional time period in the future?

Perhaps like Calgary's:

- 09:00 – 11:00
- 11:00 – 13:30
- 13:30 – 15:30
- 15:30 – 18:00

Saturdays 9:00 – 18:00

If opponents say, this is a money grab

This is NOT the revenue maximising strategy

Revenue is maximised with a much lower occupancy target than 85%

(see Donald Shoup, 2005, The High Cost of Free Parking)

Revenue is a bonus of course ... “and we will use it to improve the local ...”

But the key goal of these fees is efficient on-street parking, not the revenue

Baltimore uses the slogan “Walk to Save a Buck”

Debate
principle not
specific
adjustments

Small but
regular price
changes

Lowest
price that
hits target

SURPRISE!
**Demand-based
parking pricing**
eases the
unpopularity of
parking fees

Based on data
from digital
fee collection,
enforcement
& sensors

To pay less,
visit off-peak

To pay less,
walk a bit

Allays
retailer
fears that
fees deter
customers

Price only
where and
only when
necessary



But extending parking fees to new locations always provokes opposition

Debate what conditions should trigger the start of pricing in any street. Don't debate each specific extension (Auckland)

Devote surplus to things that ease the politics:

- improving local facilities (via Parking Benefit Districts or similar mechanisms)
- discounts for locals in need
- validation schemes
- rebates on local taxes
- and/or
- local charities

change.org Start a petition Browse Subscription

Right to park for free at Henley Beach

Petition Closed
This petition had 8,675 supporters

Charles Sturt City Council: R free parking at Henley Beach

Share on Facebook

Send a Facebook message

Send an email to friends

Tweet to your followers

Copy link

Teresa Tripodi started this petition to Charles Sturt City Council and 5 others

As of the 14th of August, the Charles Sturt City Council are charging \$2 an hour/50c per 15 minutes for parking at Henley Beach (<http://www.charlessturt.sa.gov.au/ParkingHenleyBeach>) Henley Beach has become one of Adelaide's most popular beaches and it's sickening to see it being turned into a Westfield Shopping Centre or the Adelaide CBD. For most, if not all, Henley Beach is a place for recreation, fun for families alike and youth, peace, relaxation, sports and community enjoyment. One of Australia's natural main attractions is being turned into a money-making profit. No part of it's beauty should be sectioned for money. As a result, Henley Beach's popularity will go down and

Thoughts on residents' permits

Keep residential street spaces in the wider 'parking pool'

- So avoid exclusive 'permit holder only' spaces.
- Better to have part-time 'permit-holder only' (eg night time).
- Best: ensure vacancies by rationing visitor parking with prices but exempt permit holders from hourly price.

Cap number of permits based on number of spaces

- Common mistake ... even Amsterdam!
- Pricing principle: waiting list means price is too low

Eligibility:

- No permits for occupants of NEW buildings (eases the way to abolishing parking norms)
- Possibly no permits for those with off-street parking

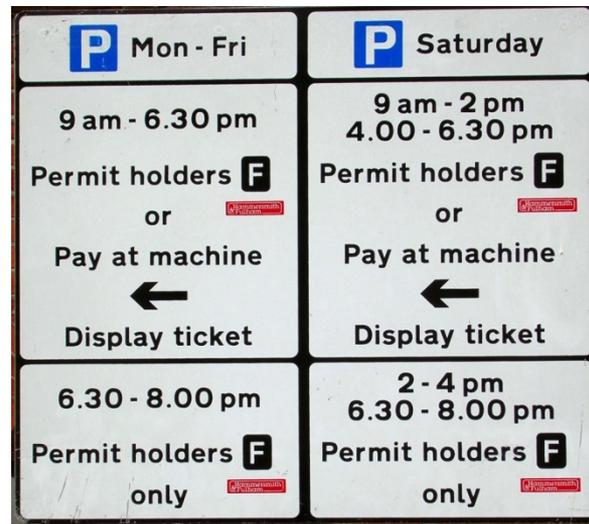


Image by DeFacto [CC BY-SA 2.5 via Wikimedia Commons]

Can we (slowly) ease residential parking problems?

Phasing in of demand-based prices?

- Have only new residents face demand-based prices? (grandfathered price for existing residents)

Map where the problem is worst to discourage car owners from moving in

‘Shared parking’ matchmaking

NOTE: ~3 to 5% of households move out/in each year.



PARKING POLICY FOR TDM

Parking TDM: reduce parking in suitable places!

Dense transit-rich business districts
need traffic reduction policies

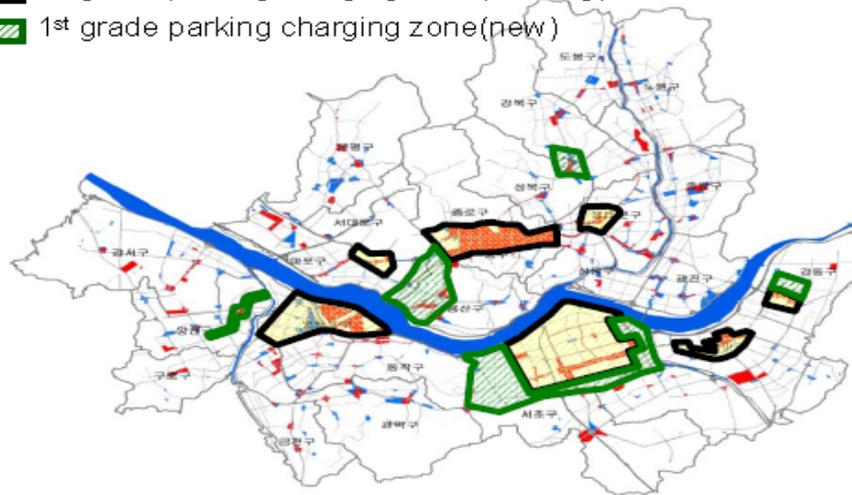
Restricting parking supply is effective

Impact is gradual: no sudden drop in supply; prices rise gradually

Need not be scary with good parking management

Used in hundreds of downtowns
around the world

-  Commercial Area
-  Semi-residential Zone
-  1st grade parking charging zone(existing)
-  1st grade parking charging zone(new)



Seoul imposes low parking maximums on parking with new buildings in major business districts

Source for map: Presentation by Sang Bum Kim (Assistant Mayor for City Transportation), "Policy Directions of Seoul for a Clean and Green City" to CUD Global Conference Seoul 2009

Unbundling of Residential Parking Costs

Multi-family housing often offers ‘free’ parking

The cost of the parking ‘bundled’ with the home

This means those with few or no cars cross-subsidize the parking cost of multi-car families



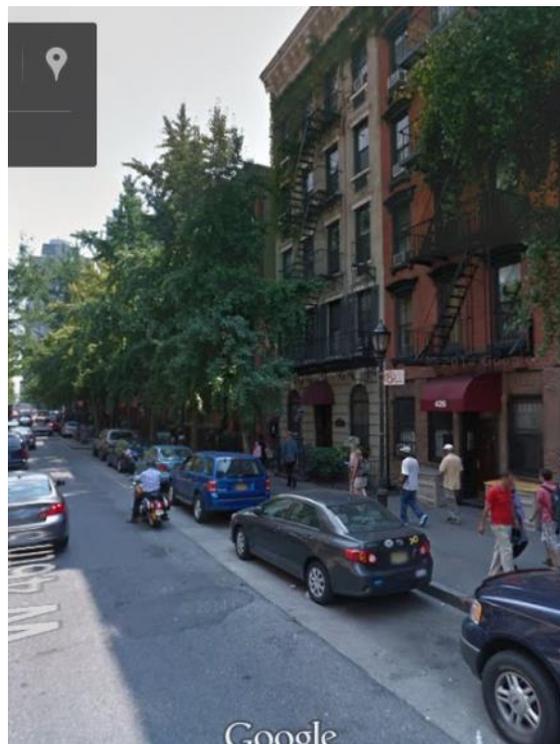
Unbundling of Residential Parking Costs

Reform of parking minimums can gradually prompt 'unbundling'

Some cities mandate unbundling
(eg San Francisco)

Housing affordability benefits

Car ownership reduction benefit



East side Manhattan near Midtown

Discourage employer-provided Free Parking at workplaces

Reforming parking minimums helps this too (gradually)

Taxing non-wage ‘perks’ also helps (as in Singapore)

Two other key ways to discourage free workplace parking:

Parking “cash out” (for example, California)

Workplace TDM (traffic reduction mandates)

Workplace TDM

Also called “workplace travel plans” (UK), or “Mobility management” (Europe)

Require employers to reduce car use by employees

Common step is to price employee parking

Seoul’s employer-based TDM encourages employer provision of shuttle commuter buses and elimination of free parking



Seoul, Korea

CONCLUSION

Adaptive Parking

Towards municipal parking policy that delivers:

- success without excess
- responsiveness to local conditions and to change
- more value from urban space



RESPOND: Towards Adaptive Parking