Parking policy – the San Francisco experience

Presentation to ITE Committee Transportation Conference Queenstown 23 March 2018

ViaStrada Ltd



Axel Wilke

TRAFFIC ENGINEERING AND PLANNING

Background

Christchurch City undertakes sound transport planning

- Christchurch Transport
 Strategic Plan (CTSP) 2012
- Replaced a number of earlier strategies (cycling, pedestrian, road safety, parking)





Chch parking strategies

- Both CTSP and 2003 strategy say all the right things
- Problems are
 - Words are not backed by policy tools (e.g. Wgtn-style residents parking)
 - Same issues are fought over on a project-by-project basis





Timothy Papandreou (SFMTA)

Timothy Papandreou (SF chief transport planner) had this to say in Adelaide at the 2014 Velo-city conference

"If you don't have a strong planning policy for parking, you might as well forget about your other transport planning, too."

 John Lieswyn and I went to San Francisco in 2015 to meet with Tim and his team





Video

Play video at https://vimeo.com/13867453

Major elements of SFpark

- Demand-responsive pricing to create parking availability
 - Different prices at different times
- Abolish time limits at parking meters
 - -To make parking more convenient
 - Time limits are a vague tool to achieve turnover
 - -Some 4h time limits remained
- Pricing is transparent

STRADA

- -If you are price-sensitive, could park further away
- If price is less of an issue, can park close

"Making it easy to find a parking space."

How does it work?

- Main principle is to aim for 60% to 80% parking occupancy
 - Above 80%, finding a park becomes uncertain
 - -Below 60%, there is underutilisation
- Both on-street and off-street are included
 Needs to be one integrated system
- San Francisco trialled at 25% of their parking meters
 And at 15 of their 20 parking buildings
- Also event parking different prices when events centre is used



Benefits – 1

- Convenient parking easy to find a park
- Fewer parking tickets easier to pay & time limits removed
- Improved economic vitality access improved
- Public transport is faster and more reliable double-parking and congestion are reduced



Benefits – 2

Reduced traffic

- -Fewer crashes, as drivers no longer circulate to find a car park
- Less distraction, leading to fewer car collisions with people on bikes and on foot
- -Improved air quality and reduced greenhouse gas emissions
- May encourage mode shift
 - -People may make more deliberate travel decisions based on cost
 - -Comparing cost options and mode choices are closely related



Revenue gathering?

- Commonly voiced concern before they started
- The planners didn't know the answer beforehand
- It turned out that on average, costs for parking decreased slightly
 - -However, where parking was popular, prices went up
 - -Where parking demand is lowest, price is 25c/hr
- Meters did not operate on Sundays before the trial, and parking was hard to get in popular areas
 - Public supported extending metered hours in the evening and to include Sundays



Implementation

- SF: Understanding parking supply was surprisingly difficult
- Parking occupancy an important input some meters provided data
 - Opted to have sensors in each parking space
 - Get data from meter only when somebody pays





Enabling policy

- Decided on variable pricing
 - -Prices vary depending on time of the day
 - -That reflects that parking demand varies
- Decided that prices could only change within certain margins
 - -Set at 50c/hr plus or minus
- Set minima and maxima

STRADA

- -Min 25c/hr on-street or \$1/hr off-street
- -Max \$7/hr for normal and \$18/hr for event parking
- Decided that prices could be altered every few weeks

"These concepts work only when staff have delegated authority to manage parking."

Rate periods

- Rates change during the day, depending on area
- Different areas have different regimes
- Weekend parking patterns are entirely different
 - -different rates thus apply

7 am	8 am	9 am	10 am	11 am	noon	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm
		9ar	n–No	oon	Noon-3pm			3pm–6pm							
7 am	8 am	9 am	10 am	11 am	noon	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm
	7ar	n–Ne	oon		Noon–3pm			3pm–6pm							
7 am	8 am	9 am	10 am	11 am	noon	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm
	7ar	n–No	oon		Noon-3pm			3pm–7pm			ı				
7 am	8 am	9 am	10 am	11 am	noon	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm	9 pm	10 pm
	7ar	n–No	oon	No	on–3	pm		3pm-	-7pm	1	7pm–11pm				



Adjusting meter rates

- First demand-responsive rates set in July 2011
- 20 changes since
 - Shortest period 40 days between changes
 - -Longest period 329 days



STRADA





Downtown Pilot Area

Meter Rate Changes June 2017



In this pilot area, on-street, non-commercial meters operate Monday through Saturday from 7am to 8pm or from 9am to 8pm.











Applicability for Christchurch

- Model suitable for adoption but consider the following
 - Cannot just be applied to CBD but must also apply to shopping centres (i.e. the streets surrounding the shopping centre)
 - Also other large traffic generators, e.g. University of Canterbury, Horncastle Arena, Sydenham industrial area
 - Needs different treatment for residents in residential streets (use Wellington model)
 - -Needs to be backed up by enforcement during operating times

Details on following slides



CBD vs shopping centres

- Could not just implement in CBD, as could otherwise drive demand to suburban shopping centres
- Shopping centres instruct their staff to park off-site in residential streets
- Therefore, put ring around the CBD and shopping centres and have demand-sensitive charging

"Ultimately, demand-responsive pricing should apply where occupancy exceeds 80%."



Residential

- Current method is to provide time-restricted parking to keep some kerbside parking free in residential streets
 - -Very clumsy tool as the same time restrictions apply to residents
- Wellington sells resident parking permits and has coupons
 - -Permits cost \$115/year
 - Combined with coupons, the system also works for visitors or tradespeople
 - -Areas are set aside within 9 residential areas
- Auckland operates a similar scheme





Enforcement in the 3 large NZ cities

hr Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	_	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	69) h	rs/	/w	ee	k		16	8 ŀ	ırs	/w	/ee	ek			16	8 ł	nrs	/w	/ee	٤k	
19 20 21 22 23 24	C	hris	tch	urc	h				Wel	ling	ton						Au	ckla	ind			

Christchurch enforcement

- Should extend enforcement so that operating hours of a parking scheme are covered
 - -Also after-hours footpath parking is common
 - -Might want to consider 24/7 operation as per Wgtn & Akld



Other consideration

- Projects that involve changes in parking will become simpler
 - -People perceive a "lack of parking provision"
 - -Hence they fight for things not to get worse
 - -Demand-responsive pricing ensures that there's always parking



Further info

To discuss this further, please contact

Axel Wilke ViaStrada axel@viastrada.nz

(027) 2929 810

