

Off-Street Parking Management

Observations from San Francisco

Institute for Transportation & Development Policy



Bogotá, Colombia

June 22, 2011

Parking in San Francisco

| On-Street | Quantity of Spaces |
|-----------------------------|--------------------|
| Metered | 24,000 |
| Un-metered | 257,000 |
| Off-Street | |
| City-Owned Lots and Garages | 15,000 |
| Private Commercial Stocks | 150,000 + |
| Private Residential Parking | 300,000 ++ |



Data Source: SFMTA, SFCTA

Parking Management – Why?

- ▶ Utilize existing parking supply more efficiently
 - ▶ Provision of additional parking is expensive, often contrary to policy goals
- ▶ Meet local/neighborhood objectives
 - ▶ Commercial and residential access
 - ▶ Local circulation and curbside uses
- ▶ Support Citywide/regional policy goals
 - ▶ Travel demand management
 - ▶ Transit performance
 - ▶ Facilitate alternative uses of curb space
 - ▶ Reduce housing costs



Photo Credit: SFBC



Off-Street Management Strategies

► Manage provision

- Eliminate minimums and/or institute maximums
- Allow waivers/modifications for certain project types or zones
- In-lieu fees

► Manage demand

- Unbundling and cashout
- Tax/surcharge on off-street parking charges
- Regulatory use/impact fee

► Manage (existing) supply

- Shared parking; designated carshare spaces
- Coordinated on- and off-street policies and pricing
- Curb cut consolidation/regulation



Parking Requirements in San Francisco

- ▶ **1955 – 1:1 parking mandated for each newly created dwelling unit**
- ▶ **1968 – Residential minimums reduced in Downtown (C-3) districts**
- ▶ **1985 – Downtown Plan adopted**
 - ▶ Re-zones C-3
 - ▶ Eliminates minimum commercial parking requirements downtown
- ▶ **1998 – Mission Bay Plan adopted**
 - ▶ First area plan to eliminate minimum residential parking requirements
 - ▶ Sets maximum of 1:1 for residential parking



Parking Requirements in San Francisco

- ▶ **2004 – Rincon Hill Area Plan adopted**
 - ▶ .5:1 by right, 1:1 with conditional use
 - ▶ Large developments must unbundle, provide min. bike parking (.5:1)
- ▶ **2008 – Market and Octavia Area Plan adopted**
 - ▶ Residential parking maximums at .25:1, .5:1, and .75:1
 - ▶ Exceptions allow for up to 1:1 in some cases
- ▶ **2009 – Eastern Neighborhoods Area Plans adopted**
 - ▶ Replaces minimums with maximums (up to .75:1)



Minimums and Maximums

► Eliminating minimums has clear benefits:

- Reduced housing costs
- Urban design and local circulation benefits
- Mode choice and systemwide effects

► But, change has been slow

- Tied to land use planning processes taking up to a decade

► Tale of Two Cities?

- Parking minimums have been replaced in many areas with high transit accessibility and land use diversity
- 1:1 minimums remain in effect for majority of land area



Eliminating Minimums

► Supported/enabled by:

- Coordinated on-street parking policies and programs (e.g., pricing)
- Effective transportation options (transit, bike and pedestrian networks)
- Provision of carshare spaces
- Transit pass bundling



Parking Requirements and Travel Behavior

Compared to other travel behavior factors (e.g. price, time), residential parking availability has been minimally studied.

Weinberger et al (2009):

- ▶ Comparison of Jackson Heights (Queens) and Park Slope (Brooklyn)
 - ▶ Comparable in transit service and distance from Manhattan CBD
- ▶ Jackson Heights has 156% more parking than Park Slope
 - ▶ Residents are 45% more likely to drive to work in Manhattan

Weinberger (2010):

- ▶ Citywide analysis of availability and mode choice to CBD
- ▶ Controlling for other factors, guaranteed parking at home is strong factor in drive-to-work mode choice



Managing Existing Supplies

► City-owned supplies:

- Coordinate on- and off-street policies/pricing
- Facilitate alternative curb usage by meeting displaced demand
- Where significant excess capacity exists, assess if parking is “over-provided”

► Privately owned commercial stocks:

- Tax and pricing options (e.g. regulatory impact fee, entry/exit fee)
- Carshare, bicycle parking, and bicycle-sharing requirements
- Restrict use of “soft-sites” for off-street parking



Meanwhile...

San Francisco considered Prop A vs Prop H (Nov. 2007 ballot):

Prop A – “Emissions Reduction/Transit Reform Act”

- ▶ Gave authority over parking regulations and 80% of parking revenues (~\$50M) to the San Francisco Municipal Transportation Agency

Prop H – “Downtown Parking Initiative”

- ▶ Would increase downtown parking requirements from 1:4 to 3:4 and set neighborhood ratios at 1:1
- ▶ Would allow property owners to construct curb cuts regardless of “any potential effects on transit stops, transit preferential street, bicycle or primary pedestrian street.”



Significance of Prop H

Prop A win was an important victory, but Prop H issues have not gone away

**Parking fees/fines and Muni fares have gone up 50% in past 5 years,
continuing MTA deficits may require more increases**

Yet parking shortages and transit service have worsened

- ▶ **Rising gap between bus and car travel times (buses are 2x slower)**
- ▶ **Transit on-time performance is stuck at 68%**
- ▶ **No significant parking facilities built in last 10 years from “off-street parking fund”**

Growing perception of “anti-car” social engineering and pricing as a revenue generation measure to fund bloated, ineffective bureaucracies, leading to:

- ▶ **Prop H-like initiatives**
- ▶ **Bike plan litigation and injunction**
- ▶ **Backlash against parking and congestion pricing initiatives**



Limitations of Parking Pricing

- ▶ Most peak period congestion is from long-term parkers
 - ▶ City-owned supply of off-street parking is limited (and is prioritized for short-term use)
 - ▶ Majority of off-street supply is privately owned, hard to regulate
 - ▶ Unclear how long-term parking pricing would affect behavior of high-income workers (some pay \$300-400/mo. for parking)
- ▶ Parking rates may need to go very high (esp. with credit card payment)
- ▶ Parking is “cash cow” for cities – hard to base prices on congestion only or even primarily
- ▶ Handicapped usage hinders effectiveness of parking pricing
- ▶ Transparency and accountability regarding use of funds is important to gain public support (e.g. expenditure plans)



Concluding Thoughts

Parking pricing is an important tool in toolkit of “Road Use Pricing”

Parking pricing is a useful companion to (not substitute for) roadway pricing

- ▶ **Primary purpose is as management tool to encourage more efficient utilization of on-street spaces**
- ▶ **May have some effect on traffic congestion, through reduction of cruising, but this is likely to be limited during peak periods**

Best way to manage overall demand for driving may still be to limit supply, regulate ownership

Parking pricing can help pave the way for roadway pricing:

- ▶ **Early trials need to be clear about objectives, effective**
- ▶ **Demonstrate notion of “user fee” through re-investment of funds**
- ▶ **Financial transparency and accountability are critical**



Thank you!

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Parking Management Principles

- ▶ Effective parking management requires a neighborhood-level approach
 - ▶ Flexible toolkit of strategies for different neighborhoods
 - ▶ Mechanisms for neighborhood level involvement (e.g., benefit district)
- ▶ Parking pricing strategies should be linked to benefits
 - ▶ For payers (parkers)
 - ▶ For affected areas (neighborhoods)
 - ▶ For other transportation system users (e.g., transit riders)



On-Street Management Strategies

► Conventional Regulation

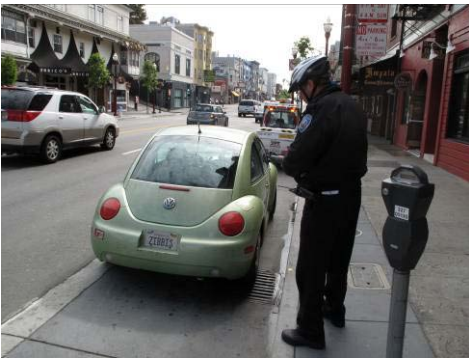
- Metering, time limits, colored curbs, preferential permits

► Price-Based Regulation

- Set on-street parking rates to achieve availability target

► Technology and Enforcement

► Parking Benefit Districts



SFpark Pilot Projects

- ▶ Funded by \$19 million Federal Urban Partnership grant
- ▶ 8 pilot neighborhoods plus 2 control monitoring areas
 - ▶ Initially, 6,000+ metered spaces and 14 City-owned garages
- ▶ New technology, including meters and in-street sensors
- ▶ Real-time information and new payment methods
- ▶ Variable pricing approach



Example: Time-of-Day Pricing

| Time Parked | Price per Hour |
|-------------|----------------|
| 7am - Noon | \$1.50 |
| Noon - 3pm | \$2.50 |
| 3pm-7pm | \$3.50 |

Source: SFMTA



SFpark On-Street Pricing Approach

- ▶ Meter operational hours split into distinct rate periods
- ▶ Rates will respond to demand over time, changing max. 1x/month

| Observed Occupancy | Change in Hourly Rate |
|--------------------|-----------------------|
| Above 85% | + \$0.25 |
| 65 - 85% | -- |
| 35 - 65% | - \$0.25 |
| Below 35% | - \$0.50 |

- ▶ Rates will be adjusted on a block-by-block basis
- ▶ Meter time limits extended to at least 4 hrs



SFpark Anticipated Outcomes

- ▶ **Rebalance parking revenue mix**
 - ▶ Reduce citation revenue
 - ▶ Increase meter revenue
- ▶ **Reduce vehicle circling and double-parking**
 - ▶ Reduced local congestion
 - ▶ Improved transit speed and reliability
 - ▶ Reduced pedestrian/vehicle conflicts
- ▶ **Improve accessibility in neighborhood commercial areas**
 - ▶ Convenience and information for visitors
- ▶ **Robust data to inform policy development**



Strategic and Policy Challenges – Near/Mid Term

- ▶ Disabled placard policy/abuse
- ▶ SFpark evaluation
- ▶ Policies for alternative use of curb lane
- ▶ Metering extensions/expansions
- ▶ Pricing policy
 - ▶ Use of funds
 - ▶ Public acceptance
 - ▶ Neighborhood-level involvement
- ▶ Residential parking reform

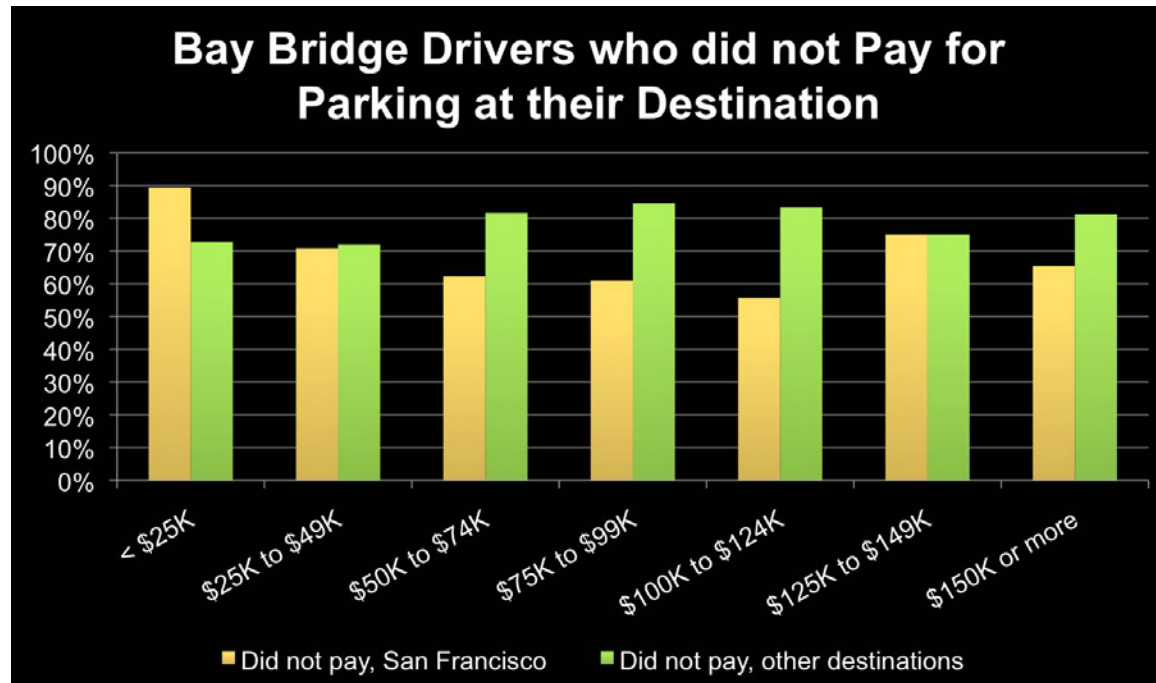


Photo Credit: Streetsblog



Strategic and Policy Challenges –Mid/Long Term

- ▶ Role of parking pricing/regulation in demand management
- ▶ Parking requirements – growth areas, citywide
- ▶ Regional policy development



Data Source: UCB, MTC



Parking Management and Congestion

- ▶ Variable pricing of on-street parking:
 - ▶ Addresses on-street parking shortages
 - ▶ Limited effect on peak-period road use in SF's most congested areas
- ▶ Area-wide pricing approaches:
 - ▶ Target weekday peak-period congestion
 - ▶ Stronger effect on commute traffic
 - ▶ Invest in supporting mobility improvements

