Parking is Destiny: A Smart Parking Primer

Rail~Volution
October 2011
Parking Wastes Money

Thank you, Don Shoup!
Parking Wastes Land

- If you require more than 3 spaces per 1,000 sq ft, you’re requiring more parking than land use.
Parking Worsens Housing Affordability

- For each parking space required in a residential unit:
  - Price of unit increases 15-30%
  - Number of units that can be built on typical parcel decreases 15-25%

- Fannie Mae: Getting rid of a car = extra $100,000 in mortgage

- At >300 sq ft, each parking space consumes more space than an efficiency apartment

Parking Produces Traffic Congestion

- Poorly managed parking results in motorists circling for a parking space, from 8 to 74% of traffic in many downtowns.
- Eliminating just 10% of vehicles from any congested location makes traffic free flowing.
- Why provide more parking than you have traffic capacity to access that parking?

Parking will Drive you Crazy
So what do we do?
1. Residential Permits

- May be necessary to address fear of spillover
- Deed restrict new buildings from participating.
- Switch to market pricing when permit becomes a “hunting license.”

Source: theexpiredmeter.com
2. Smart Meters

- Are your parking meters 1947 technology?
2. Smart Meters

- Meters must:
  - Accept all common forms of payment
  - Call you up to ask if you want more time
  - Provide data on usage
  - Allow easy adjustment

- Put your customers first.
3. Smart Technology
5. Right Time

Hours of Operation

Sunday - Thursday
11 AM to 8 PM

Friday - Saturday
11 AM to 12 midnight
Except Holidays
6. Invest Revenue

A NEW OLD PASADENA COMING SOON

STREET AND ALLEY WAY IMPROVEMENTS:
- LIGHTING
- REPAVING
- TRASH RECEPTACLES
- SIGNS AND BENCHES
- DIRECTORY MAPS
- TREES AND GRATES
- NEWSRACKS
- MAINTENANCE
- SAFETY

YOUR METER MONEY IS MAKING A DIFFERENCE
THE OLD PASADENA RENAISSANCE CONTINUES

CITY OF PASADENA
6. Invest Revenue
7. Replace Minimums with Maximums

These cities have abolished minimum parking requirements, citywide or in districts:

- Coral Gables, FL
- Eugene, OR
- Fort Myers, FL
- Fort Pierce, FL
- Los Angeles, CA
- Milwaukee, WI
- Olympia, WA
- Portland, OR
- San Francisco, CA
- Stuart, FL
- Seattle, WA
- Spokane, WA
- United Kingdom (illegal in entire nation)
8. Unbundle
9. Share
9. Park Once
Mixed Use, Park Once District

Results:
- <½ the parking
- <½ the land area
- ¼ the arterial trips
- 1/6th the arterial turning movements
- <¼ the vehicle miles traveled
SFpark: Pulling it all Together

Thanks to Jay Primus, SFpark manager, SFMTA
Coin and card meters
Real-time information
Pricing at parking meters and lots

- Demand responsive to find lowest possible prices
- Gradual and periodic changes: $0.25 up or down every 4-6 weeks
- Time of day pricing (vary by block + weekday/end)

![Clock and pricing chart]

<table>
<thead>
<tr>
<th>Duration</th>
<th>Price Per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>9AM – 12AM</td>
<td>$2.50</td>
</tr>
<tr>
<td>12AM – 3PM</td>
<td>$3.50</td>
</tr>
<tr>
<td>3PM – 6PM</td>
<td>$2.00</td>
</tr>
</tbody>
</table>
Pricing – 1st rate adjustment (July/August)
Pricing – 2nd rate adjustment (October)
Enforcement

Current Revenues

Expected Revenues

Tickets

Meters

Tickets

Meters
Parking census
Automatic data collection

- Supply data (census, asset management, street closures)
- Parking data (from sensors, meters, and citations)
- Garage data (usage by hour)
- Travel demand data (roadway sensors, highways PEMS, BART, Muni)
- Muni data (travel time data from APCs)
- Parking tax
- Sales tax
- Safety (SWITIRS collision data)
- Exogenous (fuel price, CPI, unemployment, precipitation)
Manual data collection

- Parking search time
- Double parking
- Disabled placard
- Occupancy in residential areas
- Motorcycle occupancy
- Vehicle occupancy
- Intercept surveys (professional survey firm)
Why these pilot projects matter

Great USDOT investment
- Demonstrating data management tools
- Unprecedented data set
- Sharing + transparency
- Addressing universal urban issue

Easy to replicate
- Low cost and (relatively) low tech
- Politically feasible (only local approvals required)
- No privacy issues
Thanks to Jay Primus, SFpark manager, SFMTA
For More Information

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