Europe’s Parking U-Turn

Michael Kodransky
February 4, 2011

New Partners for Smart Growth
Charlotte, NC
Breda, The Netherlands
### On-Street Cost of Parking Comparison
#### First Hour Fees

<table>
<thead>
<tr>
<th>City</th>
<th>Euros</th>
<th>Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>5</td>
<td>6.80</td>
</tr>
<tr>
<td>London</td>
<td>4</td>
<td>5.44</td>
</tr>
<tr>
<td>Stockholm</td>
<td>3.87</td>
<td>5.26</td>
</tr>
<tr>
<td>Paris</td>
<td>3.6</td>
<td>4.90</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>3</td>
<td>4.08</td>
</tr>
<tr>
<td>Barcelona</td>
<td>2.85</td>
<td>3.88</td>
</tr>
<tr>
<td>Antwerp</td>
<td>2.5</td>
<td>3.40</td>
</tr>
<tr>
<td>Munich</td>
<td>2.5</td>
<td>3.40</td>
</tr>
<tr>
<td>Budapest</td>
<td>2</td>
<td>2.72</td>
</tr>
<tr>
<td>Hamburg</td>
<td>2</td>
<td>2.72</td>
</tr>
</tbody>
</table>

*Currencies converted as of February 1, 2011*
Zurich Progressive Parking Charges

- **0.50 CHF**
  - 30 minutes: 0.50
  - 60 minutes: 0.50

- **2.00 CHF**
  - 90 minutes: +1.50

- **4.00 CHF**
  - 120 minutes: +1.50

- **5.00 CHF**
  - 120 minutes: +1.00

**Price of Parking (CHF)**

**Time (minutes)**
Mobile Phone Parking Payments

London (Westminster):
Verrus gets 10% of revenue

- Lost £200,000 a week from theft before going cashless

Stockholm:
EasyPark gets 3% of revenue

- Customer pays subscription fee to EasyPark of €3 per month and a per parking transaction fee of €0.50 euro cents

Amsterdam:
Parkmobile/Parkline/SMS Parking get 4-5% of the revenue

- All payments in 2010 will require license plate input.
## London Borough of Camden
### CO2 Based Residential Parking Permit Costs

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Vehicle Cylinder Capacity (cc)</th>
<th>CO2 Emissions (g/km)</th>
<th>3 month</th>
<th>6 month</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motor Vehicle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-1299</td>
<td>up to 150</td>
<td>£30.50</td>
<td>£48.00</td>
<td>£82.00</td>
<td></td>
</tr>
<tr>
<td>1300-1849</td>
<td>151-185</td>
<td>£35.50</td>
<td>£56.50</td>
<td>£97.50</td>
<td></td>
</tr>
<tr>
<td>1850-2449</td>
<td>186-224</td>
<td>£41.00</td>
<td>£67.50</td>
<td>£118.00</td>
<td></td>
</tr>
<tr>
<td>2450+</td>
<td>225+</td>
<td>£53.00</td>
<td>£89.00</td>
<td>£159.00</td>
<td></td>
</tr>
<tr>
<td><strong>Motorcycle</strong></td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>£25.00</td>
<td>£47.00</td>
</tr>
<tr>
<td><strong>Electric Vehicle</strong></td>
<td>n/a</td>
<td>n/a</td>
<td>£6.50</td>
<td>£12.00</td>
<td>£22.50</td>
</tr>
</tbody>
</table>
Paris On-Street Space Reclamations

- 4,000 removed to accommodate 1,451 new Velib stations that hold about 20,000 public rental bikes.

- 70+ miles of new bicycle lanes installed.

- Space was also reallocated for motorcycle parking, bicycle parking, disabled parking and tramway corridor access.
Paris On-Street Parking Supply Trend

Overall on-street parking supply was reduced by 9% (14,300 spaces)

95% of free spots were turned into paid parking spaces

Free Parking Spaces in Paris

Impact of Paris Parking Reforms

- Paris has managed to decrease vehicle kilometers traveled by 13%

- Share of private vehicles in traffic decreased from 68% to 60%

- 5% of cyclists reported shifting from car commuting

Paris Bollard Measure

Approximately 335,000 bollards installed on the edge of sidewalks to prevent cars from illegally parking.

> $20 million invested in this initiative since 2001

Bollard costs approximately $33-$52 each + $41 each for the labor to install them
“The walking distance to a parking place has to be at least as long as the walking distance to the public transport stop”
– Hermann Knoflacher, Inventor of Walkmobile
## Minimum Residential Parking Standards

<table>
<thead>
<tr>
<th>City</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>1 spot/housing unit + 0.2 added for guests</td>
</tr>
<tr>
<td>Antwerp</td>
<td>1.1 spots/dwelling unit</td>
</tr>
<tr>
<td>Barcelona</td>
<td>1 spot/2-6 apartments (depending on area)</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>1 spot/100 sq. meters</td>
</tr>
<tr>
<td>Hamburg</td>
<td>0.2/living unit in CBD, 0.8/living unit outside CBD</td>
</tr>
<tr>
<td>Madrid</td>
<td>1 spot/unit</td>
</tr>
<tr>
<td>Munich</td>
<td>1 spot/unit</td>
</tr>
<tr>
<td>Stockholm</td>
<td>0.14 spots/room</td>
</tr>
<tr>
<td>Strasbourg</td>
<td>0.5 spots/apartment if within 500 meters of PT, 1 spot/apartment otherwise</td>
</tr>
<tr>
<td>Vienna</td>
<td>1 spot/dwelling</td>
</tr>
</tbody>
</table>
Existing Supply Scan

• **Stockholm:** Developers contact Stockholm Parkering to help find available parking spaces off-site to satisfy parking regs.

• **Strasbourg:** When building permits are granted, construction projects clustered in an area are analyzed and unused spaces nearby are shared or consolidated (as of 2010).
National Parking Policies

- **United Kingdom**: National Guidance on Parking Maximums

- **The Netherlands**: Dutch A,B,C Policy

- **France**: Parking is viewed as a tool that can influence 14% of the greenhouse gas emissions emitted every year.
Linking Parking Provision to Public Transit

- **Paris:** 100% discount if a development is 1,600 ft. from a metro stop. Approximately every 1,600 ft. there is a metro.

- **Strasbourg:** 50% discount for centrally located neighborhoods or neighborhoods less than 1,600 ft. from a public transportation stop.
Zurich Transit Access Plot

**RED:** Very good access to public transport

**YELLOW:** Good access to public transport

**BORDER LINE:** Emphasizes the capacity gaps
Parking Requirements Based on Access to Transit

<table>
<thead>
<tr>
<th>Area</th>
<th>Minimum (%)</th>
<th>Maximum (%)</th>
<th>*Maximum 2 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>B</td>
<td>25</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>D</td>
<td>60</td>
<td>95</td>
<td>105</td>
</tr>
<tr>
<td>Remaining Areas</td>
<td>70</td>
<td>115</td>
<td>130</td>
</tr>
</tbody>
</table>

*Related to clean air regulations and road capacity
Alternative Modes & Parking Funds

**London:**
Freedom Passes

- elderly and disabled ride for free

**Barcelona:**
Bicing Bicycle Share Program

- First city to use 100% of surplus from on-street parking fees to finance a public bicycle sharing scheme—Bicing.

**Antwerp:**
- Parking fines are invested into public transport
Illegal Parking & Enforcement

Amsterdam Scan Car

- 6 cameras
  (3 on each side)
- Moves at 40 km/hr
- Takes 160 photos/sec
- 3 wardens on scooters follow
- 98% accuracy
Thank You!

Michael Kodransky
Institute for Transportation and Development Policy

9 East 19th Street, 7th Floor
New York, NY 10003
Tel: +1 (212) 629-8001
Fax: +1 (646) 380-2360
skype: mkodransky
mkodransky@itdp.org
www.itdp.org
www.ourcitiesourselves.org