At a Crossroads:
Making Sense of New York City's Off-Street Parking Policies
AGENDA

- Geography
- History of NYC parking policy
- Current context
- Why parking policy is important
- Research questions
- Residential Parking Study Findings
- Research agenda
- Conclusions
The Manhattan Core
- MN CDs 1-8
- Caps on permitted parking since 1982
- Most off-street parking operated as public parking

Outside the Core
- Residential parking required since 1950
- Off-street parking is mostly accessory
History of NYC Parking Policy Since 1938

1938
- Off-Street parking permitted in new residential buildings

1947
- CPC issues report calling for $100 million parking garage construction plan

1949
- Off-street parking required in new residential buildings

1950
- CPC permits development of public parking in core commercial districts

1961
- Accessory residential requirements increased and accessory commercial parking required in some districts

1973
- Eliminated requirements & established parking maximums in Manhattan Core

1982
- Lower Density Growth Management increases parking requirements in Staten Island and Throgs Neck

1987
- Parking requirements reduced for quality housing development outside the Core

1995
- Long Island City parking requirements removed

2005
- Parking requirements reduced for infill development
Current Context: Recent Considerations

Encouraging modal shifts in transit-rich areas in and near the Manhattan Core
Managing growth in auto-oriented neighborhoods
Current Context: Recent Considerations

Reclaiming streets for pedestrians
Current Context: Recent Commuter Modal Shift to the Core

Shift away from auto to transit among region’s commuters

Workers* in Manhattan by mode of transportation to work

*Workers Residing in NY-NJ-CT Metropolitan Region

Source: Census 2000, ACS 2007

Hub-bound vehicles and DCA-licensed public parking spaces below 60th Street in Manhattan, as a percentage of 1978 totals

1978: 649,000 Vehicles
1978: 127,000 Parking Spaces

1999: 844,000 Vehicles
1998: 116,000 Parking Spaces

2001: 689,000 Vehicles
2007: 783,000 Vehicles
2009: 105,000 Parking Spaces

Source: New York Metropolitan Transportation Council, Department of Consumer Affairs, New York City Dept. of Environmental Protection
Why is Parking Policy Important?: Mobility & Travel Patterns Outside the Core

Source: Census 2000
Why is Parking Policy Important?: Mobility & Travel Patterns Outside the Core

NYC Workers: Work Trips By Boroughs

Borough of Work

- The Bronx
- Queens
- Manhattan
- Brooklyn
- Staten Island
- Outside NYC

Borough of Residence

- The Bronx: 41.1%
- Brooklyn: 48.0%
- Queens: 39.6%
- Staten Island: 45.5%
- Manhattan: 84.3%

Source: Census 2000
Why is Parking Policy Important?:
Quality of Life: Urban Design & Streetscape
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Why is Parking Policy Important?:
Quality of Life: Urban Design & Streetscape
Why is Parking Policy Important?
Quality of Life: Cost & Difficulty of Parking

- Cruising for parking is commonplace
- Double-parking is problematic citywide
- Over-utilization of on-street parking vs. cost of providing off-street parking
Why is Parking Policy Important?
Quality of Life: Cost & Difficulty of Parking

Legend
- open space
- Housing built before 1938, R6 and higher zoning districts

R6 and higher housing built before 1938
Source: DCP MapPluto, 2008

Census 2000 Population Density and Proximity to Subway Station
Source: U.S. Census 2000

The citywide average population density is 91 people per acre

MTA Subway Station
People per Acre
- 0 - 91
- 92 - 150
- 151 - 250
- 251 - 650
Research Agenda

- Development and parking in NYC is complex
- Further study of policy is necessary
- Need to distinguish the policies based on land use and development trends in specific areas
- The Core, transit-rich areas outside Manhattan and lower-density neighborhoods warrant separate studies
Research Questions

Public Parking in the Core

→ What is the role of public parking in the CBD?
→ Who is using the garages and why?
→ Can parking policy influence choice of mode?
Research Questions

Accessory Residential Parking

→ How does parking demand differ geographically within NYC?
→ What factors govern whether a household owns a car?
→ What effect do zoning requirements have?
→ How do New York City households use their cars?
Residential Parking Study (Completed)
Best Practices in Parking Policy (Ongoing)
Manhattan Core Public Parking Study (Ongoing)
Inner Ring Residential Parking Study (Upcoming)
Using building-specific data from 2005 on car registrations from the Department of Motor Vehicles:

- Assess how parking requirements in the Bronx, Brooklyn, Queens & Upper Manhattan relate to ownership patterns
- Assess how ownership patterns relate to demographics
Residential Parking Study: Standard Requirements

- Standard residential off-street parking requirements

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Parking Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Density (R1-R4*)</td>
<td>1.00</td>
</tr>
<tr>
<td>Mid Density (R4 “infill”, R5-R7)</td>
<td>.50 - .85</td>
</tr>
<tr>
<td>High Density (R8 - R10)</td>
<td>.40 - .50</td>
</tr>
</tbody>
</table>

Source: DCP

- Waivers permitted in medium & high density districts
Residential Parking Study: Applicability of Residential Off-Street Parking Rules

- Special parking rules exist in certain areas of the city
- No required parking in Manhattan CDs 1-8 & LIC
- Increases & waiver reductions within some zoning districts

Source: DCP
Residential Parking Study:
Cars per Unit in New Buildings by Location & Building Type

New 5+ Family Buildings in Census Tract

All Recently Constructed Buildings with Registered Cars, by Census Tract

Source: NYSDMV Passneger Vehicle Registrations 2005, NYC DOB
residential buildings permitted since 1995, Census 2000
Residential Parking Study: Cars per Unit in New Buildings by Location & Building Type

New 3-4 Family Buildings in Census Tract

8 Miles from Times Square

5 Miles from Times Square

Source: NYSDMV Passenger Vehicle Registrations 2005, NYC DOB
residential buildings permitted since 1995, Census 2000

New 1-2 Family Buildings in Census Tract

8 Miles from Times Square

5 Miles from Times Square

Source: NYSDMV Passenger Vehicle Registrations 2005, NYC DOB
residential buildings permitted since 1995, Census 2000
Registered Cars by Required Parking
All New Residential Buildings, 1995-2005

Parking Demand
- Cars Exceed Req’t.
- Req’t. Meets Demand

Source: NYSDMV, DOB

PARKING RESEARCH AGENDA
Residential Parking Study: Family Status & Car Ownership

Cars per household by family status, location & building type

- **Family households with children**
  - **MULTIFAMILY**
  - **3-AND 4-FAMILY**
  - **1-AND 2-FAMILY**

- **Nonfamily households without children**
  - **MULTIFAMILY**
  - **3-AND 4-FAMILY**
  - **1-AND 2-FAMILY**

Source: ACS 2006

**Cars per household**
- **OUTER RING**
- **MIDDLE RING**
- **INNER RING**
Residential Parking Study: Household Type by Location & Housing Type

Family Households with Children

<table>
<thead>
<tr>
<th>Location</th>
<th>1-/2-Family</th>
<th>3-/4-Family</th>
<th>Multi-Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Ring</td>
<td>10.50%</td>
<td>2.46%</td>
<td>3.32%</td>
</tr>
<tr>
<td>Middle Ring</td>
<td>18.36%</td>
<td>7.07%</td>
<td>15.88%</td>
</tr>
<tr>
<td>Outer Ring</td>
<td>26.65%</td>
<td>4.43%</td>
<td>11.32%</td>
</tr>
</tbody>
</table>

Nonfamily Households

<table>
<thead>
<tr>
<th>Location</th>
<th>1-/2-Family</th>
<th>3-/4-Family</th>
<th>Multi-Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Ring</td>
<td>21.71%</td>
<td>2.67%</td>
<td>8.52%</td>
</tr>
<tr>
<td>Middle Ring</td>
<td>27.34%</td>
<td>5.52%</td>
<td>19.63%</td>
</tr>
<tr>
<td>Outer Ring</td>
<td>10.10%</td>
<td>2.11%</td>
<td>10.10%</td>
</tr>
</tbody>
</table>

Source: ACS 2006
Residential Parking Study: Income & Car Ownership

Car Ownership by Household Income

Source: ACS 2006
Residential Parking Study: Manhattan Car Ownership Since 1962

Rising registrations of car ownership for Manhattan households


Source: NYSDMV, passenger vehicle registrations since 1962, New York County
RECOMMENDATIONS FOR FURTHER STUDY

→ Study requirements in inner ring locations

→ Explore demand management opportunities

→ Evaluate the relationship between proximity to transit and parking demand

→ Study relationship between parking and building design

→ Evaluate impacts of providing parking on housing cost

→ Assess needs and characteristics of subsidized developments
Best Practices in Parking Policy

Interview 15 Cities
Parking Requirements and Policies

Identify innovative policies
Review applicability in NYC context
Some policies already exist in NYC – parking maximums in the central business district
Other policies already being considered – car sharing text amendment
Manhattan Core Study

Policy Considerations

→ Supply of DCA-licensed public parking in the Core has declined 22,000 spaces since 1978, from 127,000 to 105,000

→ How do we determine what the appropriate supply is to meet the needs of Manhattan?

Parking Survey

→ Interview users of public parking
→ Conducted March-April 2009
→ Will analyze over 2000 intercept surveys in ~ 100 parking garages and lots
Inner Ring Study: Neighborhoods with Modal Shift Potential

Study Areas:
- High density, transit-rich neighborhoods
- Low commute times & high transit share

Scope of Study:
- Auto ownership patterns
- Auto utilization
- Parking supply
- Parking pricing
- Policies to encourage modal shift from car to public transportation

Source: NYC Department of City Planning and Census 2000
Next Steps

→ Complete Best Practices & Manhattan Core Studies
→ Begin Inner Ring Study
→ Proceed with citywide car sharing text amendment