



# 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



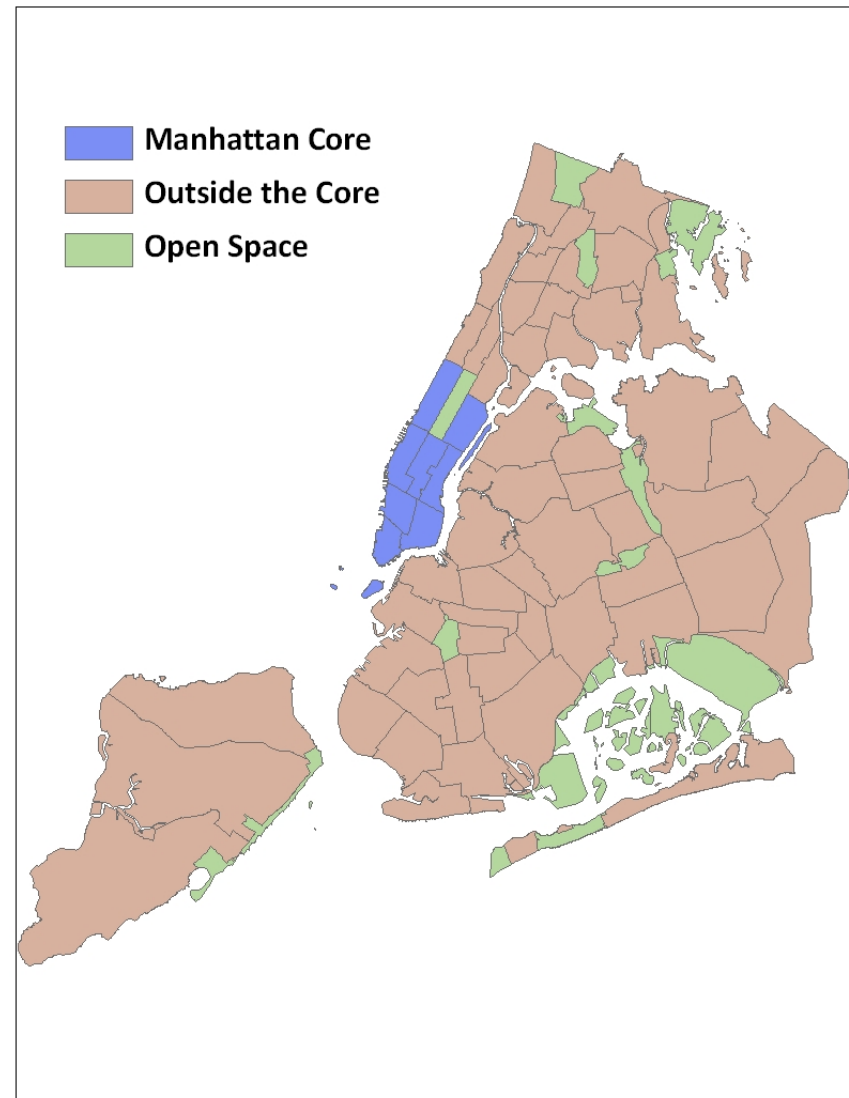
## The Core & Outside the Core

### → The Manhattan Core

- MN CDs 1-8
- Caps on permitted parking since 1982
- Most off-street parking operated as public parking

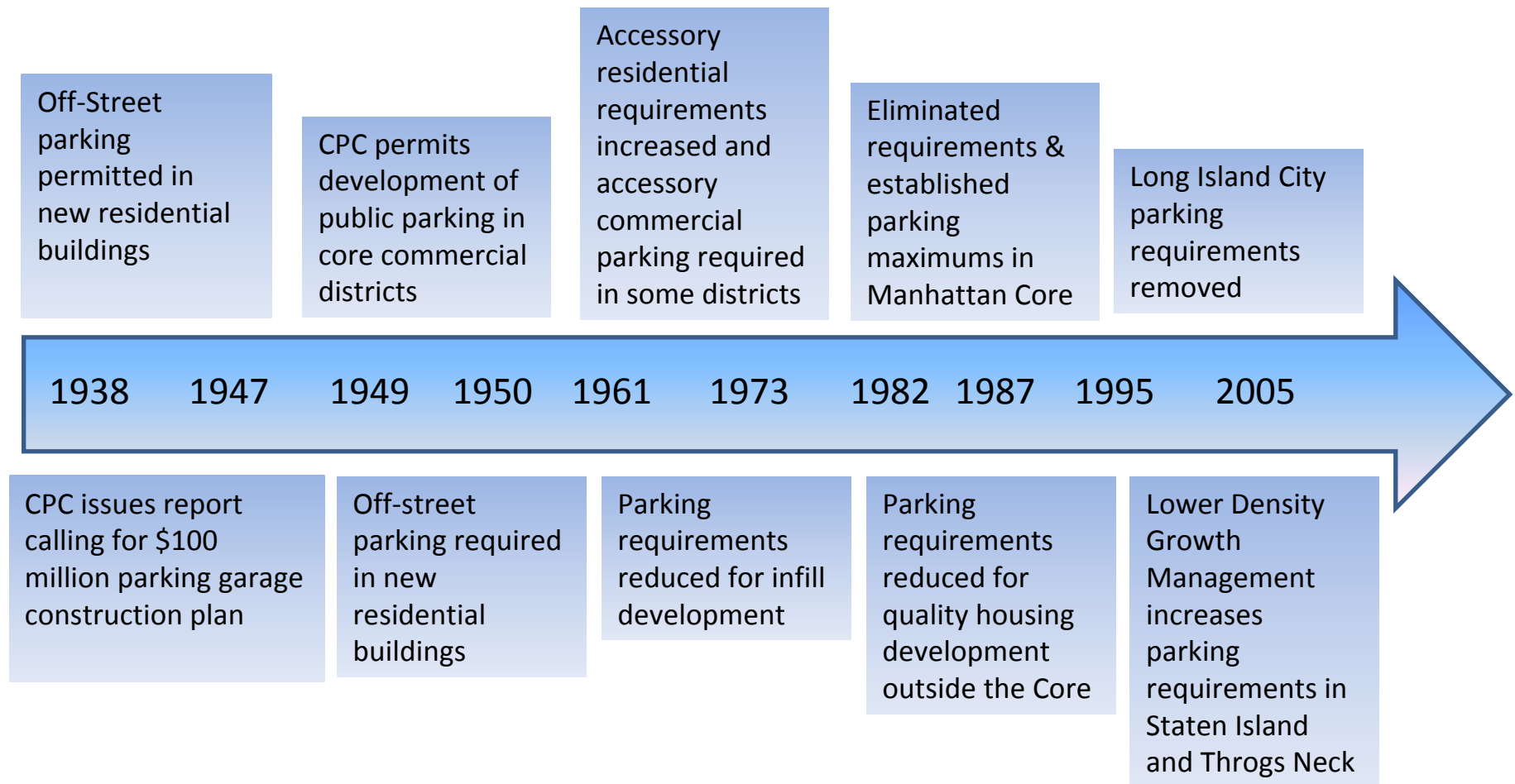
### → Outside the Core

- Residential parking required since 1950
- Off-street parking is mostly accessory





## History of NYC Parking Policy Since 1938



# → Current Context: Recent Considerations



**Encouraging modal shifts in transit-rich areas in and near the Manhattan Core**



## → Current Context: Recent Considerations

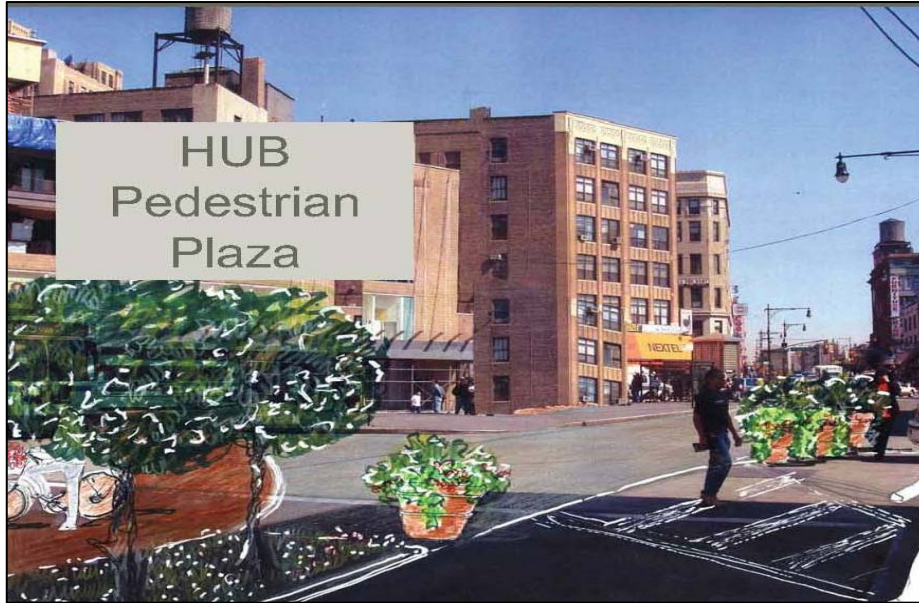


**Managing growth in auto-oriented neighborhoods**



# → Current Context: Recent Considerations

## Reclaiming streets for pedestrians

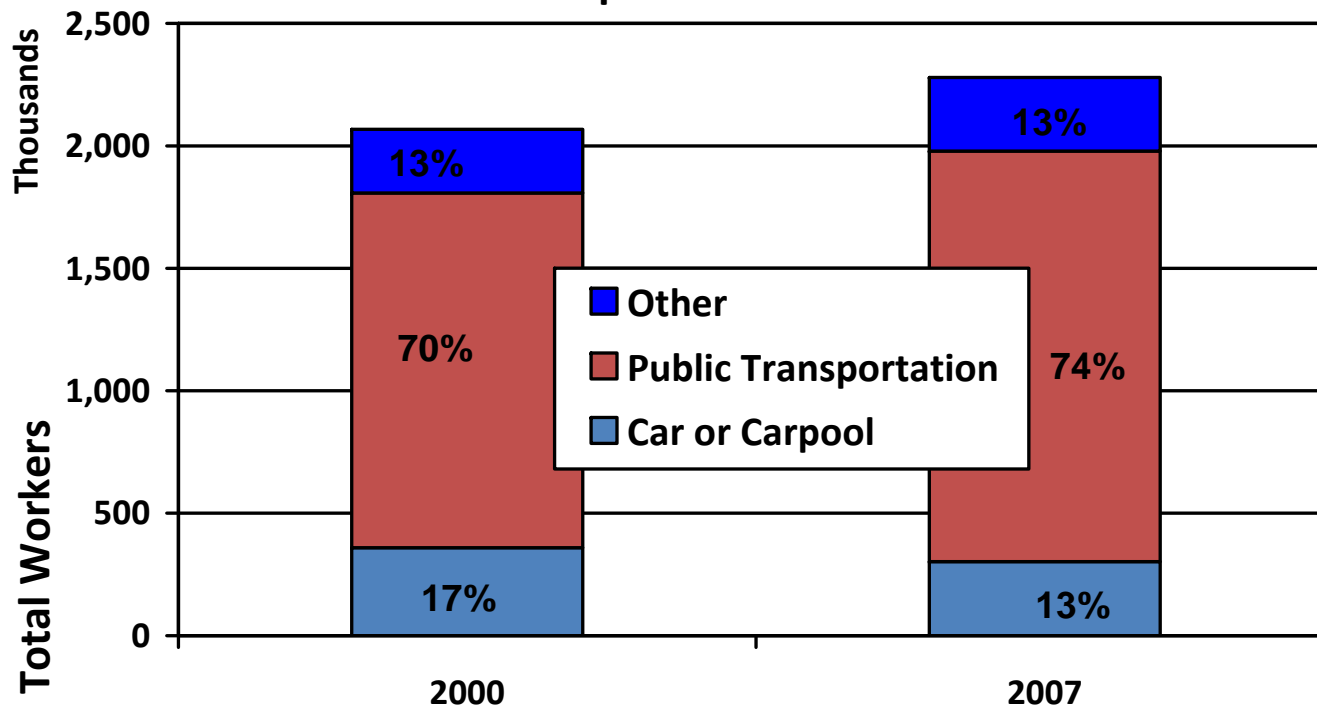




## Current Context: Recent Commuter Modal Shift to the Core

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

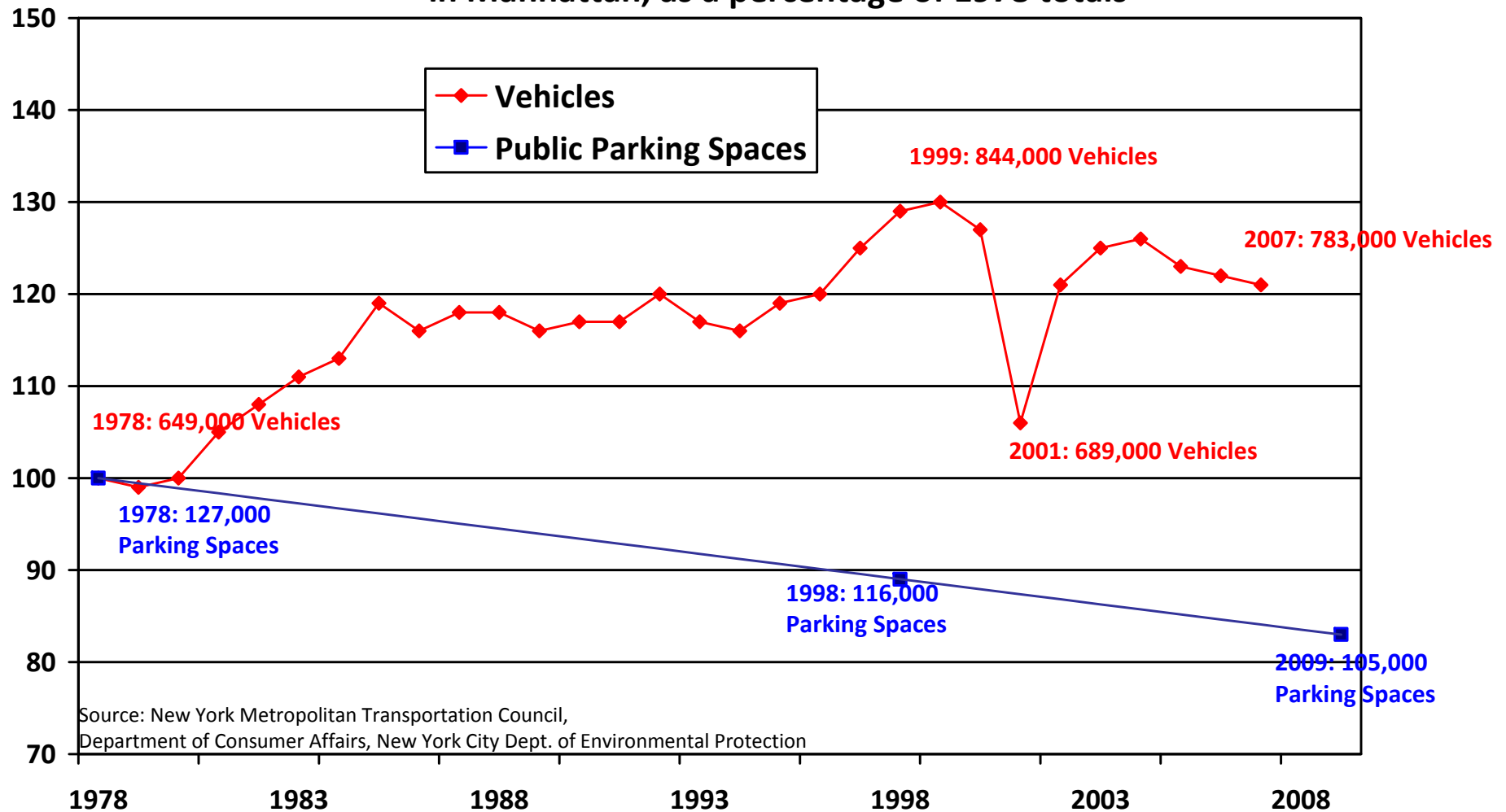
Source: Census 2000, ACS 2007





## Current Context: Hub-Bound Trips & Public Parking (1978-2009)

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



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

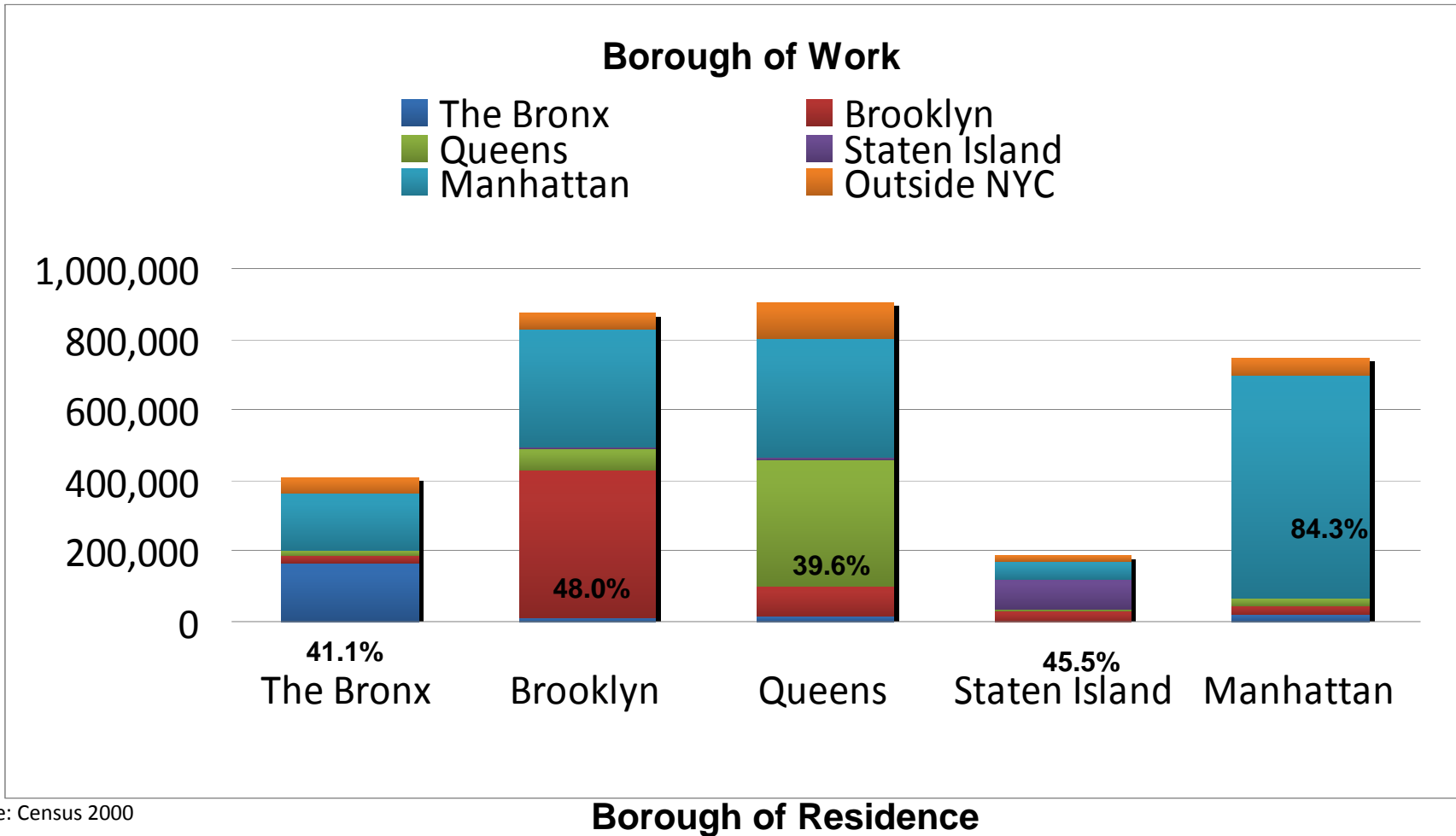


Source: Census 2000



# Why is Parking Policy Important?: Mobility & Travel Patterns Outside the Core

## NYC Workers: Work Trips By Boroughs



Source: Census 2000



## Why is Parking Policy Important?: Quality of Life: Urban Design & Streetscape





## Why is Parking Policy Important?: Quality of Life: Urban Design & Streetscape



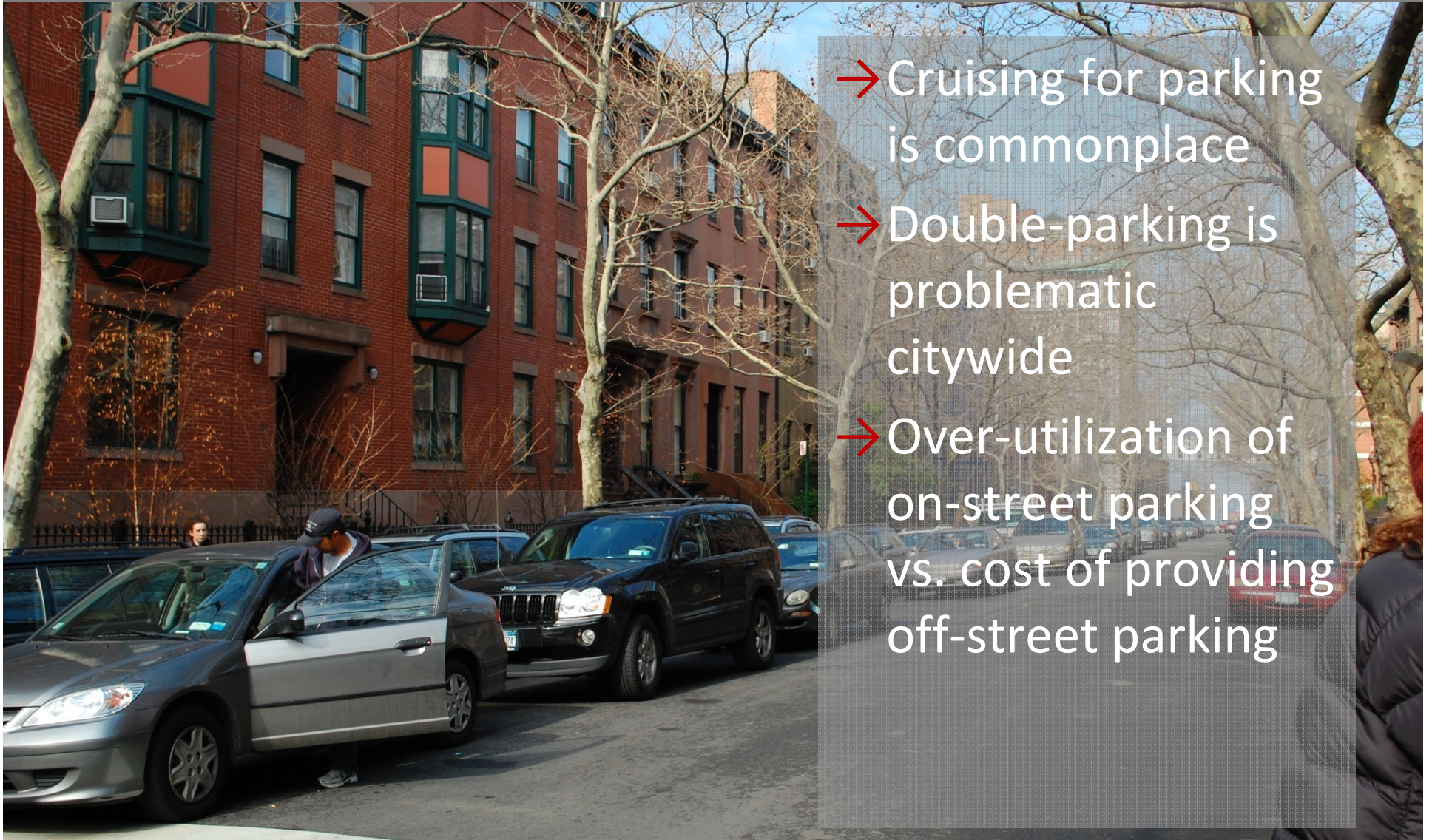


## Why is Parking Policy Important?: Quality of Life: Urban Design & Streetscape





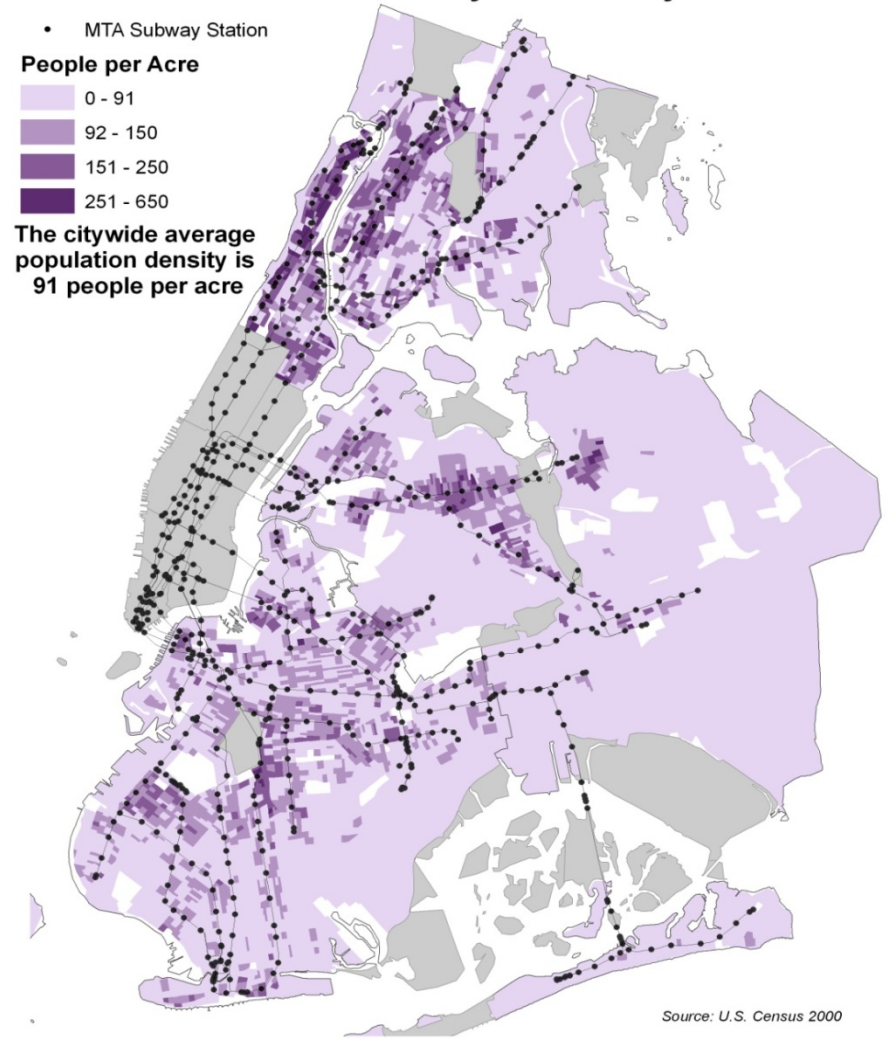
## Why is Parking Policy Important? Quality of Life: Cost & Difficulty of Parking



- 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



**Census 2000 Population Density and Proximity to Subway Station**





## 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?



## Research Agenda

**Residential Parking Study (Completed)**  
**Best Practices in Parking Policy (Ongoing)**  
**Manhattan Core Public Parking Study (Ongoing)**  
**Inner Ring Residential Parking Study (Upcoming)**



## Residential Parking Study: Study Areas

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

Summary of Residential Parking Requirements	
<i>Zoning District</i>	<i>Parking Requirement</i>
Low Density (R1-R4*)	1.00
Mid Density (R4 “infill”, R5-R7)	.50 - .85
High Density (R8 - R10)	.40 - .50

Source: DCP

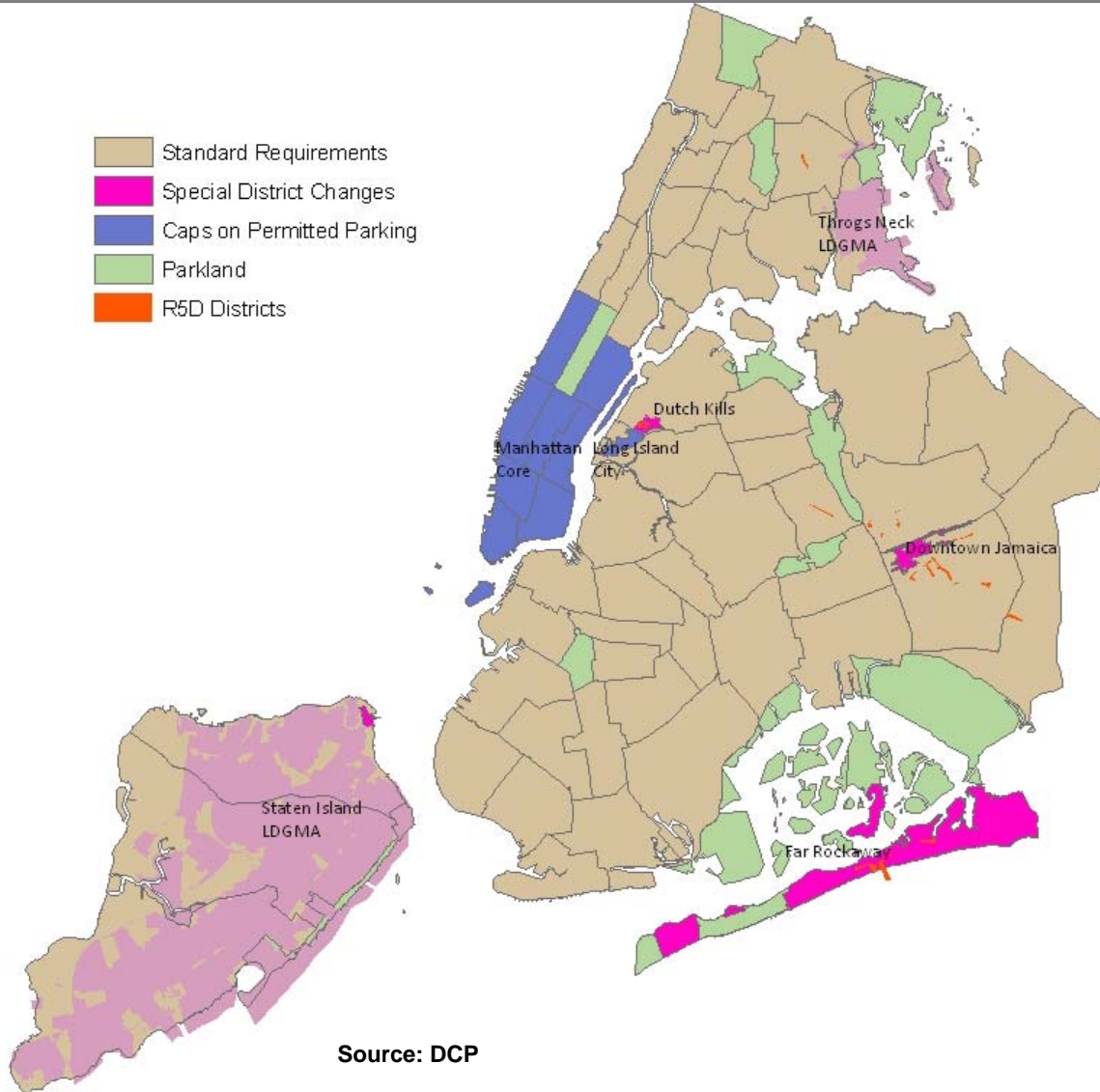
- Waivers permitted in medium & high density districts





# Residential Parking Study: Applicability of Residential Off-Street Parking Rules

- Standard Requirements
- Special District Changes
- Caps on Permitted Parking
- Parkland
- R5D Districts



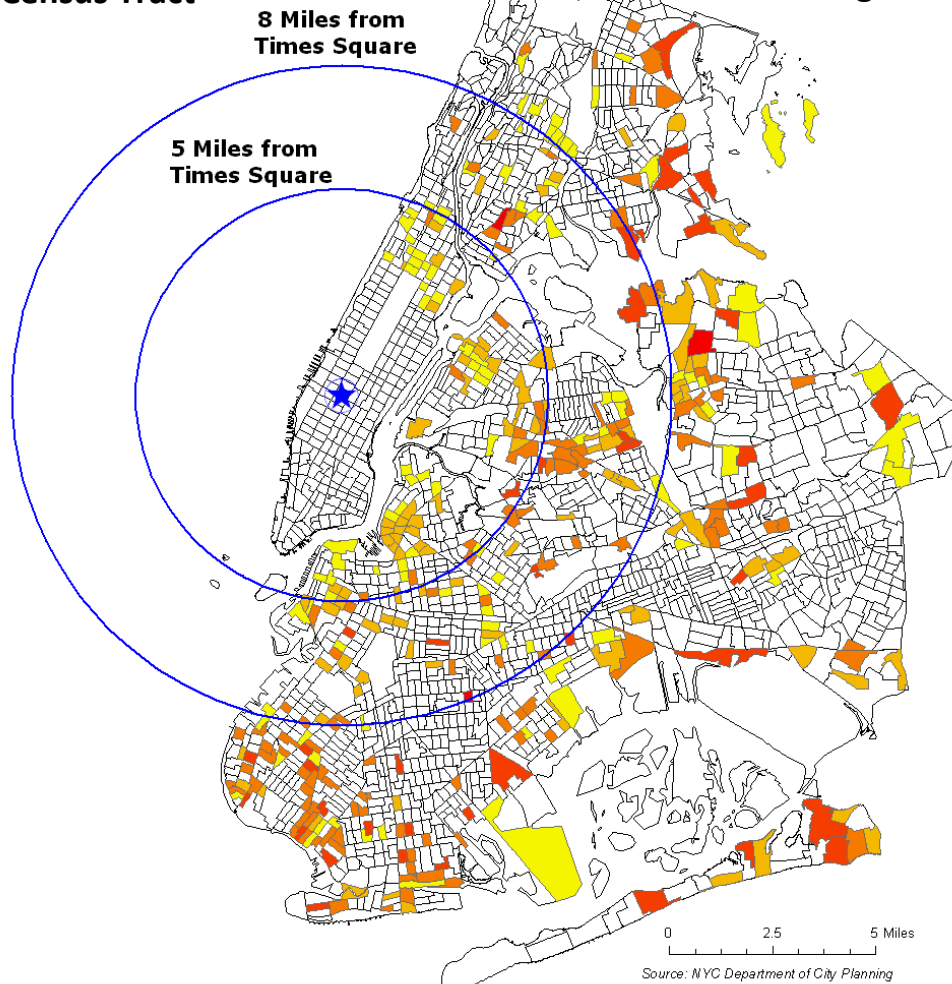
Source: DCP

- 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

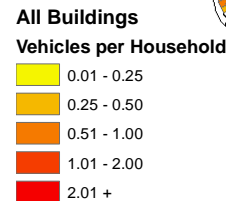
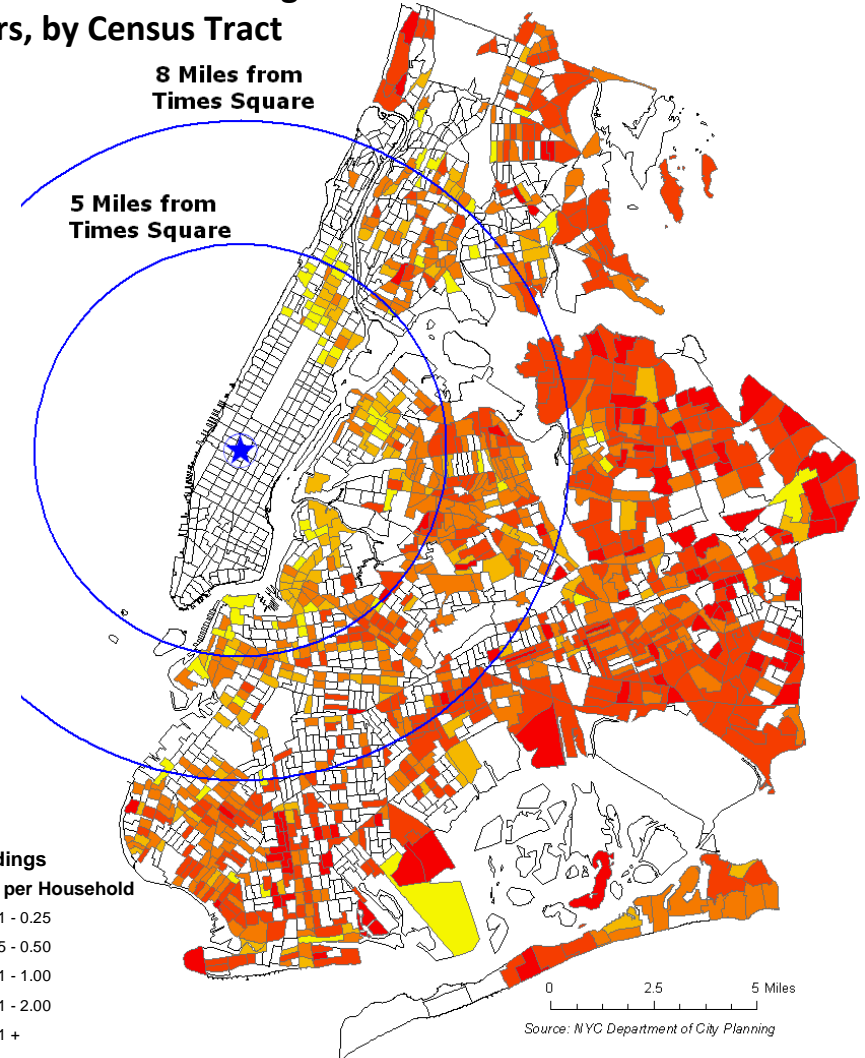


# Residential Parking Study: Cars per Unit in New Buildings by Location & Building Type

**New 5+ Family Buildings in  
Census Tract**



**All Recently Constructed Buildings with  
Registered Cars, by Census Tract**



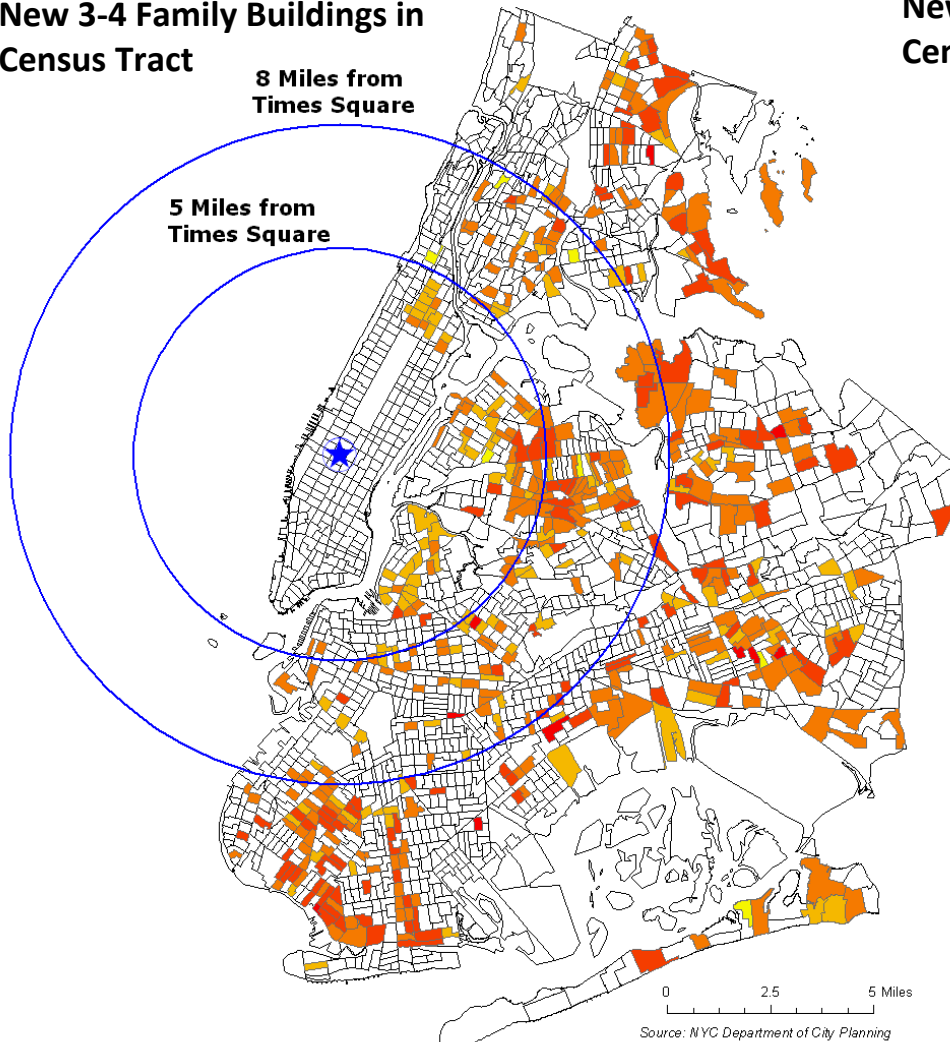
Source: NYSDMV Passenger Vehicle Registrations 2005, NYC DOB residential buildings permitted since 1995, Census 2000



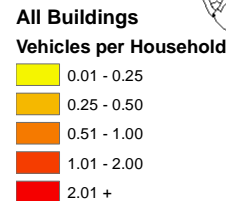
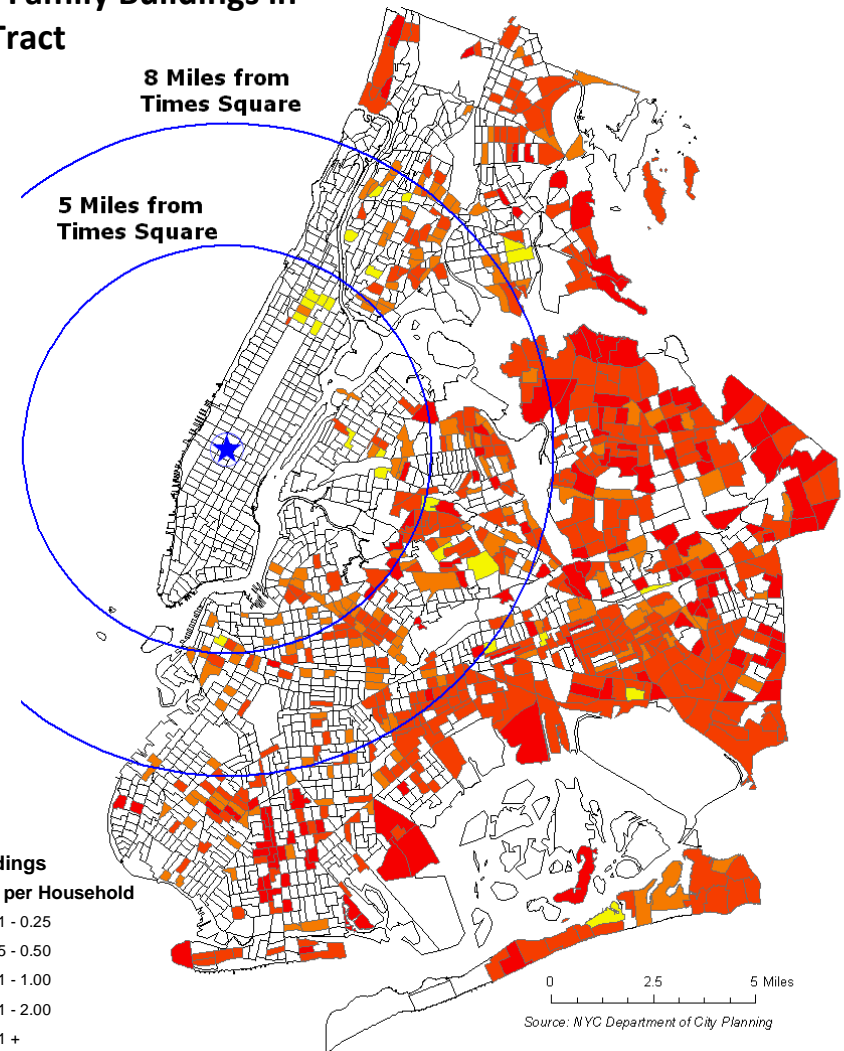


# Residential Parking Study: Cars per Unit in New Buildings by Location & Building Type

## New 3-4 Family Buildings in Census Tract



## New 1-2 Family Buildings in Census Tract



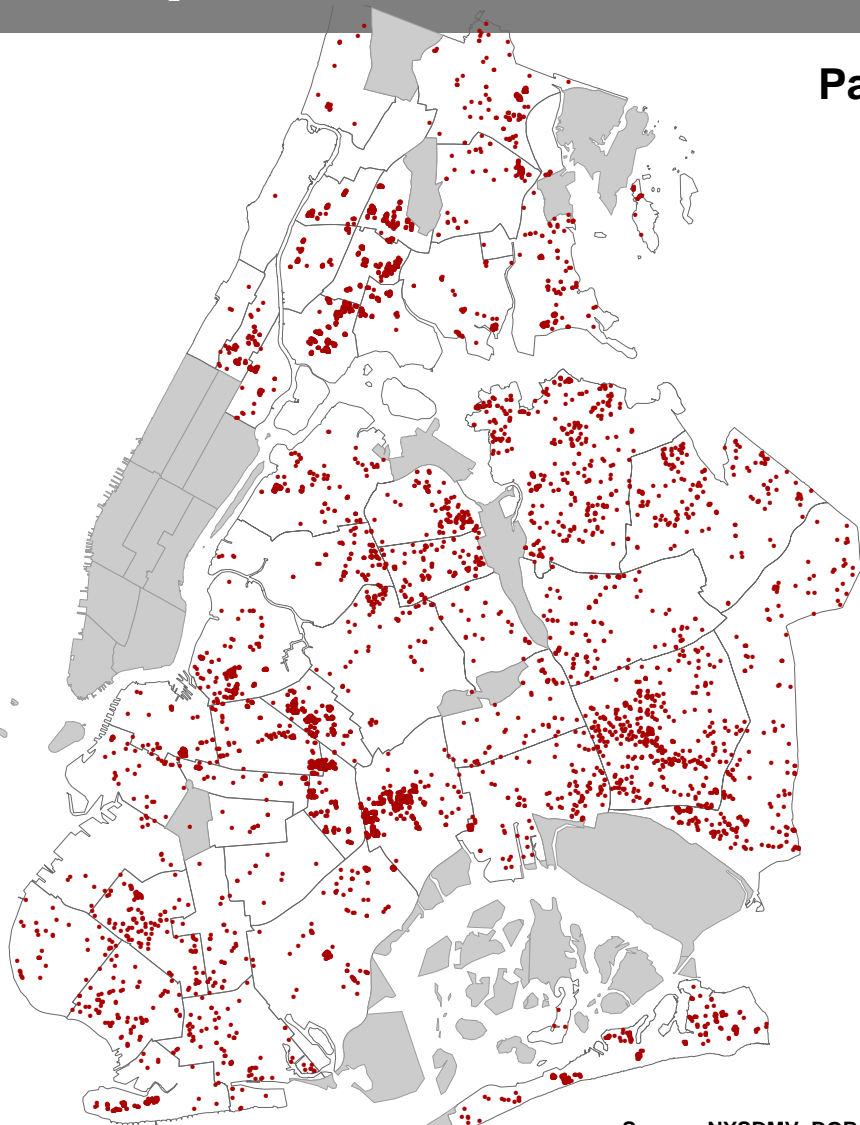
Source: NYSDMV Passenger Vehicle Registrations 2005, NYC DOB residential buildings permitted since 1995, Census 2000



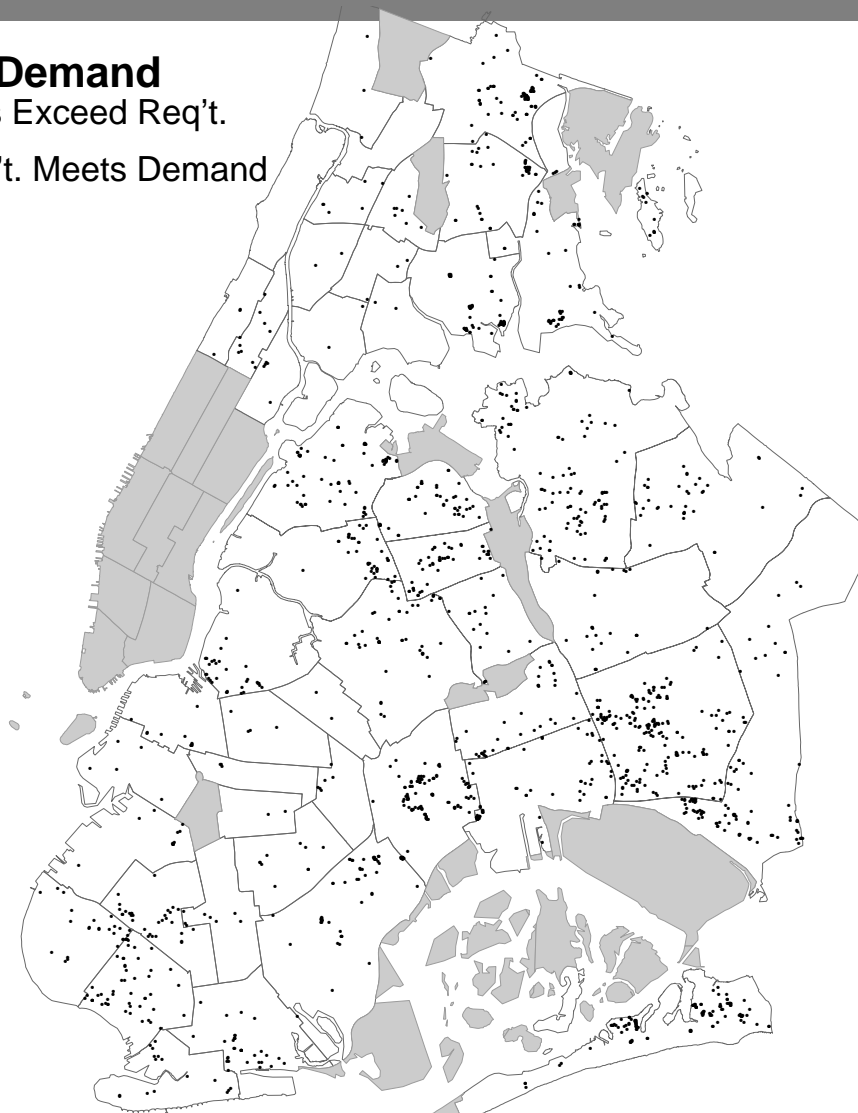
# Registered Cars by Required Parking All New Residential Buildings, 1995-2005

## Parking Demand

- Cars Exceed Req't.
- Req't. Meets Demand



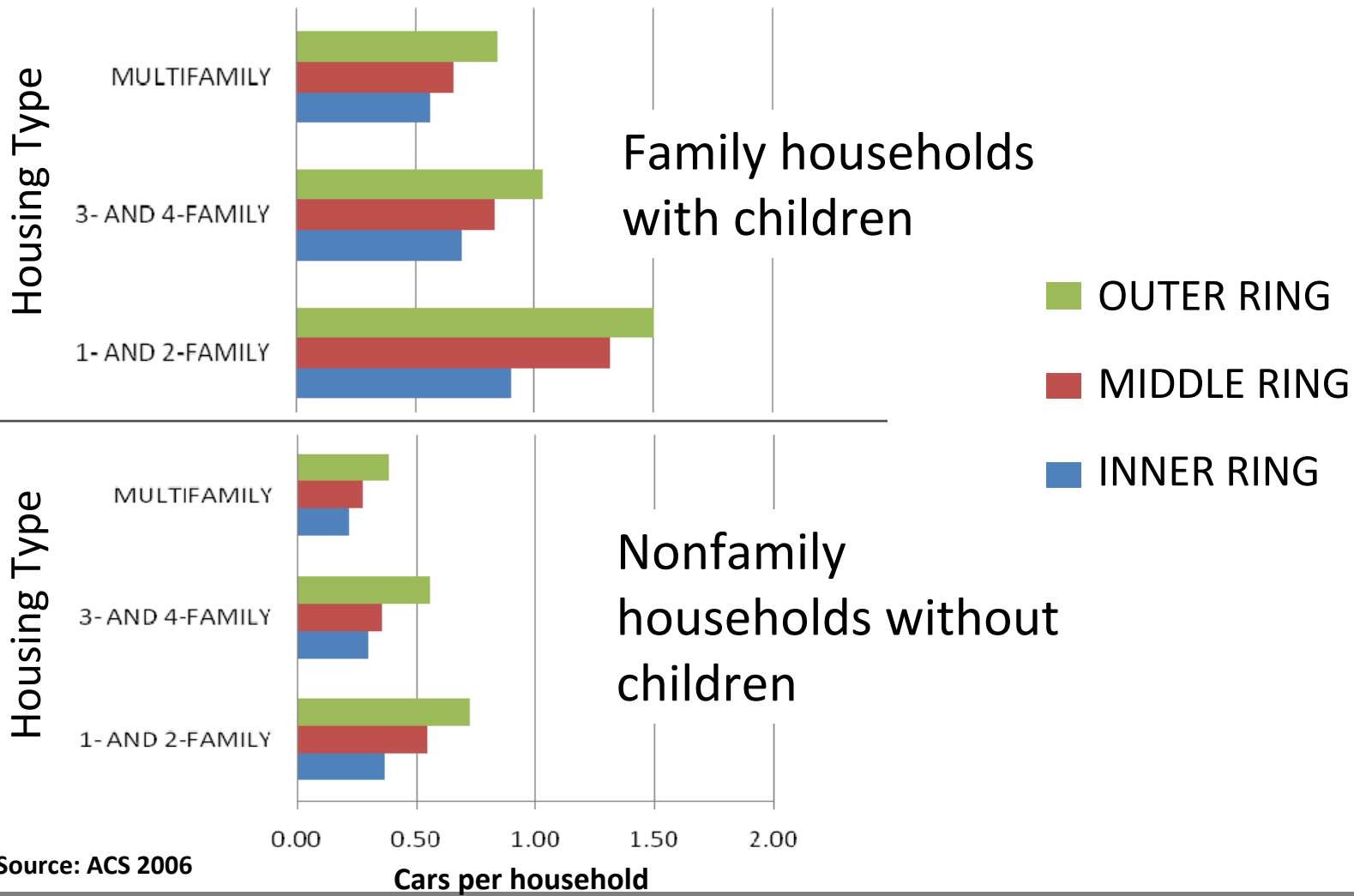
Source: NYSDMV, DOB





# Residential Parking Study: Family Status & Car Ownership

## Cars per household by family status, location & building type

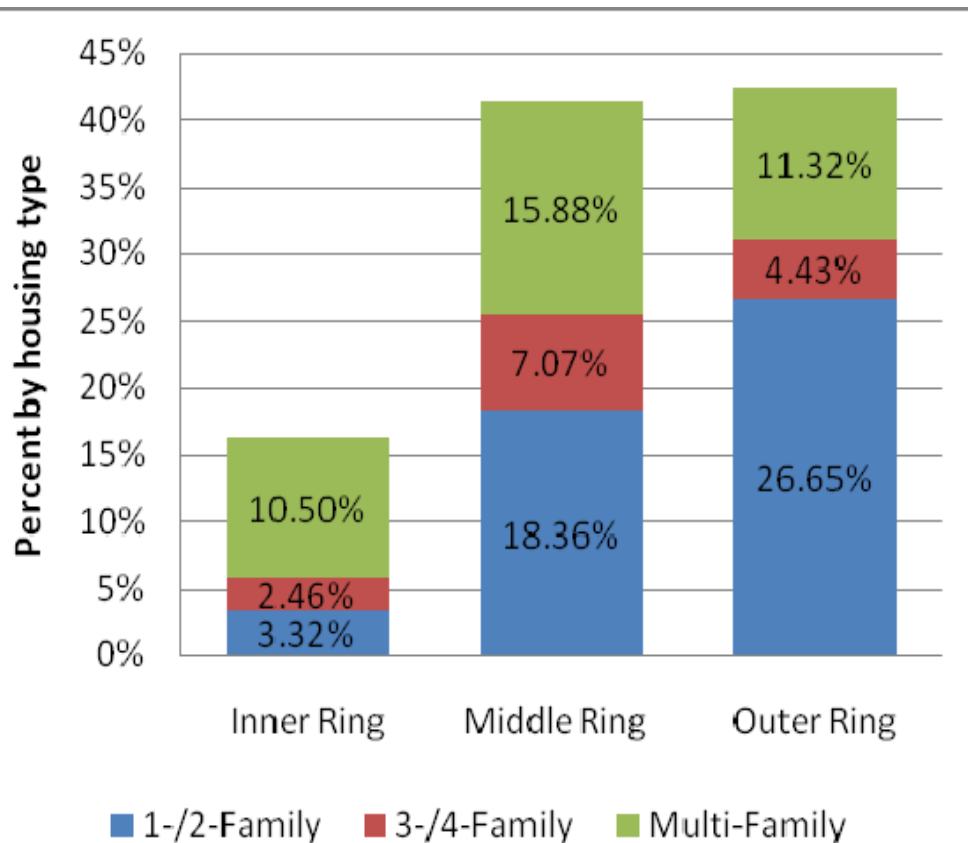


Source: ACS 2006

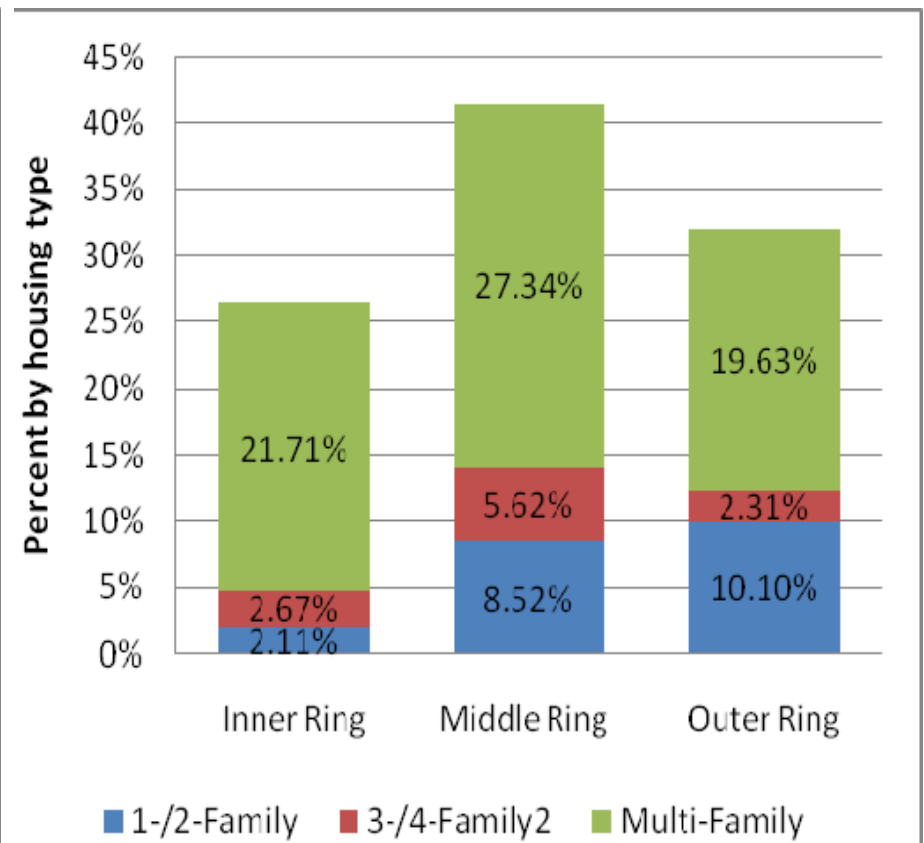


# Residential Parking Study: Household Type by Location & Housing Type

## Family Households with Children



## Nonfamily Households



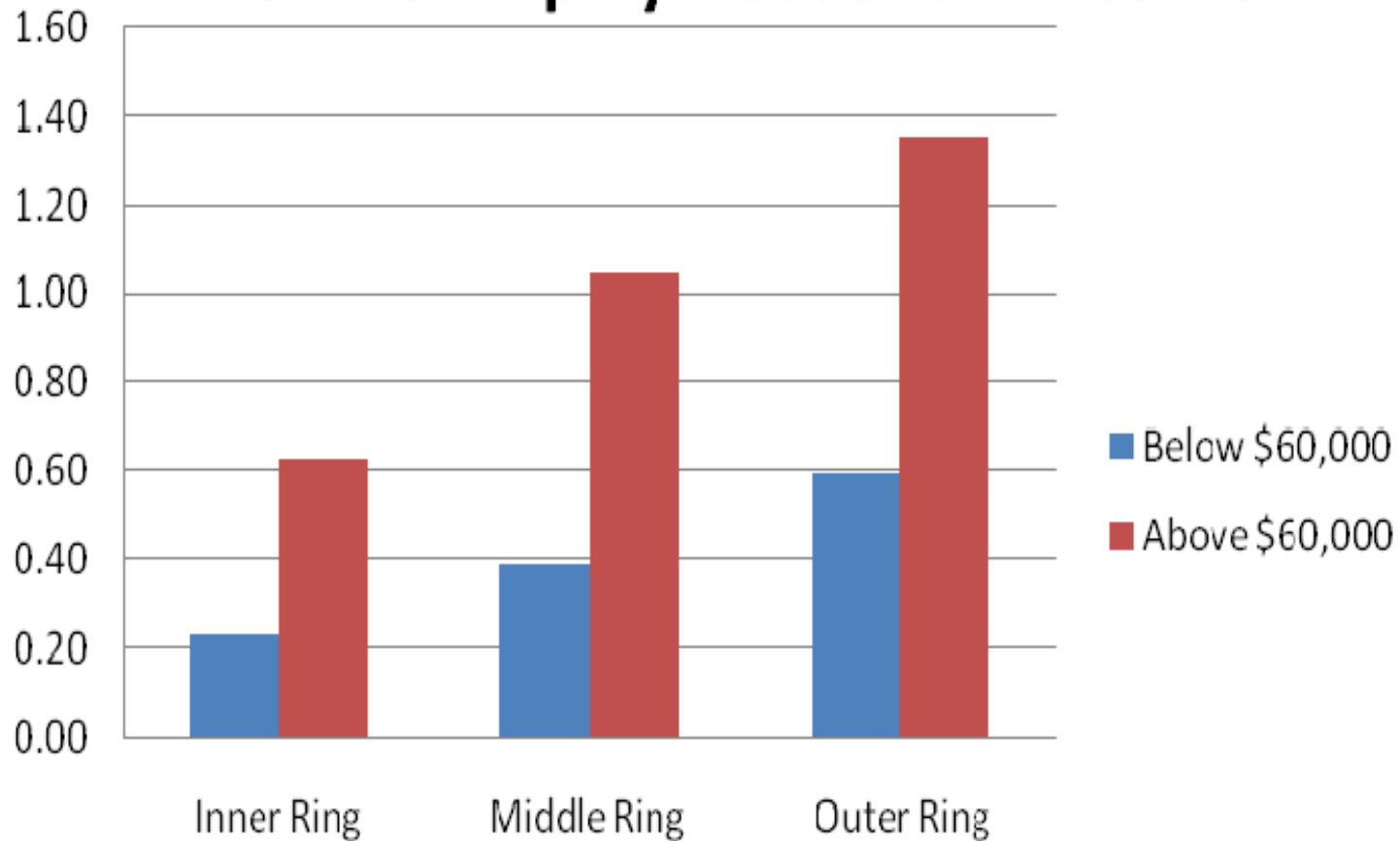
Source: ACS 2006





## Residential Parking Study: Income & Car Ownership

### Car Ownership by Household Income

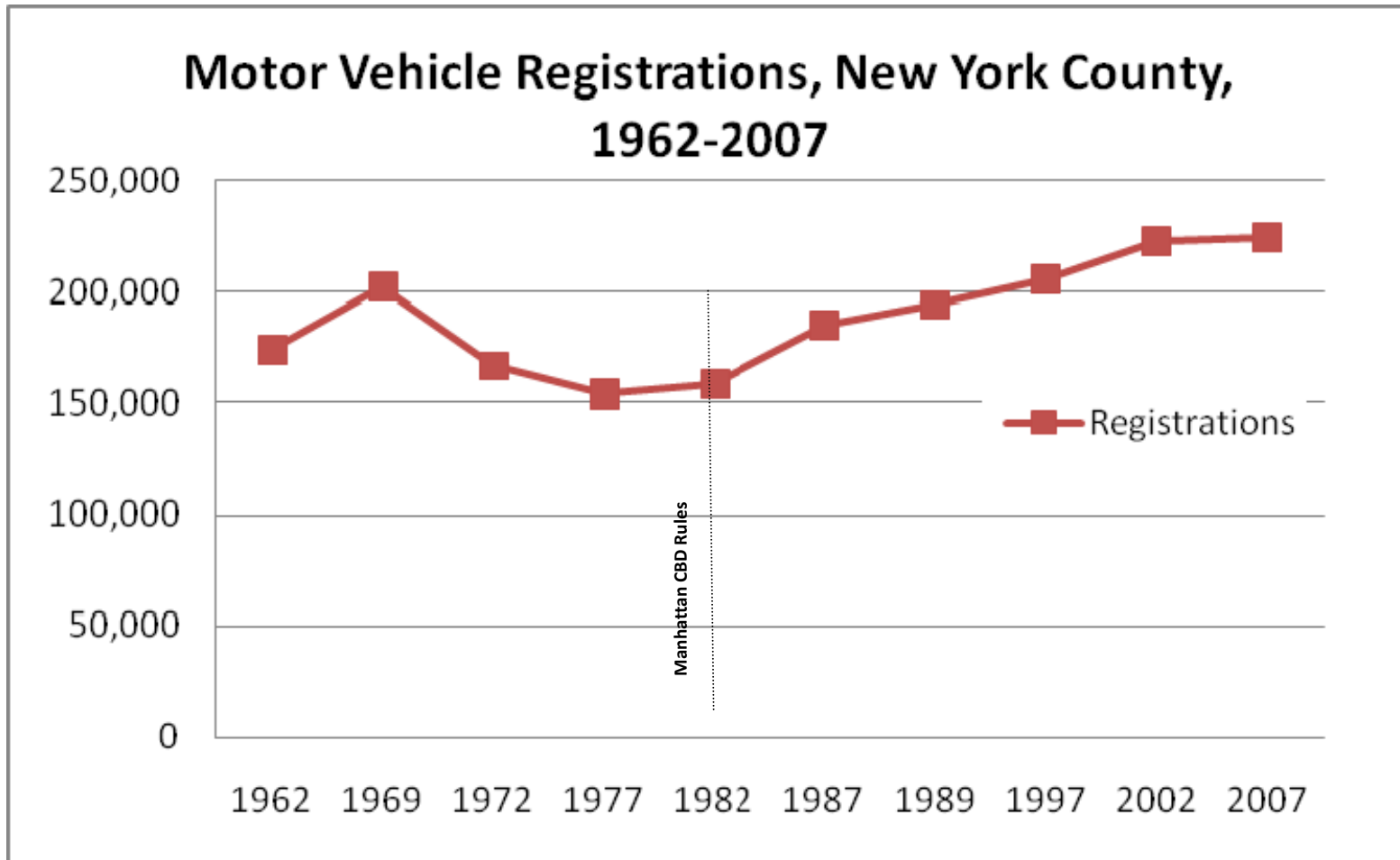


Source: ACS 2006



# 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



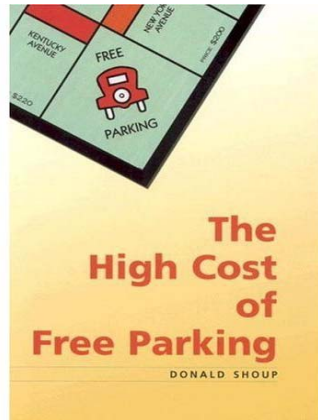
## RECOMMENDATIONS FOR FURTHER STUDY

- 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

Arlington, Boston, Chicago, Los Angeles, Milwaukee, Minneapolis, Philadelphia, Portland, San Diego, San Francisco, Seattle, Washington DC, London, Toronto, Vancouver



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?

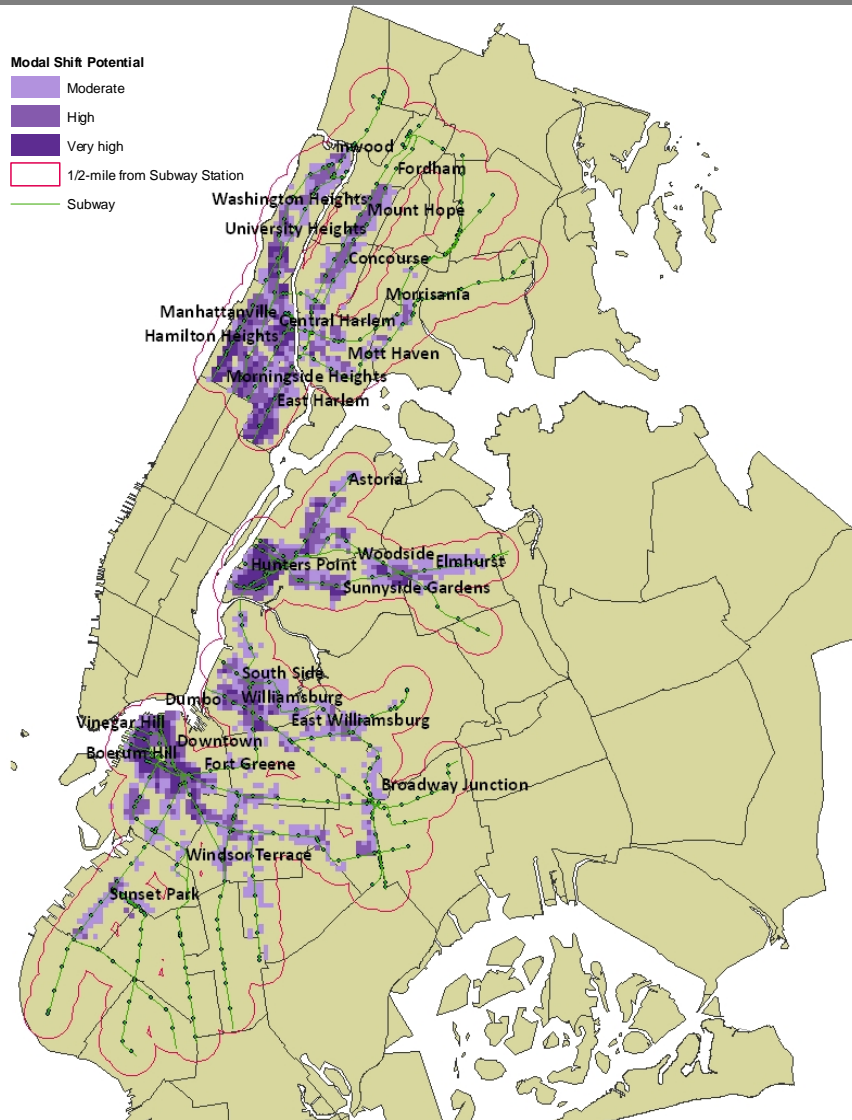
### Parking Survey

- 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



Source: NYC Department of City Planning and Census 2000

## 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



## Next Steps

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

