

Social Science of Parking



DR. Rachel Weinberger (Nelson\Nygaard)

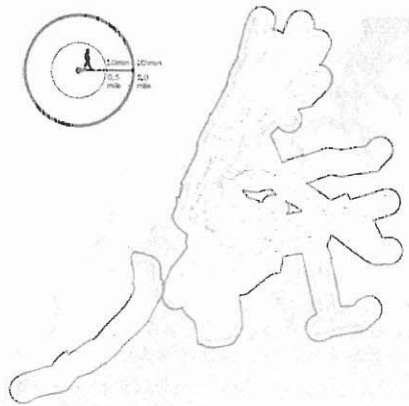
- Studied Households in Bronx, Brooklyn, & Queens, NY.
- Found a clear relationship between the availability of parking **at home** and higher rates of **driving to jobs** in the core of Manhattan, even when both the home and workplace were well served by transit
- When a guaranteed, off-street parking space is available, the ownership and use of an automobile becomes much a more attractive option - regardless of the availability of transit, highways access, or demographic differences.



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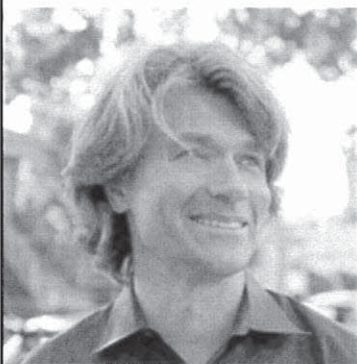
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DR. Daniel Chatman (UC Berkeley)

- Studied Households near train stations in Northern NJ
- Availability of off-street parking was actually the #1 most important variable in determining automobile ownership and commuting to work
- Regardless of accessibility to a rail transit station
- When looking only at households within walking distance to a transit station, households with both low on- and off-street parking commute by automobile 60% less than households with easy access to parking.



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DR. Stephanie Pollack (MA Sec. of Tans.)

- Studied 12 Metro areas where a new rail station opened between the 1990 and 2000 Census
- Median Household Income increased more than in the surrounding metro area
- Automobile ownership increased faster than in the surrounding metro area
- Ownership of two or more automobiles increased in 57% of the study areas
- When upper income households move into an area, they are more likely to own motor vehicles and to use them for their commute.
- Higher income households moving into the study areas bring and use more vehicles undermine efforts to shift commuting trips to the newly-built transit.



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Tonight's Schedule

Presentation

- SomerVision Goals
- Policy Context
- Transit Oriented Development
- The Social Science of Parking
- **Regulating Parking**
- Mobility Management



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Regulating Parking

Customize the Standards


	Conventional Minimum Parking Requirements	Tailored Minimum Parking Requirements	No Parking Requirements	Maximum Parking Requirements
Typical Tools	- Requirement > average demand - Hides all parking costs	Adjust for: - density - transit - mixed use - on-street spaces ...etc.	- Market decides - Garages funded by parking revenues - Manage on-street parking - Residential parking permits allowed by vote	- Limit parking based on road capacity or transit goals - Manage on-street parking - Market rate fees encouraged/ required
Traffic	High	←		→ Low
Housing Costs	High	←		→ Low
Transit Ridership	Low	←		→ High


Figure 6 – Conceptual Approaches to Setting Parking Requirements



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<h1>Regulating Parking</h1>	
<h2>Motor Vehicle Parking</h2>	
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<h1>Regulating Parking</h1>	
<h2>Motor Vehicle Parking</h2>	
<ul style="list-style-type: none">• Calibrated to Proximity	
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Regulating Parking

Motor Vehicle Parking

- Calibrated to Proximity
- Customized Standards for Different Places and Uses



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Regulating Parking

Motor Vehicle Parking

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Figure 6 – Conceptual Approaches to Setting Parking Requirements



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Regulating Parking

Customized Standards

Motor Vehicle Parking

Article 7: Parking, Service, & Mobility

TABLE 7.2 Motor Vehicle Parking Standards

SQ.FT. - Gross Leasable Square Footage DU - Dwelling Unit	Urban Square TOD (max)	Neighborhood Square TOD (max)	Non-TOD Areas (min)
ARTS & CREATIVE ENTERPRISE			
Artisan Production	1.0 / 800 sq. ft.	1.0 / 800 sq. ft.	1.0 / 1000 sq. ft.
Arts Education & Shared Workspaces	1.0 / 800 sq. ft.	1.0 / 600 sq. ft.	1.0 / 650 sq. ft.
Arts Exhibition	1.0 / 800 sq. ft.	1.0 / 800 sq. ft.	1.0 / 650 sq. ft.
Arts Sales & Services	1.0 / 200 sq. ft.	1.0 / 375 sq. ft.	1.0 / 1000 sq. ft.
Creative Studio	1.0 / 800 sq. ft.	1.0 / 600 sq. ft.	1.0 / 650 sq. ft.
Design Services	1.0 / 800 sq. ft.	1.0 / 800 sq. ft.	1.0 / 1000 sq. ft.
Work/Live Creative Studio	0.25 / DU	0.50 / DU	1.0 / DU



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Regulating Parking

Customized Standards

Motor Vehicle Parking

Article 7: Parking, Service, & Mobility

TABLE 7.2 Motor Vehicle Parking Standards

Maximums

SQUARE FEET OF GARAGE SPACE PER DU - Dwelling Unit	Urban Square TOD (max)	Neighborhood Square TOD (max)	Non-TOD Area (max)
	10,700 sq ft	10,700 sq ft	10,700 sq ft
ARTS & CREATIVE ENTERPRISE			
Artisan Production	10,700 sq ft	10,700 sq ft	10,700 sq ft
Arts Education & Shared Workspaces	10,700 sq ft	10,700 sq ft	10,700 sq ft
Arts Exhibition	10,700 sq ft	10,700 sq ft	10,700 sq ft
Arts Sales & Services	10,700 sq ft	10,700 sq ft	10,700 sq ft
Creative Studio	10,700 sq ft	10,700 sq ft	10,700 sq ft
Design Services	10,700 sq ft	10,700 sq ft	10,700 sq ft
Work/Live Creative Studio	0.33 / DU	0.50 / DU	1.0 / DU



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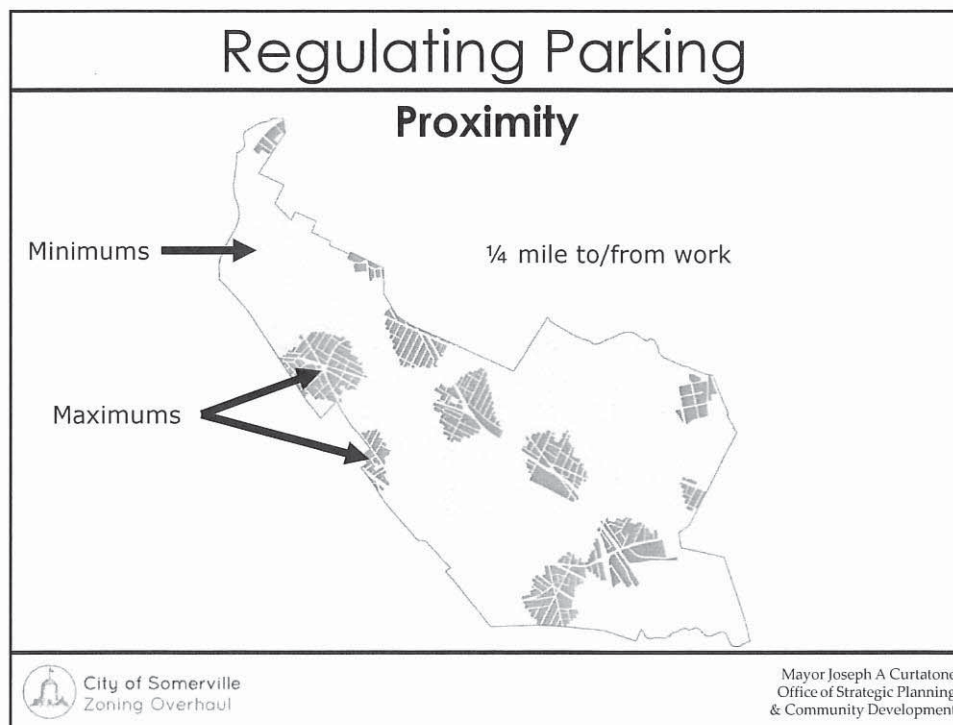
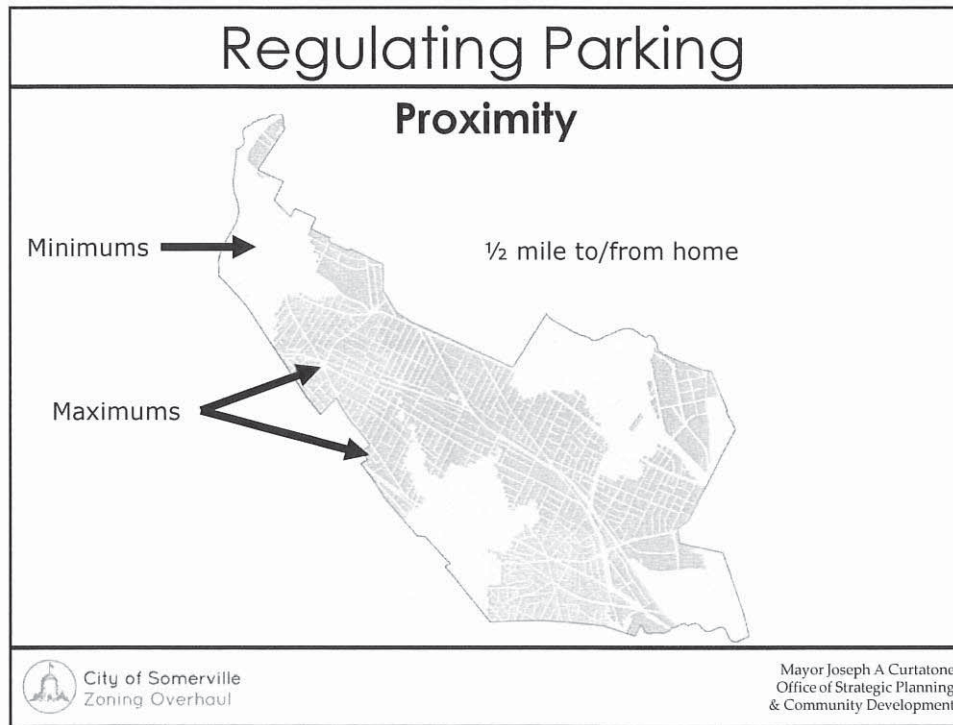
Minimums

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Regulating Parking

Motor Vehicle Parking

- Calibrated to Proximity
- Customized Standards for Different Places and Uses
- Reduction to Minimum Standards for Affordable Housing, Senior Housing, and Housing for the Disabled



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Regulating Parking

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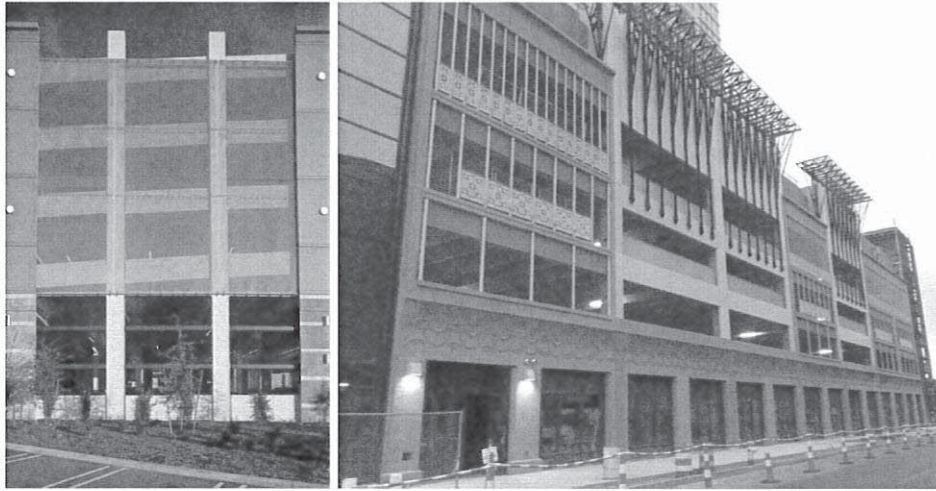
- Calibrated to Proximity
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- Reduction to Minimum Standards for Affordable Housing, Senior Housing, and Housing for the Disabled
- Design Standards for Driveways, Parking Spaces, & Parking Structures



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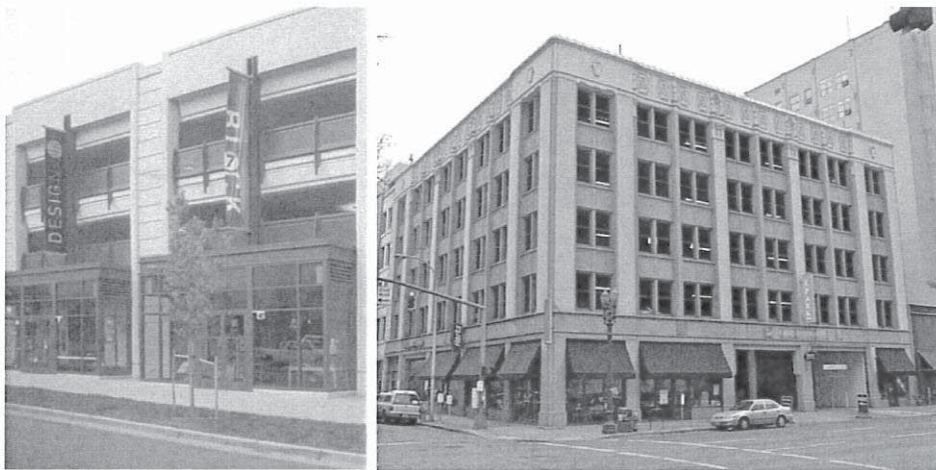
Regulating Parking Parking Structures



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Regulating Parking Parking Structures



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Regulating Parking Parking Structures



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- Design Standards for Driveways, Parking Spaces, & Parking Structures
- Limitations on Curb Cuts



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- Design Standards for Driveways, Parking Spaces, & Parking Structures
- Limitations on Curb Cuts
- Flexible Use of Accessory Parking



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- Design Standards for Driveways, Parking Spaces, & Parking Structures
- Limitations on Curb Cuts
- Flexible Use of Accessory Parking
- Special Permit available to adjust minimum or maximum requirements



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Public Feedback

Motor Vehicle Parking

- Better mechanisms for shared parking should be included in the proposal
- Parking requirements for mixed-use buildings should be lower than the sum of all uses because they will use parking at different times of the day
- All properties should be required to unbundle the price of parking from the price for a dwelling across the city
- Various parking configurations exist between underground and surface parking. Parking definitions should be clarified to address this diversity.
- Electric car charging station should be mandatory when new parking is provided
- A maximum of one car per dwelling unit should not be imposed city-wide
- On street parking policy should be coordinated with the parking standards in the zoning ordinance



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Public Feedback

Motor Vehicle Parking

- Car free housing should be allowed in some areas of the city
- Car free development should not have access to on street parking permits
- A market rate should be charged for on street parking spaces to support objectives of the proposed zoning
- Shared driveways should be encouraged wherever they would result in fewer curb cuts
- Car share parking should be permitted in the neighborhood Residential district
- Implementation of new parking standards should be correlated to the construction and operation of the Green Line Extension...as the city transform from auto-oriented to transit oriented.
- Removal of parking minimums is the most important thing this does



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Public Feedback

Parking Access

- How does access to a new development on a Pedestrian Street work?
- Access should be from a public alley, not a private alley
- Curb cuts should only provide access from side streets and alleys rather than main streets. We want minimal interruptions to people walking due to driveways and parking access.



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Mobility Management

Definition

A program of information and incentives provided by organizations to encourage and help people use transportation modes such as transit, walking, and bicycling instead of private motor vehicles



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A program of information and incentives provided by organizations to encourage and help people use transportation modes such as transit, walking, and bicycling instead of private motor vehicles

Thresholds for Participation

- Non-Residential Development over 20,000 sq. ft.
- Businesses with 20 or more employees and multi-tenant buildings with businesses that combine to have 20 or more employees or students
- Residential development with 20 or more units
- Any project that increases parking
- The establishment of any commercial parking facility



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Mobility Management

Requirements:

- Submit a Mobility Management Plan for Approval as part of the permitting process
- Submit an Annual Performance Review
- Provide Minimum Programs & Services



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Mobility Management

Minimum Programs & Services:

Non-Residential

- Annual Mobility Meeting for Employees/Students
- Posted & Distributed Information
- Guaranteed Ride Home Program
- On-Site Coordinator
- Preferred Parking
- Qualified Transportation Fringe Benefits

Residential

- Posted & Distribute Information
- Unbundled Parking



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Public Feedback

Mobility Management

- The Mobility Management Section should have more predictable, less subjective standards as to what complies and what does not
- Mobility Management needs a benchmark for enforcement and goals to reduce automobile use and parking demand
- This creates disincentives to improve buildings and open businesses
- The thresholds for participation (20,000 sq.ft. and 20 employees) are too low and will unfairly burden small businesses
- None of this should be adopted until after the mobility plan is complete



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