

New York City  
Department of  
Transportation in  
conjunction with the New  
York City Economic  
Development Corporation

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**Lower Manhattan Street  
Management - Placard  
Parking**

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Placard Parking Usage in  
Lower Manhattan

January 2008



Governor David A. Paterson  
Mayor Michael R. Bloomberg  
LMDC Chairman Avi Schick  
LMDC President David Emil

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party

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## Executive Summary

### Study Purpose & Background

The streets of Lower Manhattan are a valuable public asset where different user groups compete for limited road space.

Competition for parking spaces along these streets affects their overall capacity. Further, curbside parking spaces are highly valued. A significant portion of the more than 1,300 block faces of curb frontage is allocated to authorized users – vehicles with Placards displayed in their windshield that permit them to park in designated areas. Funded by the Lower Manhattan Development Corporation (LMDC), the New York City Economic Development Corporation (NYCEDC) with the New York City Department of Transportation (NYCDOT) commissioned this study to:

- Understand how placards are used in Lower Manhattan
- Assess the availability of curb frontage relative to placard activity

The results of this study are intended to help the City accurately consider existing policies in the context of the future of the Lower Manhattan street network.

### Approach & Methodology

Previous efforts to understand the impact of authorized vehicles have relied upon anecdotal information. The objective of this effort is to replace conjecture with empirical evidence to support the conclusions and to allow for informed policy-making.

This study seeks to assess empirically the following performance indicators:

- The share of available parking occupied by authorized vehicles.
- Extent of the use of non-designated areas (e.g., Commercial Vehicle loading zones, meters, etc) by authorized vehicles.
- Areas that are most impacted by authorized parking.
- Quantity of authorized vehicles parking either inappropriately or illegally.

Parking supply is categorized by what is available to different user groups, and the delegated legal permissions that come with various placards and vehicle types. Important figures in this report include:

- Supply by regulation type (e.g. No Standing Except..., No Parking, etc.)
- Supply by user group (e.g. Authorized vehicles, commercial vehicles, etc.)
- Supply by agency type (e.g. Agency Business, Law Enforcement, other)

- Parking Legality (e.g. Illegal at crosswalks vs. Legal at dedicated spaces)

On the demand side, the important statistics developed in the study include:

- Parking by vehicle category (e.g. government, commercial, taxi, private, etc.),
- Parking by permit (placard) type (e.g. Law Enforcement, Agency Business, etc.).
- Parking by agency type (e.g. Agency Business, Law Enforcement, other)
- Parking patterns (including by time of day, duration, location, clustering, and more)

Parking patterns are described in the report. Key patterns of interest include:

- When and where permitted vehicles park illegally in safety-related conditions (e.g. in crosswalks, at fire hydrants, at bus-stops and in driveways).
- How many park outside of their designated parking supply and where is this happening the most?

### Key Findings

Highlights of the study findings are:

- *Curb parking spaces in Lower Manhattan are highly utilized, with 93% of all legal on-street parking spaces in Lower Manhattan occupied during the peak hours (9AM-5PM).*
- *Vehicles with agency and law enforcement permits, when combined with marked official vehicles (e.g., police cruisers, DOT bucket trucks), are a large share of the vehicles parked on-street, comprising 43% of vehicle-hours from 9AM-5PM. Law Enforcement placards are the major component of these vehicles (23% of all vehicle-hours). (A vehicle-hour is one vehicle parking for one hour. Thus, a vehicle that parks for three hours uses three vehicle-hours.)*
- *Nearly 1 in 8 permitted vehicles were illegally parked at a bus stop, crosswalk, fire hydrant, driveway, or were double-parked.*
- *Placards displayed by 9% of all agency and law enforcement permitted vehicles were deemed to be inauthentic or illegitimate in some way.*
- *Vehicles with agency and law enforcement permits use more of the parking supply than is allocated to them, occupying 49% more spaces than are allocated to them during the hours of 9AM-5PM.*
- *Vehicles with permits take space away from other designated uses such as curb space for commercial vehicles – 22% of loading zone spaces were removed from the commercial supply due to permitted vehicles parking in those spaces*
- *Similarly, 18% of metered spaces were removed from the general public's supply due to permitted vehicles parking in those spaces.*

- *Permitted vehicles park for longer periods, on average, than other vehicles, thus consuming disproportionately more space hours. Agency and law enforcement permits park on average for 4.0 hours compared with 2.7 hours for privately owned vehicles.*
- *42% of agency business permits park outside of their dedicated parking supply for more than three hours, which is in violation of their permit.*
- *Over the course of a typical day (9AM-5PM) over 3,300 vehicles in Lower Manhattan display an LE permit, resulting in nearly 14,000 vehicle hours. This represents almost one-quarter of the total observed vehicle-hours in Lower Manhattan.*
- *The peak demand for agency and law enforcement permits is 5,805 and 13,494 vehicle-hours respectively, while their peak supply is only 7,052 and 5,937 space-hours, respectively. Therefore, while agency permits are technically parking within their allocated supply, vehicles with law enforcement permits use 127% more space hours than are designated for them from 9AM-5PM. This may indicate that the space allotment for law enforcement is not sufficient for its needs during those hours.*

The data provides insight into the parking patterns in Lower Manhattan, with specific attention paid to authorized (i.e. placard/permit -using) vehicles. The report concludes that official vehicles (marked or permitted cars) comprise a large share of the vehicles parked on-street (43% of peak hour vehicle-hours), and of these, Law Enforcement placards are the major component of this demand (23% of all vehicle-hours). The data indicates that either the curbside regulations, as currently configured, allocate insufficient space specifically to these official uses, or there are too many placards relative to available curbside supply.

Such excess use (demand) is satisfied by authorized vehicles parking in the commercial vehicle loading and unloading zones and metered and unregulated areas intended for the general public -- as is allowed by their permit. While the share of parked commercial vehicles is small (12% of total vehicle-hours), the use of spaces dedicated to commercial but used by official vehicles makes goods delivery more difficult. This contributes to double parking or the movement of goods down sidewalks from a remote parking spot, both negatively impacting the streets and sidewalks of Lower Manhattan.

Official vehicle parking in public spaces also makes it more difficult for shoppers, employees and residents to find parking in order to access stores, homes, etc.

The peak hour occupancy figure of 93% would suggest that some parking spaces remain available during the course of the day. Effectively, however, during peak hours of the day throughout the study area, very little parking is available. 85% occupancy is typically seen as the cutoff before constant "circling" occurs by vehicles looking for spaces but cannot find any. 93% occupancy for all of Lower Manhattan means that only 7% of the supply is available and it could be located at any one moment anywhere in the entire study area. Additionally, some locales within the study area,

such as the residential portions of eastern Chinatown, do not have a parking problem and thus bring the occupancy rate down while many areas are at or above the 100% threshold.

The lack of supply exacerbates apparent disregard by official vehicles (1 in 8) for basic safety-oriented parking rules including prohibitions against parking in crosswalks, at fire hydrants, bus stops, no stopping areas, and double parking.

Finally, the study found a substantial occurrence of fake permits (9% of all permits displayed) including counterfeits, and pseudo placards (reportedly issued by third parties, including pension funds and civil service unions). This practice takes away spaces from both legitimate, official needs and the general public at large.

On January 3, 2008, after completion of the report, Mayor Michael Bloomberg announced a comprehensive program to reduce the number and misuse of government parking placards. This effort is part of the City's efforts to reduce traffic congestion, decrease the City's carbon footprint, encourage the use of public transportation and reduce the demand for curbside parking in connection with City business. This policy shift will enable the City to address the need to study and analyze the re-allocation of on-street parking in Lower Manhattan.

### Report Organization

This report provides a technical summary of the objectives and methodology for the study, as well as the specifics regarding the parking data collection and analysis for the entire Lower Manhattan study area. Breakdowns are then produced for specific sub-areas in order to observe local patterns. These areas include:

- Chinatown/Civic Center;
- Financial District;
- Greenwich South;
- Battery Park City; and
- Tribeca.

The report first details data collection methods used for this. The methodology includes:

- Defining the study area and sub-areas;
- Setting approaches for collecting, formatting, and analyzing the data;
- Establishing categories of vehicles, permits, and agencies; and
- Understanding and working with the on-street parking regulations in the area.

Overall, the report is organized into sections as follows:

- Section 1 – Introduction
- Section 2 – Approach
- Section 3 – Methodology
- Section 4 – Observations
- Section 5 – Parking Supply
- Section 6 – Parking Demand
- Section 7 – Conclusion
- Appendices – Additional Tables and Information