## 5. PARKING MANAGEMENT ON MAJOR CORRIDORS

#### CHARACTERISTICS OF MAJOR CORRIDORS

- Primary inbound and/or outbound commuter streets.
- High traffic volumes, particularly during peak morning and afternoon commuting hours.
- A mix of land uses including a density of first floor commercial and retail uses.
- Limited or no availability of off-street loading docks.



Double parking by trucks without access to loading zones blocks travel lanes.

Boston is characterized by a number of major arterial streets that radiate from the downtown. These streets link the city's employment centers with residential neighborhoods and outlying suburbs. Efficient traffic flow in these corridors is critical to the daily functioning of the city. At the same time, there is high demand for the use of curbside parking along these corridors, which have a mix of commercial and residential land uses, but little off-street parking. With a thriving economy, the competition for the use of the rightof-way in these corridors has increased significantly over the last decade. The limited width of Boston's arterial streets has to accommodate adequate sidewalks, lanes for moving traffic, curbside parking for loading activity and customer and residential parking. As this demand increases, so does the potential for unsafe and congested streets.

BTD has developed a parking management program to improve the conditions along Boston's major corridors. The goals of this program are to:

- Optimize the sharing of on-street parking by prioritizing its use for different users at different times of the day.
- Adjust on-street parking regulations to reflect the changing character of land use along the corridor.
- Encourage short term parking turnover.
- Enhance enforcement through the strategic deployment of resources.

## **Impacts of Double Parking**

A key contributor to congestion on major corridors is double parking. It can have a detrimental and wide-ranging impact on the operation of the surface street system. A blocked travel lane reduces the capacity of the street to handle traffic. This can be particularly severe when double parking occurs during peak commuting hours. Other negative impacts of double parking include:

- Increased traffic on residential streets when motorists seek to avoid congestion on major corridors.
- Degradation in the quality of bus service.
- Decreased safety for pedestrians when double-parked cars block sight lines at crosswalks.
- Safety concerns for motorists and bicyclists maneuvering around double-parked cars.



Parking meters and enforcement are commonly used in cities and towns throughout the country. The most recent, promising trend is the deployment of new technologies to improve the management and operation of meter parking. "Smart card" and multi-space payment kiosks have gained acceptance in U.S. cities as a means to improve customer satisfaction and financial management of transportation services. Some municipalities like New York City have implemented magnetic swipe card technology with multi-space kiosk payment centers. Magnetic swipe cards are similar to bank ATM cards. Information is read from a magnetic strip on a card at a card reader, such as a kiosk with a keypad to enter information that is used to pay for a parking space.

"Smart cards" provide a more sophisticated payment approach. The card itself contains a computer chip that is capable of performing operations such as storing and transferring information. Smart card technology provides the opportunity for individuals to use one card for multiple purposes. Therefore, municipalities do not need to create magnetic swipe cards, which require a municipality to create and market a card for meter use. "Smart card" technology also allows municipalities to capitalize on the growing use of a computer chip on credit cards.

Unlike magnetic strip cards, "smart cards" can operate in a "touchfree" environment. Information can be exchanged through infrared transmission when the card is held in front of, but not touching, a card reader. This reduces wear and tear on equipment. Smart cards also provide encryption capabilities to provide security for users. Hong Kong and Hull in Canada have implemented "smart card" meter systems. In 1999, BTD participated in a joint Smart Card pilot program with Fleet Bank and Boston University with positive results.

## **Parking Management Regulations**

Boston, like many U.S. cities, relies on the use of meters and onstreet loading zones to manage short-term parking and loading needs for commercial and retail establishments. BTD maintains and operates approximately 7,500 parking meters throughout the city. The majority of parking meters are located in the downtown, Back Bay and on major corridors like Commonwealth Avenue and Brookline Avenue where parking demand is generally high and there is a need to encourage turnover at the curb. On-street parking is a scarce resource and needs to be efficiently allocated.

## **Parking Meters**

Most of Boston's parking meters are in operation between 8:00 a.m. and 6:00 p.m., Monday through Saturday, except when peak-hour parking restrictions are in effect. They have a two-hour time limit with a \$0.25 charge for each 15 minutes of parking. Parking regulations prohibit "meter feeding" (i.e., the illegal practice of motorists who continuously pay meters to stay beyond the posted time limit). However, the rising cost of off-street parking makes "meter feeding" a desirable alternative for some motorists.

## Loading Zones

On-street loading zones in Boston are located on streets with concentrations of retail and commercial activities, typically in major activity centers near buildings that lack off-street loading docks. Many buildings in the downtown, Back Bay and neighborhood centers throughout the city were built prior to existing zoning requirements for off-street loading docks. The delivery of goods to these businesses, which usually include first-floor retail stores and restaurants, often use delivery entrances located in the front of the buildings that are accessed from an on-street loading zone.

BTD regulates the use of loading zones by placing additional restrictions on vehicles with commercial plates that are issued by the Registry of Motor Vehicles. These restrictions, contained in Article 1, Section 1 of the Traffic Rules and Regulations of the City of Boston, are used to regulate designated loading zones. Most loading zones are restricted to BTD-defined commercial vehicles that actively load for 30 minutes. On many downtown streets that have high demand for on-street loading, BTD will only allow commercial vehicles to actively load for one-half hour or less.

### **Types of Commercial Vehicles**

A variety of companies and commercial vehicle types use on street loading zones. The majority of these vehicles can be grouped into one of five major categories:

- package delivery and courier services
- food and beverage services
- building contractors
- moving companies
- utility companies

There are key differences among the size of the vehicles, the amount of time that these vehicles are at the curb and the number of companies. Other types of commercial vehicles also use on-street loading zones including armored cars, media vans, newspaper and magazine deliveries, office supply deliveries and storage companies.

Table 11 describes the type of commercial vehicles that use on-street loading zones. BTD updated the regulations governing commercial vehicles in August 2000. The name of the business entity must be displayed in letters or numbers a minimum of three (3") inches in height and the full business address and telephone number must be displayed in letters or numbers a minimum of two (2") inches in height.

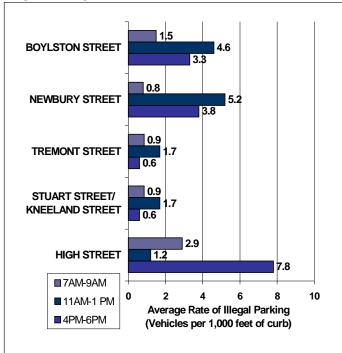
### **Table 11 – Description of Commercial Vehicles**



CATEGORY	GENERAL DESCRIPTION	DELIVERY NEEDS/ISSUES				
Package Delivery	A small number of companies account	Most deliveries completed in 1/2 hour.				
and Courier Services	for most of the vehicles. Panel trucks and autos.	Some vehicles park once and make multiple deliveries (more than $1/2$ hour).				
		Services are driven by external schedule and service commitments.				
		Least sensitive of commercial vehicles to the level of fines.				
Food and Beverage	A small number of companies account	Most deliveries completed in 1/2 hour.				
Services	for most of the vehicles.	Larger deliveries can take significantly longer.				
	Large single-unit trucks and semis (tractor-trailers).	Deliveries are schedule driven, but more flexible than package delivery and courier services.				
		Availability of personnel at the delivery point to accept deliveries.				
Building Contractors	A large number of small companies that	Building contractors are dominant on some downtown streets.				
	include plumbers, electricians, HVAC and other contractors.	Building contractors park at the curb for more than 1/2 hour, but sometimes 4 or more hours.				
	Vans or panel trucks.	Contractors have equipment in truck that is needed near site.				
Moving Companies	A small number of companies account for most of the vehicles.	Delivery time can take well over an hour depending upon the size of the move.				
	Large, single-unit trucks and semis (tractor-trailers).	Business moves usually at night or on weekends, while residential moves occur during the day.				
Utility Companies	A small number of companies account for most of the vehicles.	Often parked to make repairs in the street or in buildings, similar to building contractors.				
	Large single-unit trucks and semis (tractor-trailers).	Vehicles park at the curb for more than one hour, sometimes all day.				
		Contractors have equipment in truck that is needed near site.				

### Figure 19

**Illegal Parking in Travel Lanes** 



The highest occurrence of illegal parking in travel lanes typically occurred during midday hours. (Source: BTD 2000 Survey)

### LOADING ZONES IN OTHER U.S. CITIES

BTD surveyed the following nine U.S cities to identify current practices for loading zone management: Atlanta, Baltimore, Chicago, Cleveland, Houston, Los Angeles, New York City, San Francisco and Seattle. The surveys identified a range of on-street loading management approaches. The weekday bans of trucks longer than 33-feet from sections of Manhattan in New York City and the Chicago Loop were the most stringent restrictions among the cities that were surveyed, noting that each city provides opportunities for exemptions. New York provides special permits, while Chicago allows deliveries to private loading docks.

Stringent restrictions such as complete bans on deliveries during weekday daylight hours were considered in Chicago and Los Angeles, but were rejected in response to concerns from the business community. San Francisco uses two types of loading zones, one for all types of commercial vehicles and a second, more restrictive loading zone that allows only delivery trucks loading or unloading goods. These loading zones exclude station wagons, passenger vans, or other "non-truck" vehicles with commercial plates. San Francisco aggressively tows and tickets loading zone violators and is considering a third type of loading zone for heavy trucks in excess of 10,000 pounds (e.g., beer trucks or furniture trucks).

## **Corridor Improvement Program**

As part of the *Access Boston* planning process, BTD selected and evaluated five corridors: Boylston Street, Newbury Street, Tremont Street, Stuart/ Kneeland Streets and High Street. The objective of the Corridor Improvement Program was to develop and implement an effective regulatory approach along the five corridors for loading and unloading. The following approach was developed to increase loading availability during the morning hours when peak loading demands occur and to provide additional parking opportunities in the midday, afternoon and evening hours along the five corridors. This program can be expanded to other corridors, recognizing that local conditions will require fine-tuning to accommodate specific needs.

- Provide additional loading zones from 8:00 to 11:00 a.m. through the elimination of parking on one side of the street.
- Provide limited loading zones after 11:00 a.m. and use the available space for short-term metered parking.
- Regulate all previously unregulated curb.
- Extend meter hours of operation from 6:00 to 8:00 p.m.
- Prohibit loading or curbside use during peak periods.

Figure 19 summarizes data collected in May 2000. The data and field observations indicated that each corridor had high incidences of double parking and illegal curb parking and that the rate of illegal parking in travel lanes varies by time of day and by corridor. The data also provided a basis for future evaluations of the program's effectiveness. The programs for each street responded to specific issues pertaining to the unique characteristics of each corridor.

Boylston Street is a wide street with mixed land uses. Newbury Street provides local circulation with significant amounts of onstreet parking and loading activity. Tremont Street is outside the downtown, with a higher mix of residential uses. The Stuart/ Kneeland Street corridor has high peak hour traffic demands. High Street mostly provides local circulation within the Financial District. The development of the regulations involved gathering data to understand the functioning of the street and a community outreach program to fine-tune the approach and build support among residents, merchants and delivery companies.

		ILLEGALLY PAR	PERCENT OF COMMERCIAL			
	7-9 AM	11 АМ-1 РМ	4-6 рм	TOTAL	VEHICLES PARKED ON STREET <sup>2</sup>	
Boylston Street (west)	55%	62%	34%	51%	20%	
Newbury Street (east)	31%	49%	42%	41%	6%	
Tremont Street (north)	43%	45%	22%	39%	1%	
Tremont Street (south)	41%	44%	13%	34%	1%	
Stuart/Kneeland (east)	50%	78%	28%	42%	9%	
Stuart/Kneeland (west)	31%	56%	9%	24%	5%	
High Street	64%	28%	25%	38%	27%	
TOTAL	50%	52%	29%	42%	11%	

### Table 12 – Illegal Parking by Trucks

Source: BTD 2000 Survey

Note: 1. Percent of all illegally parked vehicles as measured during Travel Time Runs.

2. Percent of all vehicles parked on street as measured during Parking Turnover Study.

### Double Parking by Trucks

Most double parking or illegal curb parking by trucks on the corridors occurred during the morning or midday hours. Difficulty accessing loading zones contributed to double parking by trucks at several locations. Other factors include high demand, illegal parking and lack of nearby loading zones. Some commercial vehicles doubleparked when loading zones were a reasonable alternative. Given these trends, these corridors would benefit from improved loading zone management.

### Meter Use

BTD conducted a detailed study of parking turnover at over 400 meters along the five corridors. The results in Table 12 illustrate that the lowest average stay occurred on Kneeland Street, the only corridor with an average stay that was less than the meter time limit. Kneeland Street had the highest percentage of vehicles parked for two hours or less, which explains the low average parking duration

at meters on this corridor, and the lowest average occurrence of illegal parking. The high level of long-term parking accounts for the higher average parking duration of the other corridors, particularly on Boylston Street and Newbury Street, which also had the highest average occurrence of illegal parking.

## Loading Zone Use

Data was collected on the five corridors to estimate the amount of illegal parking by trucks and other commercial vehicles on these streets. Table 13 indicates that trucks represent a disproportionate amount of vehicles that double-parked or parked in a curb travellane in the five corridors. Commercial vehicles accounted for approximately 10% of the total vehicles parked in the corridors. However, trucks accounted for approximately 40% of the total vehicles that were double-parked or parked in a travel lane. High Street had the highest percentage of commercial vehicle parking during the parking turnover studies, while Tremont Street had the lowest percentage.

					PARKING DURATION			
	TIME PERIOD OF STUDY	TIME LIMIT ON METER	METERED SPACES	Average Stay <sup>2</sup>	2 HOURS OR LESS	3 to 4 Hours	More than 4 Hours	
Boylston Street	8 AM to 5 PM	2 hours	203	2.4 hours	72%	14%	14%	
Newbury Street	11 AM to 5 PM	2 hours	113	2.4 hours	74%	15%	11%	
Tremont Street	8 AM to 5 PM	2 hours	25	3.0 hours	53%	28%	19%	
Stuart/Kneeland <sup>3</sup>	11 AM to 5 PM	2 hours	57	1.7 hours	86%	9%	5%	
High Street <sup>3</sup>	8 AM to 5 PM	2 hours	41	2.6 hours	68%	15%	12%	

Source: BTD 2000 Survey

Note:

1. Includes only parking meters. Does not include double parking in front of meters.

2. Number of vehicles-hours parked divided by the number of hours of the study period.

3. Parking is prohibited from 7:00 to 9:30 AM and 4:00 to 6:00 PM on a section on Stuart/Kneeland and High Streets.

### **Corridor Improvement Program: Boylston Street**

In July 2001, the Boston Transportation Department implemented curbside regulation changes on Boylston Street as part of the Corridor Improvement Program. The goal of the program is to encourage trucks to make deliveries in the morning by "guaranteeing" carriers the ability to deliver on the curb before 11 a.m. Afterwards, curb side delivery opportunities would be limited. This would decrease double parking by trucks and ease congestion on Boylston Street. Specifically the changes included:

- Increasing curbside loading threefold from 8 to 11 a.m.
- Reducing loading curb space by almost 25% after 11 a.m. and adding metered parking (when parking demand peaks).
- Extending meter hours from 6 to 8 p.m.
- In order to accommodate parcel companies and time sensitive deliveries, some loading remains after 11 a.m.

These changes were instituted after a public process that involved neighborhood, merchant and institutional groups in the Back Bay, as well as commercial carriers such as UPS, FedEx and Pepsi-Cola.

#### Needs Assessment

To develop the new regulations, BTD first investigated traffic conditions on Boylston Street using a variety of measures and found that double parking was the principal contributor to traffic congestion. Other conclusions determined by the investigation included:

- Double parking was at its peak during the midday (11 a.m. to 1 p.m.).
- Double parking by trucks on Boylston Street was most observed closer to Arlington Street.
- Travel speed is slowest in the p.m. peak period because of greater volumes, but double parking (though less than in the midday) still has a significant effect.

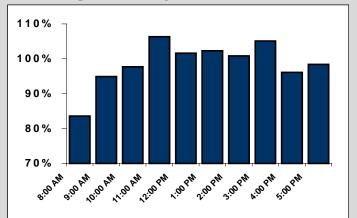
BTD examined curbside use in more detail to see who was double parking and why. Evidence showed that trucks represent a substantial and disproportionate share of double parked vehicles:

- Trucks were only 20% of all vehicles parked on Boylston Street, but 51% of all double-parked vehicles.
- 62% of all double-parked vehicles between 11 a.m. 1 p.m. were trucks.

Though some trucks double park despite curbside availability and BTD's ongoing ticketing efforts, many are compelled to because they have no alternative. Further analysis of curbside use showed that, though most vehicles park for less than two hours (72%), remarkably, more than 25% of all vehicles park for more than three hours. These longer-term parkers occupy valuable curb space, limiting the ability of the street to function properly. In addition, as illustrated in Figure 20, surveys of parking occupancy show that from 11 a.m. to 4 p.m. the street is more than 100% full (reflecting illegal parking).

#### Figure 20

Percent of Parking Spaces Used on Boylston Street before the Corridor Improvement Program



Parking occupancy exceeds 100% in the middle of the day, an indication of double parking. (Source: BTD 2000 Survey)



Double parking before Corridor Improvement Program.



Access to curbside loading zones on Boylston Street greatly improved after implementation of new regulations.

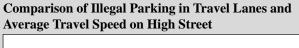
## **Corridor Improvement Program:** New Peak Hour Regulations on High Street

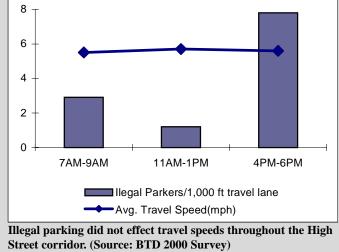
High Street is a major one-way street running southwest from the Central Artery to Summer Street, through the Financial District. A highway off-ramp formerly provided direct access onto High Street. Despite its recent removal, on street activity has not waned. A combination of new skyscrapers, old office buildings, and ground level retail contribute to this activity and the intense use of the curb. BTD implemented curbside regulation changes in January 2001, including:

- Removing the prohibition on peak hour parking except between Pearl and Congress Street.
- Adding priority loading (7 to 11 a.m.) to one side of the street.
- Changing loading times and locations to minimize the impact of loading on traffic flow.
- Extending meter hours from 6 to 8 p.m.

BTD's analysis of High Street showed a very high rate of illegal parking in the travel lane, especially during the peak hours, meaning that the parking restrictions in effect during those times were largely ignored. However, as illustrated in Figure 21, this illegal parking activity had practically no effect on travel speed through the corridor. Overall, BTD determined that the peak hour restriction could be eliminated, except in especially congested locations. This space was converted to "priority loading" during the morning, and becomes metered in the afternoon when higher demand exists. Land use on High Street is changing as the Financial District, formerly moribund after 5 p.m., has seen a growth in restaurants and nightlife, with a concomitant demand for nighttime parking. Meter hours were extended from 6 to 8 p.m. as well.









BTD color-codes the tops of its parking meters to identify curbs that have multi-purpose use and regulations. The specific regulations are posted on signs on the meters and nearby sign poles.

- **"Red Hat" meters** are used to identify locations with peak hour No Stopping regulations. The parking lanes on these curbs are used as travel lanes during the peak commuting hours.
- **"Yellow Hat" meters** were recently installed to identify meters that are also used as loading zones, typically from 8:00 to 11:00 a.m.



### **Corridor Improvement Program: New Meters and Shared Loading Zones on Tremont Street**

The area around Tremont Street is part of the South End Historic District with Victorian era townhouses and commercial structures. These buildings lack the off-street parking and loading facilities to support their burgeoning use, forcing these necessary activities onto Tremont Street itself. Meanwhile, the South End stretch of Tremont Street, running north-south from the MassPike to Massachusetts Avenue, is a heavily traveled commuter artery. Tremont Street itself is at the center of the revitalization of the South End, and has seen a dramatic change in character over the last few years. Condominium conversions, new storefronts, restaurants and a constant buzz of activity define the Tremont Street of today. The friction between these defining characteristics of Tremont Street plays out on the curbsides and in the travel lanes of this corridor. BTD found that:

- The majority of the curbside is completely unregulated, and thus shows virtually no turnover.
- Cars represent two-thirds of all double-parked vehicles.
- Trucks represent only 1% of all vehicles parked.
- Double parking occurs mostly at commercial nodes.

Parking is difficult in the South End in general and on Tremont Street in particular. As one of the few unregulated areas in the South End, Tremont Street has become a haven for commuters, area employees, and residents without RPP stickers, who tie up this needed curbspace. BTD has developed a coordinated plan for curbside use on Tremont Street that would:

- Install meters on blocks near or with commercial activity.
- Expand the South End Resident Permit Parking (RPP) program to some residential blocks of Tremont Street.
- Extend all meters to end at 8 p.m. and leave most metered parking unrestricted after 8 p.m.
- Add shared loading at key intersections along the corridor.

BTD is currently working with business and resident groups on Tremont Street to review the proposed plan. While all users agree on the approach to regulating Tremont Street, the plan is being refined on a block by block basis for Spring 2002 implementation.



Condominium conversions, new storefronts, restaurants and a constant buzz of activity define the Tremont Street of today.



The opportunities facing Tremont Street are many, as are the causes of congestion.

## Table 14 – Parking on Tremont Street (Berkeley St. to W. Newton St.)<sup>1</sup>

		AVERAGE	PERCENT OF VEHICLES PARKED FOR:			PERCENT OF	PERCENT OF SPACES USED By VEHICLES PARKED FOR:		
	SPACES	STAY BY VEHICLE <sup>2</sup>	2 HOURS OR LESS	3 то 4 Hours	MORE THAN 4 HOURS	EMPTY SPACES	2 HOURS OR LESS	3 то 4 Hours	MORE THAN 4 HOURS
Meters (2 hour limit)	25	3.0 hours	53%	28%	19%	6%	25%	29%	40%
Unregulated (No time limit)	97	6.4 hours	28%	9%	63%	1%	6%	5%	88%
TOTAL	122	5.2 hours	37%	15%	48%	2%	10%	10%	78%

Source: BTD 2000 Survey

Note: 1. Study hours were 8 AM to 5 PM.

2. Average length of time that a vehicle is parked at a meter.

## **Action Plan**

## Parking Management on Major Corridors

Expand Corridor Improvement Program

BTD will evaluate additional corridors for the application of Corridor Improvement Program techniques. Candidate corridors include: Washington Street, Massachusetts Avenue, Brookline Avenue, Commonwealth Avenue, Huntington Avenue, Dorchester Avenue, Blue Hill Avenue, Bennington Street and Chelsea Street.

#### Increase Enforcement of Meter Parking

Enforcement is a key element to the successful management of the curb. In areas of high demand, enforcement ensures that turnover is maximized and the curb is used in the most efficient fashion. BTD will enhance enforcement by:

- Increasing enforcement of the meter time limit and issuing multiple tickets for the same violation of the time limit as a means to increase compliance with posted regulations. Although BTD raised parking fines in 1999, the current fine for illegal parking is less than the all-day parking rate at nearby garages and parking lots in many downtown locations, and warrants the use of multiple ticket issuance to serve as a deterrent.
- Introducing a new fine structure that includes fines for bus parking violations and doubling fines for peak hour violations.

### Extend Multi-Ticketing Approach to Loading Zones

BTD will revise the current parking regulations to include loading zones as an eligible violation for the issuance of multiple parking tickets. Enforcement is a key element to the successful management of loading zones. The regulation governing multiple ticket issuance will provide a major deterrent for illegal parking in loading zones, particularly in downtown areas where the current fine for illegal parking is less than the all-day parking rate at nearby garages and parking lots.

### Extend Meter Hours to 8:00 P.M.

BTD has extended the hours of meter operation from 6:00 to 8:00 p.m. on Boylston Street to encourage turnover in the late afternoon and early evening. BTD will monitor this change and recommend potential applications on other, similar corridors with restaurant, shopping and entertainment venues.

#### Add Parking Meters and Loading Zones

BTD will investigate major corridors to identify the need to add new parking meters or loading zones. For example BTD has added meters and loading zones to sections of High Street that previously had "No Stopping" regulations. The following will be considered to identify corridors requiring new meters and loading zones:

- Demonstrated short-term parking and loading demand.
- Downtown streets with two-hour parking limits but no parking meters.
- Corridors where peak-hour restrictions can be removed without causing congestion.
- Side streets that connect to major corridors with No Stopping curb regulations during peak commuting hours.

#### **Investigate Deployment of Smart Meters**

BTD will continue to investigate the deployment of smart card meter technology. Potential applications for consideration include:

- Integration with other electronic payment systems such as the MBTA pass program or Fast Lane.
- Use of technology that consolidates meters into centralized payment "kiosks."
- Ability of motorists to pay in advance for meter time (e.g., park legally one hour before the meter turns on and pay for parking until 9:00 a.m.).
- Introduction of scaled rate structures to discourage long-term parking and increase of rates in areas with higher demand.

BTD should explore the potential use of multi-space meters with smartcard applications as a means to charge for use of loading zones by commercial vehicles. Payment systems are also available, which would allow "cash-free" payment by drivers. This would eliminate the need for drivers to carry cash, reducing or possibly eliminating a barrier to implementation. Multi-space meters would be distinct from regular parking meters, which should reduce the likelihood of passenger vehicles that mistakenly park in loading zones. This approach would encourage turnover at loading zones and reduce illegal parking by other vehicles.

# Prioritize Curb Use for Loading between 8:00 A.M. and 11:00 A.M. in High Demand Areas

This approach provides the ability to significantly increase loading opportunities. The reduction in metered spaces during the morning occurs when short-term parking demand is at a relative low point during the day. In addition, the elimination of spaces should discourage all-day parkers ("meter feeders") that typically arrive before 11:00 a.m. and remain throughout the day. Future candidate locations include streets with high loading demand generated by restaurants and other retail uses that could be scheduled in the morning.

#### Investigate Truck-Only Loading Zones

BTD will investigate the use of a regulation that will allow only delivery vehicles access to designated loading zones. This regulation would be similar to the San Francisco regulation, which restricts certain loading zones to allow only delivery trucks loading or unloading goods. This type of regulation could be used in areas of high demand by delivery vehicles. Potential applications include areas where it is undesirable to eliminate other curb uses such as metered parking to expand the size of the loading zone.

### Strengthen Loading Dock Requirements in Article 80 Development Review Process

BTD will work with the BRA at the earliest development review stage to ensure that loading docks meet the needs of the building and minimize impacts on adjacent streets. It is BTD's policy to require new buildings to have loading docks that can accommodate the demands of the building and minimize impacts on adjacent streets (e.g., provide capability for drive-in/drive-out operations). This approach benefits on-street operations by reducing demand for onstreet spaces that would be generated by new development. BTD will describe this policy in its revised development review guidelines.

#### Increase Towing Capability

BTD will investigate the feasibility of obtaining and deploying a tow truck that can tow larger trucks. The current BTD fleet does not have this capability. BTD will also assess its fleet capabilities and staffing levels to determine if additional resources are required to implement a more extensive enforcement program as parking regulations are revised along major corridors.