## Manhattan Congestion Pricing Program

### Initiative Description:

As part of PlaNYC's approach to reducing traffic congestion and promoting the use of alternative modes of transportation, the city has proposed a pilot cordon pricing program, which will have a significant impact of reducing through traffic in Downtown Brooklyn.

#### **Blueprint Issues Addressed:**

- ✓ Surface Transportation
- ✓ Recurring Traffic Congestion
- ✓ Preference for East River Bridges
- ✓Through vs. Local Traffic
- ✓ One-way Toll at the Verrazano

### **Details:**

The proposed pilot cordon pricing program will encompass the zone of Manhattan south of 86<sup>th</sup> Street. Cars entering this zone would be charged a a total of \$8 Monday to Friday, 6:00 am to 6:00 pm, with credit given for tolls already paid. This will have the impact of equalizing the cost of crossing into Manhattan, and therefore take away the financial incentive for drivers to access the free East River Bridges via downtown Brooklyn instead of tolled crossings such as the Brooklyn Battery Tunnel. Estimates of traffic reductions in downtown Brooklyn from a pricing program have been as high as 29%

### Implementation :

In response to the Mayor's Congestion Pricing Proposal, the New York State Legislature has formed a commission to recommend a congestion reduction plan. The plan must be approved by the Legislature and the City Council by March 2008, for implementation in spring 2009 as a three-year pilot project.



Manhattan's Proposed Congestion Pricing Zone

### **Blueprint Goals Met**

- Travel demand growth
- Managing congestion
- 🚺 "Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

### PlaNYC Initiative

# Subway-Sidewalk Interface Project

### Initiative Description:

The Subway-Sidewalk interface project aims to improve the connections between the subway and street levels by improving safety, design and bus and pedestrian movements.

### **Blueprint Issues Addressed:**

- ✓ Competition for Curbside Space
- ✓ High-occupancy Vehicles and Buses
- ✓ Rail Transit
- ✓ Pedestrians

#### **Details:**

The Subway-Sidewalk Interface project includes two key stations in the Blueprint study area: Jay Street-Borough Hall (A/C/F lines) and 7<sup>th</sup> Avenue (B,Q lines). At Jay Street, a major recommendation is the installation of a "transit neckdown" at the northeast corners of Jav Street/Fulton Mall and Jay Street/Willoughby Street, providing much needed additional pedestrian space adjacent to subway entrances. A further possibility is the extension of these neckdowns to create "bus bulbs", allowing buses to pick up and drop off passengers without pulling into and out of the stream of traffic. At the 7<sup>th</sup> Avenue station, signal enhancements to improve pedestrian safety will be explored. Both stations will benefit from better location of street furniture. improved lighting and wayfinding signs and maps and streetscape designs.

### Implementation:

Currently, the New York City Department of Transportation is working with the New York City Economic Development Corporation and New York City Transit to construct improvement measures around Jay Street Borough Hall (A, C, F) station and the 7<sup>th</sup> Avenue Q Station. The initiative is expected to be completed by summer 2009.



Potential transit neckdown or bus bulb location at the Jay Street and Fulton Street intersection adjacent to Jay-Street Borough Hall station.

### **Blueprint Goals Met**

- Travel demand growth
- Managing congestion
- Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

### PlaNYC Initiative

## **Bus Hot Spots**

#### Initiative Description:

"Bus Hot Spot" corridors are being identified city-wide as areas where buses are routinely caught in traffic, reducing speed and reliability. As part of PlaNYC, improvements are proposed to aid in bus operations, as well as improve pedestrian operations and safety. The corridors of Jay Street, Flatbush Avenue and Myrtle Avenue are three such areas in the Blueprint study area.

#### Blueprint Issues Addressed:

- ✓ Competition for Curbside Space
- ✓ High-occupancy Vehicles and Buses
- ✓ Pedestrians

#### **Details:**

#### Jay Street (from Tillary to Livingston)

Options being considered include bus-only lanes and bus bulbs. There is also a need for increased enforcement of placard parking in this corridor.

#### Flatbush Avenue (from Grand Army Plaza to Livingston)

One option to improve bus operations in this corridor would be to convert the curbside lanes between Livingston Street and Plaza Street from peak period/peak direction travel lanes to peak bus-only lanes, An existing bus only approach at Grand Army Plaza affords an opportunity to test the concept of a bus queue jump through priority signalization.

#### Myrtle Avenue (from Flatbush to Wyckoff)

A bus stop rationalization study could identify areas where eliminating and/or relocating stops could help speed travel on the B54 route, which uses this corridor.

#### Implementation:

New York City Department of Transportation, with MTA New York City Transit is assessing the feasibility of introducing these bus hot spot improvements by fall 2008.



Potential cross-section of Jay Street from Tillary Street to Livingston Street showing a bus-only curbside lane in the Southbound direction (at the left) and a bus only travel lane in the Northbound direction with a typical bus bulb (at the right).

### **Blueprint Goals Met**

Travel demand growth
 Managing congestion
 "Through" vs. "To/From/In" travel
 Physical/fiscal constraints
 Street management/safety
 Institutional challenges

### PlaNYC Initiative

### Pedestrian Plazas

### Initiative Description:

The Willoughby Street Pedestrian Plaza and the Pearl Street Pedestrian Plaza have recently been implemented as test installations with moveable planters and furniture. A third pedestrian plaza will be constructed in Albee Square at Fulton Mall. Finally, NYCDOT Bridges is reconstructing a plaza at the base of the Manhattan Bridge.

#### Blueprint Issues Addressed: ✓ Pedestrians

#### **Details:**

PlaNYC commits to creating a new pedestrian plaza in every community district in the city. The purpose is to reclaim underutilized roadway space for pedestrians and to improve the quality of the public sphere. The success of Willoughby Plaza in the heart of Downtown Brooklyn, now used by pedestrians to walk, dine and lounge, led to the installation of another test plaza in DUMBO at the intersection of Pearl Street and Water Street. Fulton Mall's streetscape is being redesigned and reconstructed to provide more room for pedestrians, and a small portion of DeKalb Avenue at Albee Square will be closed to allow for the creation of a plaza that will provide a public space with amenities on this extremely busy shopping corridor

### Implementation:

The Willoughby, Pearl Street and Fulton Mall/Albee Square Plazas will be reconstructed in permanent materials by fall 2009. Construction on the Fulton Mall/Albee Square Plaza project is projected to begin in 2008.



Willoughby Street Pedestrian Plaza

### **Blueprint Goals Met**

- **Travel demand growth**
- Managing congestion
- "Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

### PlaNYC Initiative

## **Downtown Brooklyn Bicycle Network**

### Initiative Description:

Bicycle facilities in the Blueprint project area have been significantly expanded in the past few years. Installing several additional connecting segments in and around Downtown Brooklyn would make the already mature network in this area complete.

#### **Blueprint Issues Addressed:**

✓ Bicycles
 ✓ Waterfront Connections

### **Details:**

The Blueprint recommends installing Class 1 (protected), Class 2 (marked) and Class 3 (recommended for use) bicycle facilities in Downtown Brooklyn. Routes would be installed on road segments in the following areas to provide connectivity. Potential roadways are shown in parenthesis:

•Downtown Brooklyn Core (Schermerhorn Street, Lafayette Avenue)

•Brooklyn Waterfront (Old Fulton Street, Henry Street, Clark Street, Cadman Plaza West and East, Washington Street, York Street),

•South of Atlantic Avenue (Pacific Street, Court Street, Congress Street, Union Street, Sackett Street, 3<sup>rd</sup> Avenue, Lincoln Place).

### Implementation:

The Blueprint recommendations can be installed as part of NYCDOT's program to complete the City's bicycle network by 2020. While there is a need to address areas of the city currently lacking in bicycle facilities, implementing a relatively small number of lane miles in and around Downtown Brooklyn can be achieved by the spring of 2010.



Class 2 Bicycle Lane on Navy Street

### **Blueprint Goals Met**

Travel demand growth
Managing congestion
"Through" vs. "To/From/In" travel
Physical/fiscal constraints
Street management/safety
Institutional challenges

### PlaNYC Initiative

## Expanded Use of Muni-meters

#### Initiative Description:

Muni-meters are recommended for installation on priority corridors in Downtown Brooklyn. The use of muni-meters to flexibly regulate commercial zones should also be considered.

**Blueprint Issues Addressed:** 

- ✓ Parking and Curbside Issues
- ✓ Parking Supply and Demand
- Competition for Curbside Space

### **Details:**

Muni-meters allow for greater flexibility in the use of curbside space, increasing parking spaces by up to 15%, removing parking meters from the sidewalk and allowing for variable pricing programs that may affect the types and duration of usage. However, misuse of existing parking capacity (such as illegal placard usage) must be addressed before muni-meters can be effectively used. The Blueprint has identified several key corridors that would benefit from Muni-meter installation.

#### Implementation:

Munimeters were installed on Atlantic Avenue in 2006. Potential future corridor installations and commercial rate introductions on at least two of the four corridors, Smith Street, Flatbush Avenue, Livingston Street and Montague Street, are estimated to be completed by fall 2009. Installations on Court Street, Willoughby Street and Tillary Street could be coordinated with scheduled reconstruction projects for those roadways.



A New York City Muni-meter

### **Blueprint Goals Met**

- **Travel demand growth**
- Managing congestion
- "Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

### PlaNYC Initiative

# HOV Lane on Manhattan Bridge

### Initiative Description:

An HOV2+ lane has been implemented on weekday mornings on the Manhattan Bridge to give preference to buses and vehicles with two or more passengers. The reserved lane will help reduce the number of vehicles on the Manhattan Bridge, or increase the number of people who may use the Manhattan Bridge.

#### Blueprint Issues Addressed:

- ✓ Recurring Traffic Congestion
- Limited Major Roadways
- ✓ Surface Transportation
- High-occupancy vehicles and buses

#### **Details:**

The left-most lane of the upper roadway (which operates Manhattan-bound at all times) is now reserved for buses and vehicles with two or more occupants. Monday to Friday, 6:00 AM to 10:00 PM. All other Manhattan Bridge operations will remain the same (upper roadway remains Brooklyn-bound at all times, lower roadway switches from Manhattan-bound in the AM to Brooklyn-bound in the PM). The HOV2+ lane should encourage carpooling, thereby either decreasing the total number of vehicles, or, if the total number of vehicles remains the same, increasing the people moving capacity of the Manhattan Bridge. The accompanying figure shows the access routes to the HOV2+ lane.

#### Implementation:

HOV2+ lane operation on the Manhattan Bridge went into effect in October 2007 when the lower level of the bridge reopened.



Access routes from street network and BQE to HOV Lane on the Manhattan Bridge (left lane of upper roadway), which is in effect Monday to Friday 6:00 AM to 10:00 Am for vehicles with 2 or more passengers.

### **Blueprint Goals Met**

Travel demand growth
Managing congestion
"Through" vs. "To/From/In" travel
Physical/fiscal constraints
Street management/safety
Institutional challenges

### PlaNYC Initiative

# Real-time Bus Arrival Information

### Initiative Description:

Real-time bus arrival information in Downtown Brooklyn could significantly improve service to bus riders and make the bus a more attractive mode of transportation. MTA New York City Transit is in the process of implementing real-time bus arrival information in selected depots, with tentative plans to expand the service city-wide.

### Blueprint Issues Addressed:

✓ High-occupancy vehicles and buses

### **Details:**

MTA New York City Transit's plan to provide real-time bus arrival information includes the following features: automatic vehicle location, automatic passenger counters, customer information signs displaying "Next Bus" information, on-line "Next Bus" information and "Next Stop" audio and visual announcements on-board the bus. This information significantly improves service for bus passengers, increasing reliability and decreasing uncertainty, making the bus a more attractive form of transportation.

### Implementation:

MTA NYCT has begun operations at the 126<sup>th</sup> Street Depot in Manhattan, and will soon expand to 3 or 4 more depots. Eventually, the plan is to install a total of 360 customer information signs at bus stops throughout the city.



Newly Installed Passenger Information Sign at Bus Shelter in Manhattan

### **Blueprint Goals Met**

Travel demand growth
 Managing congestion
 "Through" vs. "To/From/In" travel
 Physical/fiscal constraints
 Street management/safety
 Institutional challenges

# Strategies to Reduce Agency Permit Parking

### Initiative Description:

The abuse of agency issued placards in Downtown Brooklyn reduces the available curbside parking capacity and other curbside activities. There is a need to develop realistic strategies that can reduce this problem In Downtown Brooklyn and other areas in New York City.

### **Blueprint Issues Addressed:**

- ✓ Parking and Curbside Issues
- ✓ Parking Supply vs. Demand
- ✓ Excessive Use of Windshield Placards
- ✓ Competition for Curbside Space
- ✓Enforcement
- ✓Institutional

### **Details:**

Although the city sets aside curbside space for temporary parking of vehicles used for legitimate city business, many individuals abuse this privilege by parking personal vehicles, using invalid permits, or otherwise not abiding by the authorized parking rules. This use of limited curb space creates congestion by compelling others with legitimate curbside access needs to stop in travel lanes.

The Lower Manhattan Authorized Parking Study will collect data on curbside usage and develop interagency strategies to address it. These strategies should apply to Downtown Brooklyn, which faces similar conditions.

### Implementation:

NYCDOT's Lower Manhattan Authorized Parking Study is completing its data collection phase and will present strategies and recommendations that may be applicable to Downtown Brooklyn by fall 2008.



### **Blueprint Goals Met**

Travel demand growth
Managing congestion
"Through" vs. "To/From/In" travel
🧵 Physical/fiscal constraints
🧎 Street management/safety
🕺 Institutional challenges

## Improvements at Major Intersections

### Initiative Description:

Several critical intersections in Downtown Brooklyn present challenges for vehicle, bicycle and pedestrian operations and safety. Modifications to these intersections will lead to localized benefits and system-wide improvements.

#### **Blueprint Issues Addressed:**

- ✓ Surface Transportation
   ✓ Recurring Traffic Congestion
   ✓ Limited Major Roadways
   ✓ Persistent Spillover
   ✓ Pedestrians
- ✓ Bicycles

### Details:

<u>Grand Army Plaza</u> –3 new islands and 5 new crosswalks were implemented at the southern end of Grand Army Plaza in November 07. Similar improvements to the north side will be completed by fall 2008.

Flatbush Avenue / Atlantic Avenue/4<sup>th</sup> <u>Avenue –</u> An Atlantic Yards EIS mitigation will make 4<sup>th</sup> Ave one way between Atlantic and Flatbush, increasing pedestrian crossing opportunities at Flatbush/4<sup>th</sup> Ave. Relocation of pedestrian crosswalks at Flatbush/Atlantic to facilitate crossings is an additional potential measures.

Flatbush Avenue/Schermerhom Street/Lafayette Avenue - Making 3<sup>rd</sup> Avenue and Lafayette Avenue one way streets would reduce the number of movements entering the intersection and increase safety for all modes.

<u>Adams Street/Tillary Street -</u> Prohibiting eastbound and northbound left-turn movements would improve vehicle levels of service and pedestrian crossing conditions.



Pedestrian Improvements at Grand Army Plaza

### Implementation:

Significant geometric improvements on all four intersections are either underway, projected to begin in the near future, or are being analyzed, towards an estimated completion target of fall 2010.

### **Blueprint Goals Met**

Travel demand growth
 Managing congestion
 "Through" vs. "To/From/In" travel
 Physical/fiscal constraints
 Street management/safety
 Institutional challenges

# F (Culver Line) Express Service

### Initiative Description:

The Culver Line (F) has the capacity to provide local and express service, but has provided local service only for many years. As demand in the corridor grows, MTA New York City Transit is considering utilizing the express tracks between Church Avenue and Jay Street, with an intermediate express stop at 7<sup>th</sup> Avenue.

### 

#### **Details:**

This initiative takes advantage of a rare opportunity to initiate a new subway service, utilizing existing infrastructure. Running trains on the express track will allow for both local and express service in this corridor, saving some commuters precious minutes in their commute into Downtown Brooklyn (and Manhattan) and may add overall capacity, depending on the service plan, car availability, and costs.

#### Implementation:

The rehabilitation of the Culver Viaduct is scheduled to begin in 2008 to be completed by 2012. This will require the closure of two tracks at all times, precluding short term implementation of express service. MTA-NYCT will evaluate express service implementation once the Culver Viaduct rehabilitation is complete.



The Culver Line in Brooklyn (from the Metropolitan Transportation Authority)

### **Blueprint Goals Met**

- Travel demand growth
- Managing congestion
- "Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

# Downtown Brooklyn Traffic Calming Project

### Initiative Description:

The Downtown Brooklyn Traffic Calming Project resulted in physical and operational recommendations to minimize the impacts of traffic on the communities of Downtown Brooklyn. Many of the operational improvements have been made, and capital improvement implementation is ongoing.



Atlantic Avenue at Court Street before and after Neckdown

### implemented include leading pedestrian

**Details:** 

intervals, bicycle lanes, and signal calming schemes in corridors throughout downtown Brooklyn. Major capital improvements throughout Downtown Brooklyn will be implemented as part of a capital project that is underway. They include:

Operational improvements that have been

•Neckdowns at intersection corners to decrease pedestrian crossing distances and slow vehicle turns

•Bus bulbs to expand pedestrian space and improve bus operations

•Sidewalk extensions at selected mid-block locations

### Implementation:

The Downtown Brooklyn Traffic Calming Capital implementation project is currently in design, with construction estimated to be completed by fall 2009.

### **Blueprint Goals Met**

- Travel demand growth
   Managing congestion
   "Through" vs. "To/From/In" travel
   Physical/fiscal constraints
   Street management/safety
  - Institutional challenges

# Pedestrian Wayfinding Signage

### Initiative Description:

Metrotech BID is installing new pedestrian wayfinding signage to assist visitors getting around downtown Brooklyn. This includes both informational kiosks with maps and directional signage.

#### 

### **Details:**

Wayfinding signage for pedestrians recognizes the primacy of this mode in Downtown Brooklyn. In addition to providing orientation and the location of key destination, kiosks provide information on the history and culture of Downtown Brooklyn.



MetroTech's Wayfinding Kiosk

#### Implementation:

Metrotech BID has surveyed locations and will be implementing Wayfinding Signs and Kiosks by spring 2008.

### **Blueprint Goals Met**

- **Travel demand growth**
- Managing congestion
- Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

## **Traffic Enforcement Agents**

#### Initiative Description:

NYPD will expand the number of level 2 Traffic Enforcement Agents (TEAs). These agents direct traffic at major intersections.

#### **Blueprint Issues Addressed:**

- ✓ Recurring Traffic Congestion
- ✓ Enforcement
- ✓Institutional

#### **Details:**

TEAs can help to reduce illegal movements at intersections, including illegal turn movements and "blocking the box", and help regulate the flow of traffic, thereby improving operations and safety. PlaNYC includes a commitment to expanding the number of TEA's city-wide, which should include an increase for Downtown Brooklyn.



A New York City Traffic Enforcement Agent

#### Implementation:

The number of level 2 agents (who direct traffic) will increase by 100 by winter 2008 to be followed by further increases in the future. NYCDOT will coordinate with NYPD to ensure that major intersections in Downtown Brooklyn are manned with TEAs.

### **Blueprint Goals Met**

- Travel demand growth
- Managing congestion
- "Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

### PlaNYC Initiative

### **Downtown Brooklyn Transit Circulator**

### Initiative Description:

A Downtown Brooklyn Transit Circulator Could serve trips internal to Downtown Brooklyn. Further study, investigating routing, ridership and expected benefits, is needed.

**Blueprint Issues Addressed:** 

- ✓ Surface Transportation
- ✓ Recurring Traffic Congestion
- High Occupancy Vehicles and Buses

### **Details:**

A Downtown Brooklyn circulator service could provide short trips within Downtown Brooklyn, and connect it with areas immediately surrounding the core, including the future Brooklyn Bridge Park. Such a service is operated by the Downtown Alliance in Lower Manhattan. This would initially operate as a circulating bus route, with the potential for exploring other vehicle technologies if ridership demand warrants it.

### Implementation:

A bus route connecting Downtown Brooklyn with the temporary waterfront floating pool operated in Summer 2007. Funds to study the feasibility of a Downtown Brooklyn Circulator transit service have been made available by the Federal Transit Administration. DOT is coordinating with Downtown Brooklyn Partnership, a potential service sponsor, to initiate the study. If recommended by the study, service is expected to be initiated by spring 2009.



Downtown Connection Transit Circulator – Lower Manhattan

### **Blueprint Goals Met**

Travel demand growth
Managing congestion
"Through" vs. "To/From/In" travel
Physical/fiscal constraints
Street management/safety
Institutional challenges

### **Upgrade Subway Stations**

### Initiative Description:

Downtown Brooklyn is a transit hub and several subway stations in the area provide for extensive transfer options between subway lines, as well as to bus and commuter rail lines. Improvements to these stations provides better passenger service and in many cases, improved transit connectivity.



Jay Street-Borough Hall Station – A/C/F Platform

#### Details:

MTA New York City Transit has recently upgraded subway stations in Downtown Brooklyn's transit hub, including DeKalb Avenue, Nevins Street and Atlantic/Pacific Stations. NYCT is currently reconstructing the Jay Street-Borough Hall (A,C,F) Station and providing an underground transfer connection to the Lawrence Street (M,N,R) Station.

#### Implementation

Rehabilitations to the DeKalb Avenue, Nevins Street and Atlantic/Pacific Stations are complete. ADA accessibility was added to Dekalb Avenue, Borough Hall (2, 3) and Atlantic Avenue – Pacific Stations. Jay Street-Borough Hall reconstruction is underway. Additional station upgrades in Downtown Brooklyn are dependent upon funding availability.

### **Blueprint Goals Met**

- Travel demand growth
- Managing congestion
- "Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

### PlaNYC Initiative

## Maintain / Improve Subway Reliability

### Initiative Description:

The subway system often runs efficiently, but a breakdown in the system results in delays and passenger frustration. The reliability of the system relies on maintenance and improvement of signals, tracks, subway cars and other infrastructure.



### Details:

MTA New York City Transit is committed to maintaining and improving its infrastructure to reach a "State of Good Repair", as detailed in its Capital Plan. This includes upgrades to signals and switches, as well as continuing maintenance on tracks and subway cars, and introduction of new cars.

#### Implementation:

NYCT regularly upgrades infrastructure as part of it Capital Program with the goal of bringing the system into a state of good repair. Since 2000, new cars have been placed into service on the 2, 4, 5 lines and are currently being placed into service on the N line. Additional car upgrades on lines serving Downtown Brooklyn are planned. The R-Train at Atlantic/Pacific Station

### **Blueprint Goals Met**

- Travel demand growth
- Managing congestion
- "Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges

### PlaNYC Initiative

## Transportation Stakeholder Group

### Initiative Description:

The Downtown Brooklyn Transportation Blueprint will require an entity to monitor the implementation of its initiatives in order to be a success. This Downtown Brooklyn Stakeholder Group, consisting of elected officials, agency representatives and business groups, will oversee the implementation of the Blueprint, and continue to track transportation trends in Downtown Brooklyn.

### Blueprint Issues Addressed:

✓Institutional

#### **Details:**

Members of the Downtown Brooklyn Stakeholder Group will include NYPD, MTA-NYCT, NYSDOT, elected officials, and community boards. The stakeholder group will meet once every 6 months, during which time NYCDOT Brooklyn Borough Commissioner's Office staff and other agency representatives will update the group on the progress of both priority initiatives and longer-term projects. The group will also track major transportation indicators for downtown Brooklyn, such as traffic volume, accidents, and transit ridership.

### Implementation:

The proposed stakeholder group will be formed at the conclusion of the Blueprint study and meet approximately every 6 months to monitor progress. The first meeting is expected to be scheduled in winter 2008. More frequent meetings may be required in the period immediately following the conclusion of the study in order to monitor the implementation of priority initiatives.



### **Blueprint Goals Met**

- **Travel demand growth**
- Managing congestion
- "Through" vs. "To/From/In" travel
- Physical/fiscal constraints
- Street management/safety
- Institutional challenges