

4. DEVELOPMENT REVIEW

BTD’s primary tool for managing off-street parking supply is through the development review process. The proponents of new developments are required to sign a Transportation Access Plan Agreement (TAPA) as part of the Zoning Code’s Article 80 stipulations. Project specifics with respect to pedestrian and vehicular access, transit use, construction management, and parking are determined through the community and technical review processes leading up to the signing of the TAPA.

The district-based policy approach adopted by BTD and detailed in the previous sections of this report provides the context to review the parking component of proposed projects. The specifics of the project can be evaluated with respect to the unique character of its host neighborhood or district. Aspects considered include existing capacity in the roadway and transit infrastructure, the cumulative impact of *all* the projects proposed in the vicinity, the constraints imposed by other parking management regulations in the district like parking freezes, and the programs offered by local Transportation Management Associations.

BTD has used TAPA guidelines extensively since they were released in 1989. The experience of the building boom of the late 1980s and the recent trend of new development spreading out to the neighborhoods has provided new perspective on balancing the benefits and costs of new projects in Boston. In response, and as part of the *Access Boston 2000-2010* process, BTD has proposed new TAPA guidelines that include:

- Consideration of the transportation component of a project early in the process to guide land-use and urban design decisions (rather than an “impact” requiring mitigation after the program is finalized).
- The use of district based mode-split and parking ratio goals.
- Updated trip generation tables.
- Mandatory requirements to provide facilities for bicycles and programs such as carsharing.
- An enhanced annual reporting system to allow BTD to monitor compliance and continuously weigh demand for transportation facilities with available public infrastructure capacity.

This section summarizes the public and institutional process that leads to the signing of a TAPA and the components of a typical transportation package associated with a new development. An action plan charting out the need for further changes is also recommended.

GOALS

BTD reviews new development projects to accomplish the following policy objectives:

- Decrease auto-use by reducing off-street parking spaces per square foot of new development and/or per employee.
- Respect the specific constraints and opportunities inherent in the local transportation infrastructure by using district based transit mode share and parking ratio goals in evaluating new projects.
- Involve the residential and business community in the development review process.
- Ensure that new development is adequately served by transportation facilities
- Enhance quality of life through appropriate traffic mitigation measures.



The public sector uses tax revenues to operate and to enhance the transportation system including new investments like the Silver Line.

Public and Private Sector

The public and private sectors bear a joint responsibility for managing the transportation demand and impacts of new development.

Public Sector

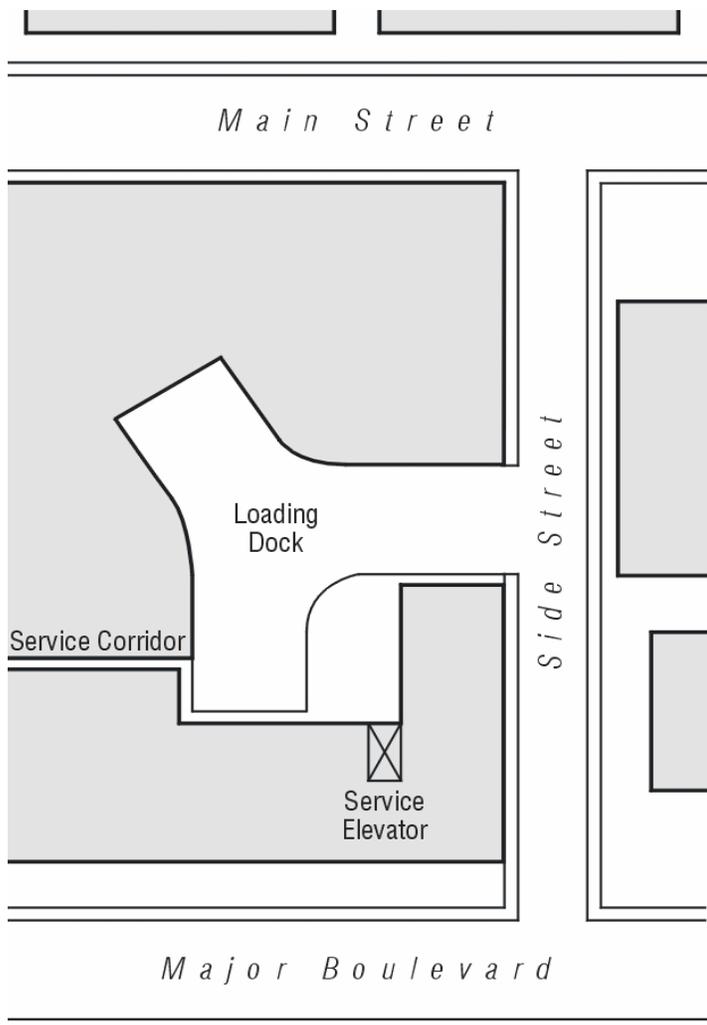
The public sector includes local state and federal transportation agencies and departments. The public sector uses tax revenues to operate and to enhance the transportation system through capital improvements to roads, sidewalks, and intersections. The public sector is also responsible for traffic management enforcement and public transit service. BTD cooperates with other transportation agencies, state and federal, to improve public transportation and roadways.

Private Sector

Private sector developers contribute to reducing and mitigating the direct transportation impacts of development. These contributions include travel demand management (TDM) measures that reduce the transportation impacts of a development. TDM measures can include the following:

- promoting and subsidizing public transportation,
- reducing parking supply and increasing parking fees,
- facilitating ridesharing and car-sharing,
- encouraging bicycling, and
- improving pedestrian, bicycle, and public transportation facilities.

Site access and circulation must be designed to minimize impacts and preserve public safety. When the scale or nature of the project results in significant traffic impacts to the surrounding streets and intersections, the developer mitigates these impacts through improvements to roadway geometry, traffic signal equipment, and traffic monitoring. BTD works with developers and their consultants to identify and agree on an appropriate package of mitigation measures in the TAPA and to facilitate their implementation.

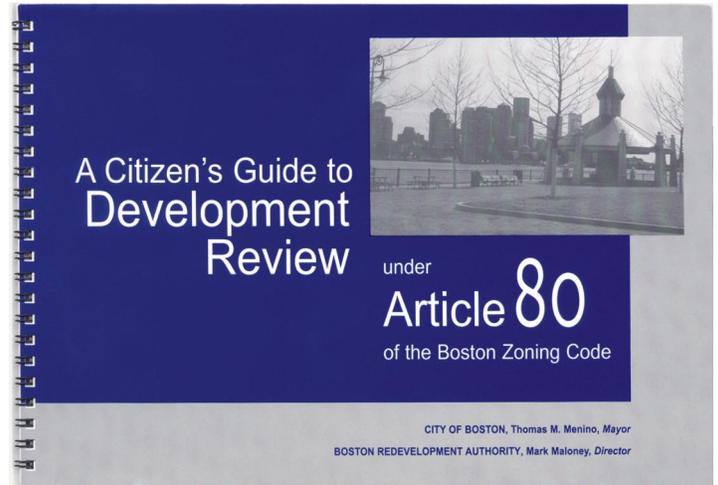


Site access and circulation must be designed to minimize impacts and preserve public safety. Loading docks should be designed for “drive-in/drive-out” operations.

Article 80 Development Review Process

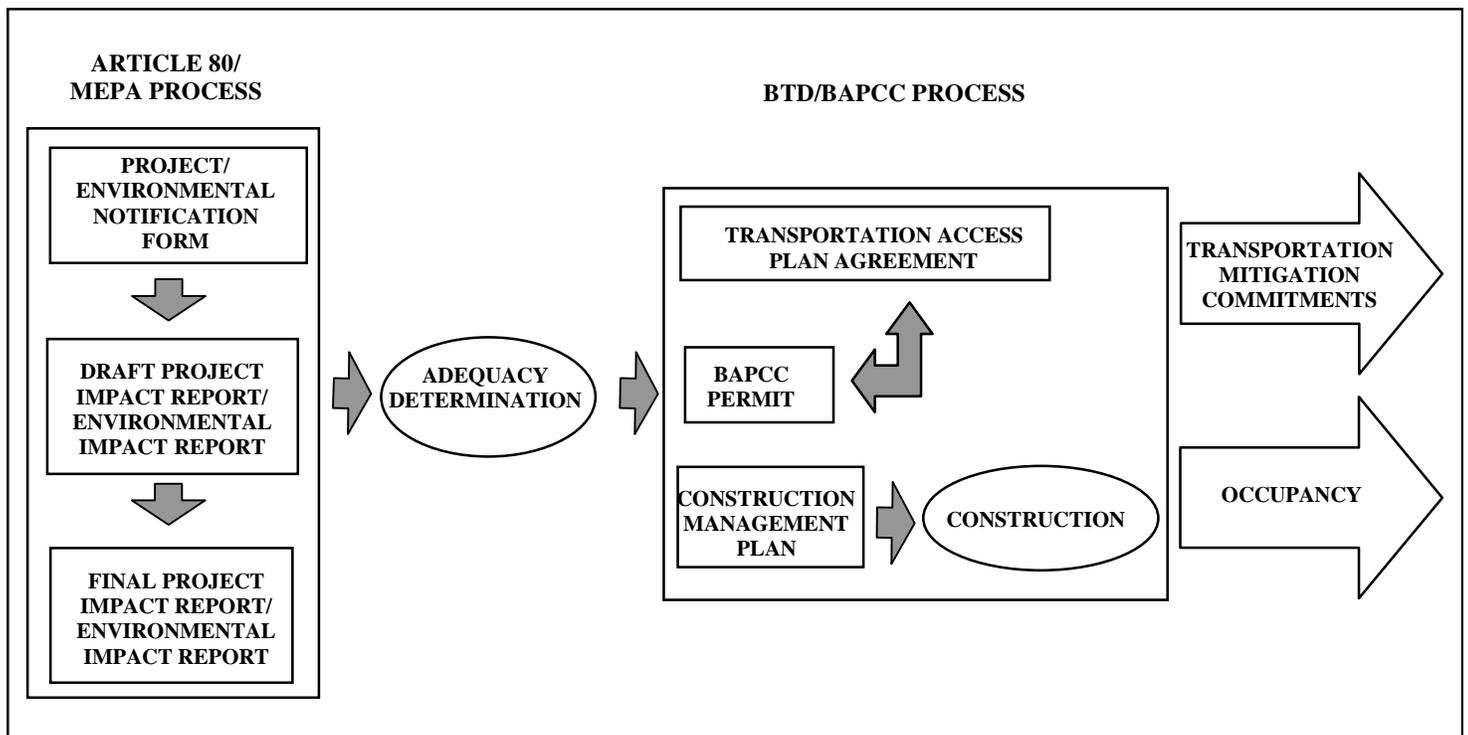
BTD reviews the transportation aspects of development projects as part of filings submitted by developers to meet the requirements of the Boston Zoning Code’s Article 80 and the Massachusetts Environmental Protection Act (MEPA). Article 80 establishes thresholds for development review based on project size, location and use. MEPA thresholds are based on traffic generation. Figure 17 illustrates the general review process that a project follows to secure zoning approval and environmental permits. For large projects, proponents make joint Article 80 and MEPA filings. Smaller projects that do not trip MEPA thresholds may nevertheless be required to make Article 80 submittals.

A proponent submits a Project Notification Form (PNF) and the BRA convenes a Scoping Session during the public review period. A project may be waived from further review depending on its size and impacts. Projects that are subject to “Large Project Review” continue through the Article 80 process by filing a Draft Project Impact Report (DPIR) and, if required, a Final Project Impact Report (FPIR). The DPIR and FPIR are comparable to the Draft and Final Environmental Impact Reports that are required by MEPA.



The BRA has recently released “A Citizen’s Guide to Development Review under Article 80” of the Boston Zoning Code to describe the City’s zoning process.

Figure 17 – Development Review Process



Transportation Components

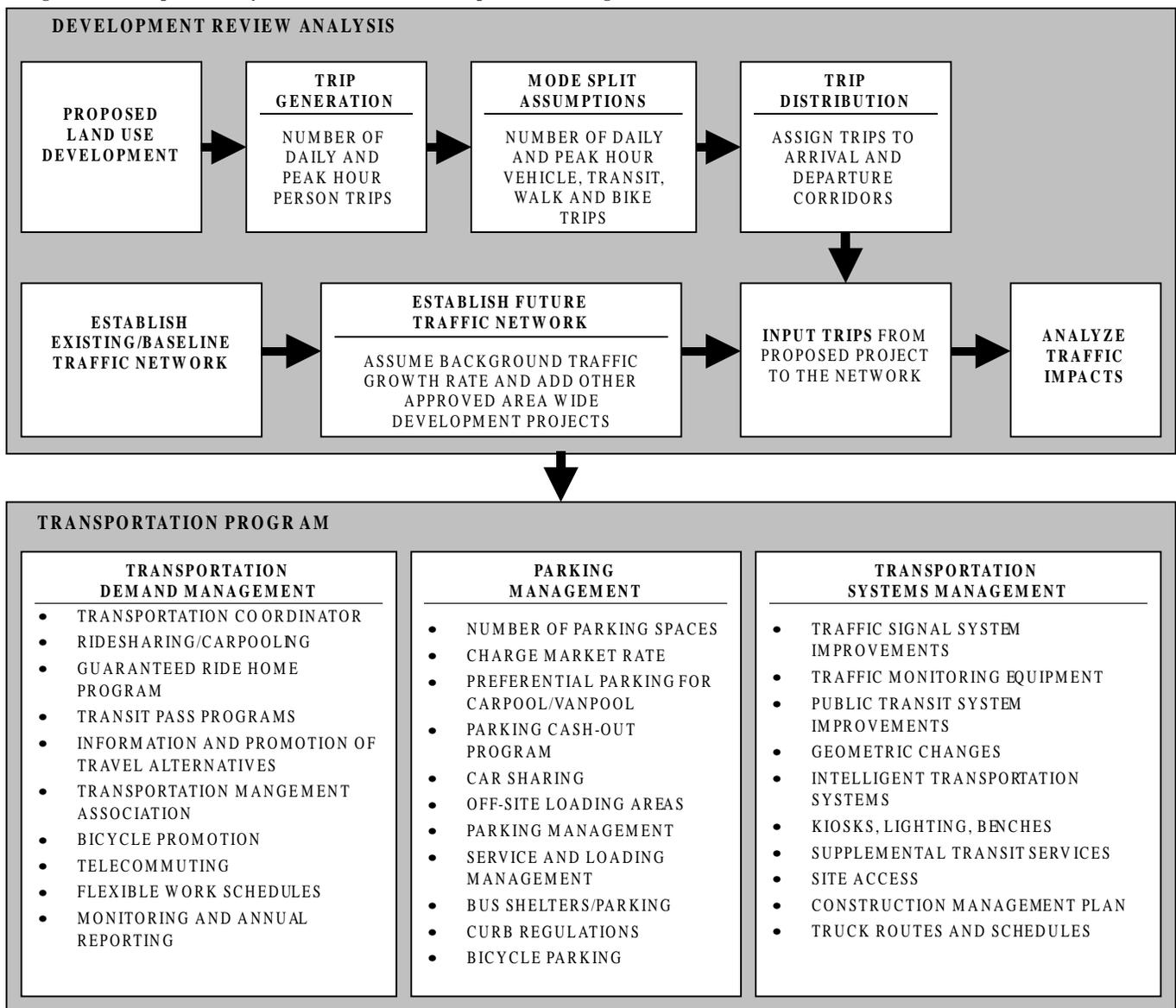
Simultaneous to the filing process described in the previous section the BTM evaluates the transportation components of the project. As illustrated in Figure 18, elements of the Transportation Access Plan include traffic management, parking management, construction management, and monitoring requirements. BTM details the extent to which these elements are required to be addressed by the proponent at the Scoping Session after the PNF is submitted and by commenting on the DPIR and FPIR.

To establish standards and to provide a defined framework for evaluating the transportation impacts of development projects, BTM issues Transportation Access Plan Guidelines. The guidelines

describe BTM's objectives, required data and information, and impact assessment methodologies. Potential mitigation measures are described, including support for Transportation Demand Management (TDM) approaches. Characteristic trip rates and transit mode shares and trip distribution information are included in the appendix.

The BRA issues an Adequacy Determination upon completion of the DPIR/FPIR and BTM negotiates a Transportation Access Plan Agreement. BTM's approval of a construction management plan is required before issuance of a building occupancy permit by the City's Inspectional Service Department.

Figure 18 – Impact Analysis to Establish a Transportation Program



Commitments to manage parking and encourage the use of alternative modes are incorporated in the project's TAPA permit. BTD's review considers the appropriate amount of parking given the proximity of the project to transit, the potential use of alternative modes to access the site and the availability and use of on-street and off-street parking near the site. Consideration is given to constraints related to the operation of local streets and intersections, the location and operation of the entrance/exits and pedestrian and urban design issues.

Boston Air Pollution Control Commission Permit

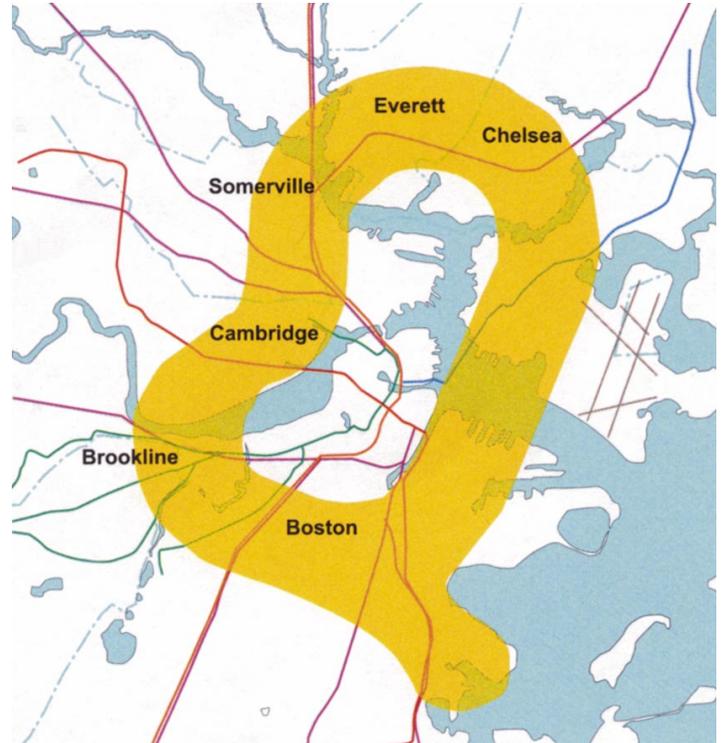
BAPCC issues a parking permit for exempt and non-exempt parking spaces that are part of the proposed development when the project is located in an area that has a Parking Freeze. BAPCC seeks to permit the minimum number of spaces based on the analysis presented by the proponent and reviewed by the City. BAPCC emphasizes that projects should include strong commitments to TDM measures. The commitments are coordinated with the TAPA.

Zoning Board of Appeals

The purpose of Zoning is to protect neighborhoods from the construction of buildings or structures that do not fit into the context of a neighborhood or may bring additional traffic, noise or pollution. The Zoning Board of Appeal (ZBA) can grant relief from strict interpretations of the Boston Zoning Code, including conditional use or variances for parking spaces. The Zoning Board of Appeal is made up of seven professionals appointed by the Mayor for three-year terms.

Institutional Master Plans

Article 80 also includes provisions for multi-year institutional masterplans that provide the framework for the future direction of institutions in Boston. These plans, which are regularly updated include transportation and parking management and mitigation components that describe transportation goals, evaluate the cumulative impacts of the projects described in the plan and propose appropriate mitigation. Institutions are not required to file a TAPA as part of this process. However, in practice the BRA and BTD have encouraged TAPAs for masterplans to provide a context for project-by-project review.



BTD's review considers the appropriate amount of parking given the proximity of the project to transit and other access factors. Efforts also seek to introduce new transit services, such as the Urban Ring in the Longwood Medical Area, to reduce parking growth.



Article 80 also includes provisions for multi-year institutional masterplans that provide the framework for the future direction of institutions in Boston.

PARKING IN BOSTON

Carsharing Programs

Car-sharing is an exciting new concept that is rapidly taking hold throughout North America and Europe. Car-sharing groups own and maintain cars for the use of their members. When a member needs a car, they reserve one on-line, let themselves into the vehicle with an access card, and receive a bill for use at the end of the month. Members pay only for what they use.

Beyond providing an important service to members, car-sharing dramatically reduces parking demand and auto use in neighborhoods. Shared cars generally serve between 15 and 25 members. Of these members, as many as half sell a car or avoid the purchase of a vehicle. It is estimated that each shared-car takes seven to ten cars off the road. Furthermore, members drive about 50% less than people who own their own cars. Members typically walk, bike, or take public transit more frequently than non-members.

Boston is served by Zipcar, Wheels When You Want Them™. The service has dozens of locations throughout the metropolitan area and adds new locations every week. By late summer of 2001, Zipcar had over 1,200 members and 55 vehicles in Boston, Cambridge, Brookline and Somerville. Zipcars are within a five-minute walk of 500,000 people. Eventually Zipcar expects to serve the entire MBTA subway network as well as many commuter rail stations and bus routes.

Along with their positive impact on parking and driving in neighborhoods, shared-cars provide low-cost transportation access to residents of Boston. Ruzheimer International, which conducts cost analysis for AAA and insurers, estimated that the cost of owning a car in Boston is over \$8,140 per year. The average Zipcar member spends about \$1,200 annually to meet their driving needs.

ZIPCAR FACTS

- Types of Vehicles:
 - New Volkswagens and Hondas
- Cost of Membership:
 - \$30 Application Fee
 - \$75 Annual Membership
 - \$300 Refundable Security Deposit
- Rates:
 - Hourly \$5-8 per hour plus 40 cents per mile with no hourly charge between midnight and 6:00 AM.
 - Daily: \$65-85 per day with 125 free miles.
 - Rates include gas insurance and maintenance.
- Individual and corporate memberships are available
- For the most current locations and rates, refer to www.zipcar.com



Zipcars are conveniently located within a 5-minute walk for 500,000 people in the metropolitan Boston area.

SHARED USE VEHICLES

Shared use vehicles such as carpooling, vanpooling and carsharing help commuters to save money on their travel expenses. Relief from stress and improving environmental conditions are additional benefits of shared use vehicles.

CARAVAN for Commuters, Inc., Massachusetts' statewide commuter services organization, provides assistance to commuters, companies, and Transportation Management Organizations. A private, non-profit organization, CARAVAN's programs are offered free of charge to Massachusetts' commuters and the business community. All of CARAVAN's efforts seek to improve air quality, reduce traffic congestion, and maximize mobility. CARAVAN maintains an extensive database to assist individuals with finding commuting options that best fit their needs.

Carpool Commuting: Carpooling is considered to be the most popular form of shared-ride commuting in the country. According to 1990 U.S. Census data, 12.8% of commuters across the country get to work in a carpool containing two or more people. In Massachusetts, 10.8% of commuters travel in 2-5 person carpools.

Vanpool Commuting: Vanpooling is a cooperative agreement among 7-15 commuters with common schedules share the ride to work. In most cases, one person from the group volunteers to do the driving in exchange for a free commute and personal use of the vehicle. Each group has at least one backup driver. The pick-up/drop-off points and route are set and agreed to by the group.

Action Plan
Development Review

Update Transportation Access Plan Guidelines

BTD will update and distribute its Transportation Access Plan guidelines which date from 1989. The updated Guidelines will provide clearer guidance for evaluating transportation impacts of development projects and create a context for developing mitigation measures that are district based and coordinated with other developments in the area.

Conduct Periodic Transportation Access Plan Guideline Public Workshops

BTD will conduct technical public workshops for transportation consultants involved with the Article 80 process to describe the guidelines, review data presentation and analysis, provide an overview of City transportation policies and provide an opportunity for feedback regarding the preparation of TAPAs. The workshops should be conducted at least once a year. The workshops will be held in partnership with local professional organizations to facilitate coordination and marketing.

Require Fees for Development Review and Preparation of Transportation Access Plans and Construction Management Plans

Article 80 includes a provision that allows the BRA to establish “appropriate fees” for development review. This provision has not been exercised in the past. The BTD will work with the BRA to develop a fee schedule for the review of Transportation Access Plan elements as part of the Article 80 process. The fees should be graduated to reflect project size and to reflect BTD’s experience with Article 80 review, the development of TAPAs and Construction Management Plans.

The fees may be deposited in an account designated for project review to support independent consultants hired by the City, to fund studies to examine the cumulative impacts of projects in a district, and to ensure timely responses to submittals.

PARKING IN BOSTON

Create and Manage a GIS Data Base to Track Development Projects

BTD will create a GIS database to track projects from the proposal stage to the implementation of TAPA commitments. The database will provide BTD and the City with the ability to generate comprehensive snapshots of potential changes to the transportation system and parking supply generated by new development. The database will also provide a tool to more effectively analyze potential transportation impacts, evaluate project-related mitigation measures and track compliance with TAPA commitments.

Extend Permitting Process of Open Air Parking Lots to Include Parking Garages

The City will investigate options to require parking garages to file annual parking permits similar to those required of open-air parking lots. The City's primary function related to off-street parking is the regulation of facilities. However, the City exercises minimal authority over garages after initial permits are secured. An annual permitting process would improve enforcement capabilities and provide the City with more realistic information about current parking conditions. Consideration should be given to the following:

- Use a fee structure for garage permits similar to the structure used for open air lots
- Review and update current boundaries that are used to determine fee structure.
- Require garages to provide bicycle parking.
- Create a dedicated enforcement group within BTD to ensure compliance with permit conditions.
- Establish a GIS database to manage the permit process.
- Create an electronic process to streamline permit application and database management.

The City should consider directing the fees generated by the off-street permit process to fund the management of the program, implementation of ITS technologies related to off-street parking management, programs that seek to encourage the use of alternative modes and efforts to encourage conversion to alternative fuel vehicles.

Modify Zoning Code to Require Institutional Master Plan TAPAs

The City should revise Article 80 of the zoning code to require Institutions to file a TAPA as part of their Institutional Masterplan. The masterplan provides a framework to evaluate the cumulative impacts of projects that are planned by an institution. Unlike Large Development Projects, the transportation elements of the Institutional Masterplans are not codified in Transportation Access Plan Agreements. The creation of an Institutional Masterplan TAPA would improve coordination of different commitments by institutions for transportation improvements and provide a mechanism to address broader commitments by the institution that cannot be ascribed to specific projects.

Modify Zoning Code to Require Bicycle Parking

BTD has recommended inclusion of bicycle parking as part of the Article 80 process. However, some projects are too small to trigger that section of the zoning code. To insure that adequate parking for bicycles is included in all projects, the City should adopt a new zoning article generally requiring bicycle parking for all development projects. The article should specify the type, location, and number of parking spaces and parking devices required.