Boston's

Over the next three years, a significant amount of federal, state and city money will be allocated to the reconstruction of several roadways in Boston. The city has grouped the reconstruction projects under one umbrella, the Boston Boulevard Project, to maximize the opportunity this presents to enhance the public realm.

The fundamental purpose of the project is to bring the streets to current safety standards for vehicular traffic, pedestrian safety and bicycle access; this is necessary for the city to remain eligible for the Massachusetts Highway Department (MHD) funding.

The city's goal, however, is broader: to create a network of public ways that will connect neighborhoods, cultural districts and downtown locations; function as roadways, civic spaces and destinations themselves; and emerge as an easily understandable element of the city's structure. Therefore, we want to design the streets in relation to shaping land use and to improve the aesthetic quality of the urban environment.

Coordination among city agencies has been essential. The Boston Public Works Department (BPW), Boston Transportation Department, (BTD) and Boston Redevelopment Authority (BRA), the city's planning agencies are involved. The BTD is responsible for traffic improvements and the BPW and the BRA assure coordination among city agencies and consultation with key community groups. The BPW is managing the
design contract and oversees the construction for the city. The projects will be built by STOT.

The streets in the project are major thoroughfares, averaging 10,000 vehicles a day. They pass through dense areas where multiple uses of the roadway must be accommodated: parking, loading, buses, bicycles and peak traffic flow. Their right-of-way cannot be enlarged because they are constrained by a tightly built environment. Any gain for one use must be made by reducing the space available to another, or by overlapping.

The design process for each street begins with an exercise that looks at alternatives and evaluates the pros and cons of each. These are debated internally and developed at workshops with task forces composed of residents, business owners and institutions. Once the design reaches a critical phase, such as 15 percent, the preferred alternative and the design process that led to it are discussed at a public meeting. If there is disagreement, the city may meet again with the task force and those in opposition to reevaluate the design.

Even though the design of each street poses a unique challenge, several common issues have emerged. One is the prevalent traffic engineering practice of providing a median with protected left-turn bays to address traffic and safety concerns. A second is the current engineering practice of providing large turning radii on all streets. A third is the safety requirement for traffic sig-

nalization with mast arms, which, some people feel, creates a highway character at intersections with local streets. The most significant issue is the custom of planning for peak hours and exceptional events, which results in allocating more of the street right-of-way to vehicular movement than required to accommodate typical daily volumes.

Through the public process, it became evident that despite the easy availability of public transportation, a large segment of the community favored facilitating vehicular traffic flow, since most people rely heavily on cars in their daily routines. Another common issue that arose was the community preference for street furniture and lights with historic references over more contemporary designs.

The streets included in the Boulevard Project are at different levels of design; some have reached only 15 percent while others are close to implementation. The time required to develop the design varies greatly according to the scope and the controversy of the proposed changes.

So far, the outcome of the project has been positive. State requirements for roadway improvements and prioritization and bicycle access are being met while the urban character of the thoroughfares is being changed. The project shows the promise of leveraging everyday street reconstruction funds to make fundamental improvements to the public realm.
Cambridge Street runs between the Beacon Hill historic district and the West End, one of the country’s best-known urban renewal sites. It serves as one of Boston’s main gateways, connecting the north and northwestern suburbs to downtown.

The architecture and block patterns along each side of the street are dramatically different and will remain different because of zoning and historical protection laws. In Beacon Hill, a nineteenth-century urban grid has been preserved and points of access are well distributed. In the West End, the character is that of a neighborhood with self-contained high-rise developments and very few vehicular and pedestrian access points.

One of the main goals of the reconstruction project, for both the community and the city, was to link the two sides of the street and transcend its edge condition. Two schemes were presented: one eliminating the existing median, the other enhancing it. The second alternative was chosen for safety reasons and because it reduces the perceived width of the roadway, keeping it in scale with Beacon Hill’s low-rise buildings.

The existing eight-foot-wide median will be replaced by a narrow median at least 10 feet wide. The median will be as continuous as possible: the number of places for left turns will be reduced and the median will be planted with trees. Specific requirements, such as provisions for bicycle lanes, were not while parking on both sides of the street was maintained. The realignment of curbs and traffic lanes allowed for larger sidewalks of 12 to 16 feet on the Beacon Hill side, where most retail stores are located. Several businesses hope to have outdoor areas, such as cafes.

The 15 percent design phase is almost complete. In the next phase, the landscaping scheme will be developed further to help unify the street that is inconsistent in its scale and architecture.
Huntington Avenue

Huntington Avenue is located at the western edge of Boston’s major business district. The street is home to many major cultural, educational, and medical institutions, such as the Museum of Fine Arts, Northeastern University and Brigham and Women’s Hospital. The street has very few streetscape amenities and barely enough room for all of its uses, including the trolley line that runs down the middle of the street.

One of the main concerns is to improve the pedestrian environment. Trolley stations are located in the center of the street and concrete barriers separate the platforms from the roadway. There are safety concerns for commuters, who must wait for trains near moving vehicles, and for pedestrians, who are caught between the trolley right-of-way and the traffic lanes when crossing the street. In addition, the existing sidewalks are extremely narrow.

Traffic studies demonstrated that roadway capacity could not be reduced and, therefore, the only way to create space for pedestrians and bicyclists was to eliminate parking lanes on both sides. That also allowed for protected left-turn bays at key intersections, reducing conflicts between turning vehicles and trolley cars.

The city generally supports on-street parking because it helps local businesses, provides a protected sidewalk environment for pedestrians and reduces traffic speed. In this case, it was judged that enlarging sidewalks to a minimum width of eight feet and

standards (6 to 8 feet), space for bicyclists and continuous tree planting on both sides of the MBTA reservation (except for a few narrow platforms and where protected left-turn bays must be provided). All MBTA shelters will be replaced, and the new shelters might include art panels that advertise special events at the institutions.

For visual enhancement, the intent is to create a continuous tree canopy from sidewalk to reservation to sidewalk and to provide for consistent street lighting on sidewalks and at the edge of the MBTA reservation. These elements will help engage the trolley reservation in the streetscape and overcome the dividing impact it has today.

The roadway reconstruction project is being combined with a transit modernization project being undertaken to meet the Americans with Disabilities Act requirements. The joint project has required great cooperation between MHD, the MBTA and the city. Consequently, the entire roadway can be reconstructed in one and significant construction dollars saved. The design of the street is almost 70 percent complete and implementation is projected for this fall or next spring.