The Urban Ring

CONNECTING THE SPOKES



Urban Ring: providing connections to jobs and economic growth

The Urban Ring is a vital transit investment that would allow "smart growth" transit-oriented development in Greater Boston and serve as an invaluable regional asset to support economic development in the Commonwealth.

A sophisticated, quick and efficient bus rapid transit system, the Urban Ring will connect rapidly growing residential and commercial areas in Greater Boston by providing improved transit access to robust job centers in the Commonwealth.

While our existing transit system was built in the last century to bring people to the downtown Boston job market, one of our primary economic engines today is the life sciences sector, built up in a "life sciences necklace" just outside of downtown Boston. Today our most promising areas of economic development are congested with traffic. The future growth and development of this corridor is at risk for lack of adequate mobility and connections. Linking the "spokes" of our existing transit system with the Urban Ring service would provide the connectivity needed in this area to link people to jobs and jobs to people.

The Urban Ring corridor is currently home to nearly 300,000 residents and 1/3 of all jobs in seven municipalities falling

within the corridor. By 2030, the corridor is projected to see a 26% increase in population and a 24% increase in jobs, from the year 2000.

The Urban Ring, expected to transport 184,000 daily riders by 2030, will provide connections for suburban and urban commuters to every MBTA commuter rail line, all rapid transit lines, major highways leading into Boston, and more than half of the MBTA local bus routes.

In the 2008 legislative session, Governor Patrick signed a \$1.4 billion transportation bond bill that includes the Urban Ring among viable transit improvement projects eligible for bond funding. This will allow EOT planners to continue working out the final technical details of the alignment and begin preliminary engineering on possible early action segments of the project. No longer the stuff of legend, the Urban Ring is well-positioned to connect people and jobs in Greater Boston.

Our life sciences economic engine

The life sciences industry is one of the main economic engines for the Commonwealth. Our "eds & meds" account for approximately 30% of the jobs in Boston and represent 9 of the largest 25 employers in Massachusetts. Greater Boston teaching hospitals and medical schools employ over 97,000 workers in Massachusetts, and research universities employ nearly 50,000 more.

The key competitive advantage of our life sciences industry is its proximity and connections. However, as the sector continues to grow, this compactness creates a problem of traffic congestion and quality of life. Harvard Business School's Michael Porter identified transportation infrastructure as a major weakness for Greater Boston's life sciences cluster, and a 2001 Jones Lang LaSalle survey showed that over 75% of knowledge-based technology companies consider access to public transportation to be a key factor in evaluating potential sites.

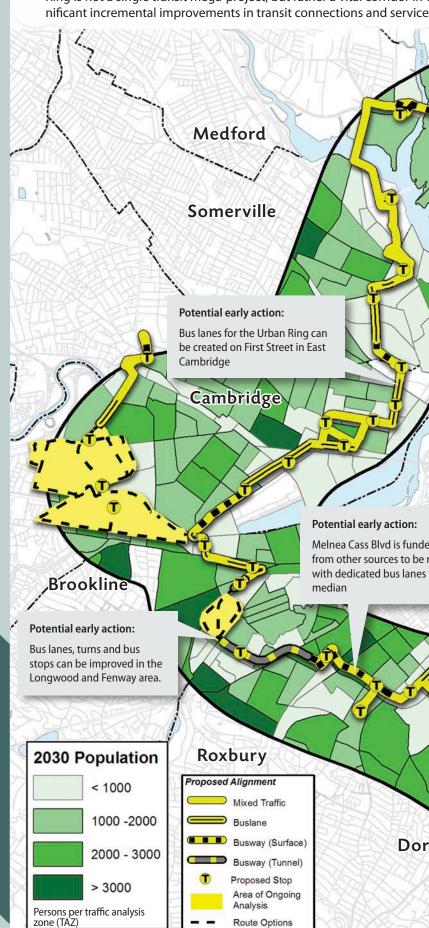
Much of the life sciences sector is supported by federal funding, which increasingly uses collaboration among institutions as important criteria in awarding funds. Improved connectivity among the medical and education institutions is therefore critical because it would provide better linkages between institutions, enabling and increasing this vital collaboration.

Competitor cities across the U.S. are trying to develop life sciences clusters to rival the Boston-Cambridge life sciences clusters and investing heavily in transportation infrastructure as a means to do so. The Patrick administration and the legislature recently passed a \$1B investment in the life sciences in an effort to sustain our economic competitive advantage. Another key component to sustained economic competitiveness in the life sciences and the Commonwealth overall will be targeted and strategic investment in transportation infrastructure that supports this growing industry.

Congestion -road block to job growth in the LMA

The Longwood Medical and Academic Area (LMA) is home to 23 medical, research, academic and cultural institutions. The LMA is the second largest employment center in Boston with more than 40,000 employees, 18,200 students and 26,000 patients and visitors each day. The close proximity of these institutions is an asset in terms of collegial collaboration. The area is underserved by the existing transit system. Congested regional arterial roads through the LMA inhibit patient access to medical care and employee recruitment and retention. The institutions spend over \$12 million annually on T-passes and shuttles that serve more than 9,500 riders daily. The Urban Ring would provide enhanced transit services to commuters from the entire metropolitan area to the LMA and enable its continued job growth rate of 1,000 jobs per year.

The Urban Ring: incremental step A phased transit investment project that would run in a roughly circul Ring is not a single transit mega-project, but rather a vital corridor in v nificant incremental improvements in transit connections and service



os on the road to economic growth

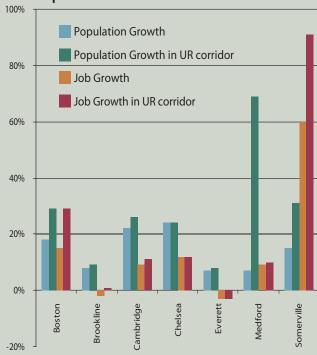
ar corridor through seven municipalities in Greater Boston, the Urban which there are short, medium and long-term opportunities for sig-



Job growth in the corridor

The portions of the municipalities that fall within the Urban Ring corridor account for 43% of those municipalities' total employment. Employment in the seven municipalities in the Urban Ring is projected to increase 6.8% by 2030. The projected increase of employment within the corridor is twice this rate, at 13.9%. The Urban Ring serves over 95% of the total employment in the cities of Everett and Chelsea, 77% in Cambridge and 62% in Somerville in 2030.

Population and Job Growth



Urban Ring by the numbers

- · 5 new bus rapid transit bus routes
- · 7 municipalities directly served
- 7 connections to commuter rail
- 15 connections to MBTA rapid transit
- · 25 miles of BRT corridor
- 36 Urban Ring stations
- 53% reserved BRT bus lanes
- · 41,500 daily auto person trips eliminated
- 184,000 daily riders expected by 2030
- 218,600 environmental justice residents served (as of 2000)
- 378,600 jobs within a 10-minute walk of a planned station by 2030
- \$2.4 billion* capital cost that can be implemented incrementally
- \$30-40 million annual operating costs, approx.

Source: EOT

^{*}Approximate; in 2007 dollars

Accessibility and mobility key to economic development

The Urban Ring would enhance quality of life in the corridor with improved transit service that will ease congestion in the existing transit system and on the roads.

Trips beginning or ending at points in the Urban Ring corridor currently require either indirect rapid transit into downtown Boston stations and out, or automobile or local bus trips on congested roadways.

The Urban Ring connects transit, commuter rail, and bus lines, and effectively links the "spokes" of the MBTA system. By allowing riders to travel circumferentially around the Urban Ring to reach their destination instead of traveling into the

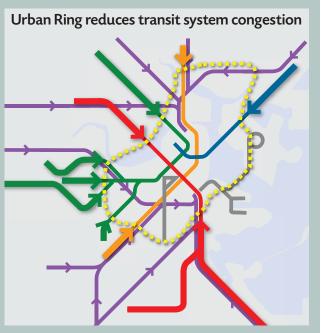
center of the system and then out, it will relieve overcrowing on existing lines.

This circumferential transit enhancement is expected to attract new fare-paying transit riders, provide enhanced service to areas of growth in the corridor, and draw existing riders off over-capacity lines.

The Urban Ring would enhance effective operations of our entire public transportation system and support anticipated growth by creating additional capacity, reducing travel time, relieving congestion, and connecting residents to jobs in centers of economic growth.

Existing and future transit system congestion

The existing system, which already experiences congestion and delays, focuses riders on four central transit stations for a large number of transfers. In the future, as line extensions are put into service and ridership across the system increases, these core segments will become even more congested.



The Urban Ring would reduce congestion on all existing transit lines. Riders transferring at crowded downtown stations can instead transfer at less crowded new and improved stations along the Urban Ring corridor. The Urban Ring would also make Commuter Rail travel more attractive by providing new and improved transit connections to jobs and destinations outside the downtown core.

The facts about bus rapid transit

World class cities all over are adapting bus rapid transit (BRT) with considerable success. Bogotá, Columbia is one of the best examples of how BRT helped to transform this city of seven million from traffic-choked to a model of sustainable urban development. And cities in the US such as Seattle, Cleveland and Portland are also successfully implementing BRT. BRT is a good model for Boston and the Commonwealth. While regular bus routes run in mixed and often congested traffic, with frequent station stops often only blocks apart, BRT uses service enhancements to enable buses to operate more like rapid transit. The Urban Ring would be comprised of a coordinated system of exclusive busways, bus lanes, and mixed traffic BRT operation. The high frequency service may use 60-foot diesel-electric hybrid buses, stopping at widely-spaced and easily identifiable transit stations rather than bus stops. Signalized inter-



sections, upgraded to include timing technology, would move buses efficiently through the corridor. And unlike permanent rail solutions, BRT affords us greater flexibility to alter routes to adapt to future geographic shifts in employment centers. Source: streetsblog.org

