

TRANS REPORT

TRANSPORTATION NEWS FROM THE BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

MPO Releases Study of the 'Braintree Split'

The Braintree Split, one of the most well-known congestion hot spots in the Boston region, is the subject of a recently completed study conducted by Boston Region MPO staff. *I-93/Southeast Expressway/Route 3 (Braintree Split): Operational Assessment and*

Potential Improvements is an in-depth exploration of the ramps and highway segments that comprise the interchange of I-93, the Southeast Expressway, and Route 3 South. Located partially in Braintree

and partially in Quincy, this complex section of roadways processes more than a quarter of a million vehicles a day whose drivers encounter frequent traffic incidents and regular congestion, delays, and queues, especially in the northbound direction in the morning and, to a lesser degree, in the southbound direction in the evening.

Field reconnaissance conducted as part of the study indicates that many of the delays at the Braintree Split are due to bottlenecks at the freeway segments leading to the split itself. These problems are compounded in the split by operational difficulties related to weaving, merging, diverging, short sight distance, insufficient capacity, and lane drops.

The primary objectives of the study were to assess the current operation of the Braintree Split and to develop recommendations for improving traffic safety and operations. A regional approach was taken to address the problems identified

in and around the split, as its traffic is regional in character. An advisory task force composed of representatives from Braintree, Quincy, Milton, MassHighway, the Massachusetts Bay Transportation Authority, the Metropolitan Area

Planning Council, the South Shore Coalition, the South Shore Chamber of Commerce, and elected officials was assembled to guide the study.

Recommended improvements for addressing bottle-

necks, improving safety, and facilitating traffic flow at the Braintree Split and its connecting highways include:

- Upgrading short acceleration and deceleration lanes and weave distances
- Improving access to the HOV lane
- Adding advanced queue-detection and warning systems

Although preliminary analysis of the recommended improvements indicates that they have significant safety and operational benefits, they would have to undergo further study before final recommendations could be made. Such review and analysis would include, but not be limited to, an exploration of environmental and right-of-way issues, public support and participation, benefit and cost analysis, design, and prioritization of the improvements.

The Boston Region MPO has already moved forward with one such recommendation, an analysis of the I-93/Route 24



Approaching the "Braintree Split" from I-93 northbound in Braintree

DON'T SIT THIS ONE OUT!



The Boston Region MPO Annual Election will be held in Burlington on May 24 at the Spring Meeting of the Metropolitan Area Planning Council (MAPC). MPO member municipalities whose current terms are expiring are the Town of Bedford and the City of Salem.

MAPC and the MBTA Advisory Board, the MPO-member entities that are responsible for administering the election process on behalf of the MPO, will host a Candidates Night in Braintree on May 17 for those interested in meeting the nominees and hearing about how they would fulfill their role as a member of the MPO. See the calendar on page 4 for details on both the election and Candidates Night.

interchange, which was identified in the study as a bottleneck that causes congestion during peak travel periods. (See the MPO activities update on page 2.)

For more information or to request a copy of the study, please contact Seth Asante at (617) 973-7098 or seth.asante@ctps.org.

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TRANSPORTATION PLANNING AND PROGRAMMING COMMITTEE ACTION ITEMS

In April the Boston Region MPO turned its attention to the development of the fiscal years (FYs) 2007-2011 Transportation Improvement Program (TIP) and the FY

2007 Unified Planning Work Program (UPWP). For the TIP, the Committee held a Municipal Input Day, at which more than 45 city and town officials presented the projects they would like the Committee to consider in the next TIP and discussed their understanding regarding project readiness.

For the UPWP, the Committee approved an adjustment to the FY 2006 Unified Planning Work Program that reallocates \$28,000 in Metropolitan Area Planning Council (MAPC) funding previously programmed for a bicycle/pedestrian plan and Massachusetts Environmental Policy Act (MEPA) project reviews to MAPC's MetroFuture project. The Committee also reviewed the current universe of projects for the FY 2007 UPWP and directed staff to seek input from the MAPC subregions on these and other projects that will be considered.

The Committee also approved a work program that implements a recommendation of both the 2004 Congestion Management System and the recently approved Braintree Split study. (See the article on page 1.) The objectives of the new study, Safety and Operational Improvements for the I-93/Route 24 Interchange, are to identify the traffic safety issues and operational difficulties on the ramps and roadways that comprise the interchange and to develop, evaluate, and recommend improvements that would be implemented by MassHighway.

REGIONAL TRANSPORTATION ADVISORY COUNCIL UPDATE

At the April meeting, David Cash of the Executive Office of Environmental Affairs briefed the Advisory Council on a comprehensive diesel strategy that is currently being developed, and Seth Asante and Efi Pagitsas of the Central Transportation Planning Staff gave a presentation on the Braintree Split study.

At the May meeting, there will be a briefing on COGNET, a private-sector proposal to enhance revenues and create economic opportunity at MBTA stations.

Immediately prior to the May meeting, the Council's Freight Committee will conduct a tour of sites included in Massport's proposed Marine Terminal project at the North Jetty in the Boston Marine Industrial Park (BMIP) and the new International Cargo Center of New England project, also located in the BMIP. (See the calendar on page 4 for details.)

ACCESS ADVISORY COMMITTEE TO THE MBTA (AACT) UPDATE

At the March AACT meeting, the MBTA's Office for Transportation Access (OTA) briefed members on recent activities and announced that a purchase order has been issued for 21 new RIDE sedans, which will be equipped with cameras for monitoring safety. Ridership on THE RIDE continues to climb: the number of year-to-date trips increased by 9.8 percent, for a record high of 952,102 trips.

OTA staff is continuing the outreach program, begun last May, to issue new "smart card" Transportation Access Passes and senior IDs for use with the automated fare-collection equipment being installed throughout the MBTA system. Photos are also being taken at outreach events for the MBTA's new Blind Access Card. For a schedule of spring outreach events, go to the MBTA Web site, www.mbta.com, or call the OTA at (800) 543-8267 (voice) or (617) 222-5854 (TTY).

MBTA to Spend \$310 Million for Improving Access for People with Disabilities

The MBTA, the Boston Center for Independent Living (BCIL), and Greater Boston Legal Services (GBLS) have announced that they have reached a settlement in a class action suit brought against the MBTA for accessibility problems that denied people with disabilities equal access to the public transportation system, which is a guaranteed right under the Americans with Disabilities Act.

The agreement, which was unanimously approved by the MBTA Board of Directors in April, requires the MBTA to invest \$310 million under its Capital Investment Program to improve services and infrastructure rather than to make payments to individual plaintiffs.

Key terms of the agreement include:

- Investing \$122 million in elevators and escalators over the next five years to ensure continuous elevator service during MBTA service hours
- Purchasing nearly 400 new low-floor buses, which provide for easier boarding
- Improving bus maintenance to ensure that ramps and other devices work properly
- Improving bus services by ensuring that bus drivers follow MBTA rules concerning accessibility, such as using lifts and ramps properly, pulling to the curb at stops, and making stop announcements
- Closing the gaps between subway cars and station platforms, which present safety hazards, especially to people in wheelchairs
- Replacing mobile wheelchair lifts with "mini-high" platforms and ramps
- Speeding up the introduction of low-floor cars on all branches of the Green Line
- Installing new public address systems and electronic message boards
- Appointing an assistant general manager who will be responsible for making

■ Accessibility Agreement cont. on p. 4

The Boston Region MPO is using its regional travel model to help in the selection of the regionally significant projects in its long-range transportation plan, JOURNEY TO 2030. The forecasts produced by the model include travel patterns, volumes, speeds, and modes, air pollutant emissions, and effects on service to low-income and minority populations.

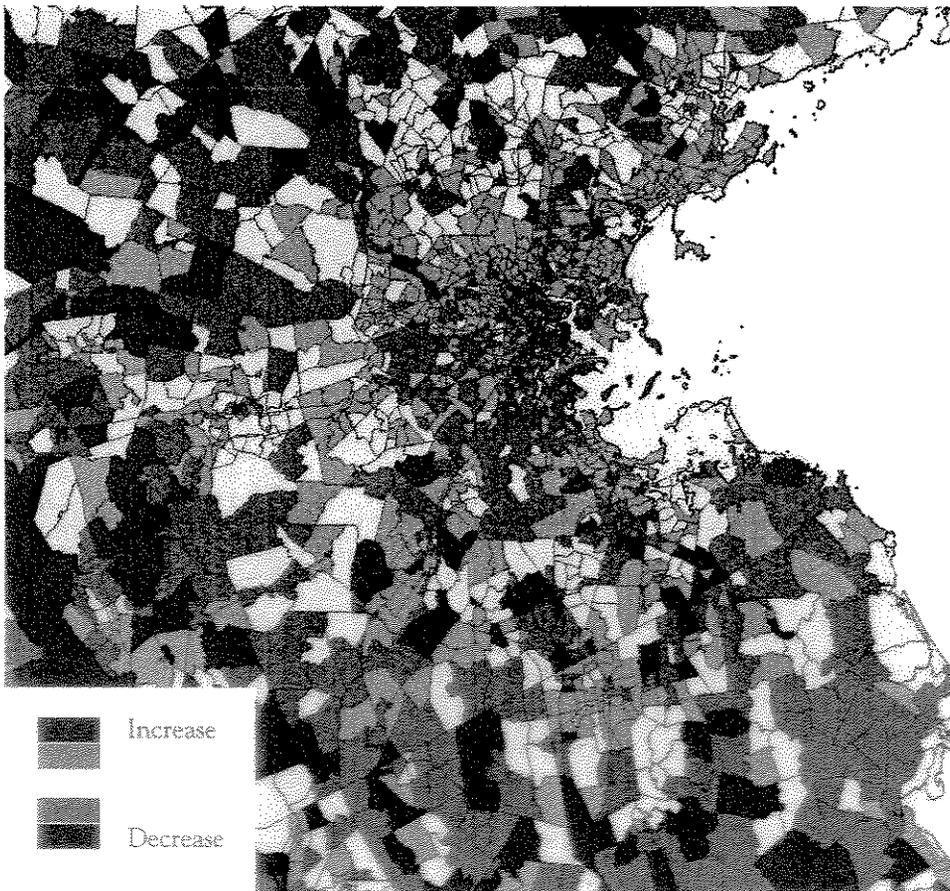
A GLIMPSE INTO THE FUTURE

As the Boston Region Metropolitan Planning Organization (MPO) develops its long-range transportation plan, JOURNEY TO 2030, it will use its regional travel model to forecast future travel conditions. The model is a computer simulation of the transportation system and its use. To represent different possible future conditions in the region, planners vary the inputs into the model, which include demographic projections and alternative sets of transportation improvements. Thus the MPO can forecast the effects of alternative investment decisions. The findings from a series of model runs will help guide the selection of projects for JOURNEY TO 2030.

The MPO has performed the first model run, in which it used as the inputs a transportation network based on the current long-range transportation plan (adopted in 2004) and "baseline" demographic projections to the year 2030 that are derived from past trends. These demographic projections were compiled by the Metropolitan Area Planning Council (MAPC), the regional planning agency for the Boston area. The inputs are detailed below, along with the resulting outputs of the model.

Percent Change in Number of Trips Destined to Zone, 2000–2030

One of the outputs of the model is distribution of trip destinations. In the results of the first model run, trip destinations in absolute terms are still concentrated in urban centers, but percentage growth in trip destinations is highest toward the edges of the Boston region.



INPUTS FOR THE FIRST MODEL RUN

Demographics

MAPC recently completed baseline demographic projections in which past trends were used to project conditions in the year 2030. These projections were the demographic inputs in the first run of the regional travel model.

Compared to 2000, the baseline projections show the population of the model area growing by 10.8 percent (from 4.3 million to 4.8 million residents) and the number of employees growing by 10.3 percent (from 2.3 million to 2.6 million).

The projected growth is not uniform through the area: one quarter of the region's population growth is projected to occur in just 20 communities, and half of the region's new jobs are projected to be in four major job centers comprising 27 communities. In terms of percentage gain in population, the fastest-growing communities are along I-495, where land is available for development. The population of these communities is projected to

Inputs for the First Model Run (continued)

grow 20 percent or more over the next 30 years.

An important demographic trend apparent in the projections is the aging of the population. As baby boomers age, the proportion of residents over the age of 55 in the region will grow from one in five to one in three. This trend is the major reason for the growth in single-person households (up 48.9 percent) and zero-worker households (up 54.4 percent) indicated by the baseline projections.

Transportation Network

For the first model run, the MPO used the 2030 transportation network set forth in the current long-range transportation plan, with the addition of two projects: the Green Line to West Medford and Union Square, and 1,000 new park-and-ride spaces in the region.

Air Quality Assumptions

The MPO uses outputs of MOBILE6 software to determine the emission rates for various air pollutants. These rates are then applied to the trips forecast by the model, to determine total emissions for the region. MOBILE6 inputs take into account many projected improvements that will reduce stationary and mobile-source emissions, including:

- Emission limitations for new vehicles
- Vehicle fleet turnover
- Low-emission-vehicle programs
- Vehicle inspection and maintenance programs
- Vapor recovery systems at gas pumps
- Fuel vapor pressure improvements

OUTPUTS OF THE FIRST MODEL RUN

With the inputs indicated above, the model projects that total daily trips in the region will rise to 19.3 million by the year 2030 from 16.8 million in the year 2000, an increase of 15 percent. Of these trips, those with their origin or destination outside the region are shown to grow 65 percent, to 3.4 million trips, by the year 2030, when they will represent 18 percent of all trips.

Despite the fact that the mode share of automobiles decreases by 1.4 percentage points, average weekday vehicle miles traveled increase 17.7 percent, from 108.3 million to 127.4 million, and average weekday vehicle hours of travel rise 23.4 percent, from 3.4 million to 4.1 million. Average roadway speed decreases 4.8 percent, from 32 miles per hour to 30.7 miles per hour.

Overall transit boardings increase 11.4 percent, with the most growth occurring in commuter rail and express bus ridership.

Air Quality Results

Mobile-source emissions are reduced, despite a forecast increase in vehicle miles traveled, mostly due to the implementation of the previously listed programs.

- Carbon monoxide emissions decrease 58 percent
- Volatile organic compound precursor emissions decrease 78 percent
- Nitrogen oxide emissions decrease 91 percent

FUTURE STEPS

Selection of Preferred Demographic Inputs

MAPC, in consultation with the MPO, will develop a second set of demographic projections, based on values emerging from the MetroFuture planning initiative.

The MPO staff will run the regional travel model using these projections and the same transportation network inputs used for the first model run, to produce a second set of outputs. These outputs will be compared with those of the first model run. The MPO will then select a preferred demographic projection for use in developing the JOURNEY TO 2030 transportation plan.

No-Build Scenario

Once the MPO selects a preferred demographic projection, a 2030 scenario will be modeled using as inputs that projection and the transportation network that exists today. This scenario will be called the no-build scenario, because it does not contain any future transportation improvements. It will be used as a baseline in comparing the effects of alternative sets of transportation improvements in build scenarios.

Build Scenarios

Using the regional travel model, the MPO will compare alternative future transportation networks in order to evaluate the relative benefits of different transportation investments. The projects to be assessed will be selected from a universe of projects developed during the MPO's public outreach for JOURNEY TO 2030. Each project will be evaluated in terms of the MPO's policies in these areas:

- System preservation, modernization, and efficiency
- Mobility
- Environment
- Safety and security
- Regional equity
- Land use and economic development

JOURNEY TO 2030 Transportation Plan

The final, fiscally constrained group of projects chosen for the transportation plan will be modeled to demonstrate its effect on air quality and on the provision of transportation serving low-income and minority populations.

DCR Presents Options for Storrow Drive Tunnel Reconstruction

The Department of Conservation and Recreation (DCR) held a round of public meetings at the end of March to present four alternatives for the reconstruction of the Storrow Drive tunnel in Boston.

Because of its deteriorating concrete, corroding steel beams, and leaking roof, the 55-year-old tunnel, which currently processes 67,000 eastbound vehicles on an average weekday, needs to be rehabilitated or replaced.

The options currently under consideration are to:

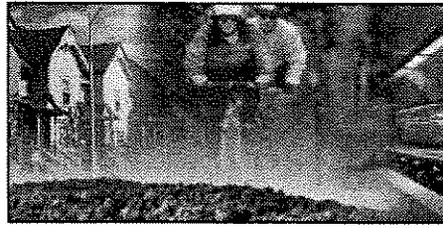
- Rebuild the tunnel and maintain the current tunnel and roadway configuration
- Remove the tunnel and replace it with a surface road
- Rebuild the existing tunnel and add a second tunnel for westbound traffic, thereby increasing the size of the adjacent park and improving pedestrian access to the park from the Back Bay
- Rebuild the existing tunnel, add a second tunnel for westbound traffic, and construct a signalized surface roadway for access between Storrow Drive and the Back Bay

The estimated costs of the options vary from \$35 million to \$135 million, and construction durations vary from 18 to 48 months. Regardless of which option is ultimately selected, residents and commuters can expect significant disruptions during construction. However, recent improvements resulting from the Central Artery/Tunnel project are expected to reduce the delays during construction.

DCR officials anticipate that the completed project will have positive impacts on the adjacent parkland along the Charles River, including improved pedestrian access between the park and adjoining neighborhoods.

DCR plans to hold open houses in October 2006 to present refined versions of the reconstruction options outlined in March. For additional information, visit DCR's Web site, www.mass.gov/dcr.

A Smart-Growth Update



2006 Commonwealth Capital Program Awards

The Commonwealth of Massachusetts has continued to show its commitment to "smart growth" development in the state by awarding \$516.5 million in fiscal year 2006 Commonwealth Capital program funds to build housing near public transit, improve water quality and sewer service, and upgrade transportation and environmental infrastructure.

Municipalities awarded funding in March within the Boston Region MPO include:

- The City of Boston, which received a total of \$6.05 million in grants for mixed-use housing and retail projects at Ashmont Station, Adams Court, and Dudley Village, as well as funding for the Long Glen Home Ownership Project
- The City of Chelsea, with an award of \$3.06 million to support the Atlas/Janus Rental Housing project and the Atlas Home Ownership project
- The Town of Cohasset, which received \$40,000 to maintain and protect land around Lily Pond, the town's drinking water source.

- The City of Lynn, with an award of \$500,000 to construct pedestrian improvements on Munroe Street

Applications for these funds, which are administered by the Office for Commonwealth Development, need to include detailed descriptions of initiatives to produce more housing or to change local zoning rules to promote smart-growth principles. The awards—\$15.5 million in grants and \$501 million in low-interest loans—are part of a program initiated by the Commonwealth to distribute state funding for these types of proposals in a targeted fashion. More than 260 cities have participated in the program since its creation in 2003.

For more information about the Commonwealth Capital program, or to see a complete statewide list of awards, visit www.mass.gov/ocd.

Comments Sought on Transit-Oriented Development Program

In related news, OCD is seeking comments on the recent Transit-Oriented Development Infrastructure and Housing Support Program funding round. Copies of the 2006 program guidelines and application materials are available at www.mass.gov/ocd, or by contacting Jane Healey at (617) 573-1388 or jane.healey@state.ma.us. All written comments are due by May 5, 2006.

Celebrations Planned for National Transportation Week, National Bike Month, and National Maritime Day

National Transportation Week, which was established to promote greater awareness of the importance of transportation, will be celebrated from May 14 to May 20. Stop by the displays at the State Transportation Building, and log onto www.ntweek.org for more information about events in the New England area.

May is National Bike Month, and the Massachusetts Bicycle Coalition has planned a full calendar of activities between May 13 and May 21, which is also known as Massachusetts Bike Week.

Log onto www.massbike.org/events/bw/calendar.htm for information about events such as the Bike to Work Commuter Challenge, a pancake breakfast, and a "green building" bicycle tour.

On May 22, which is National Maritime Day, events are scheduled at seaports and inland waterways to commemorate the people in the nation's maritime industry. For more information, visit the U.S. Maritime Administration Web site at www.marad.gov.

MEETING CALENDAR

The public is welcome to attend the following transportation-related meetings. A photo ID is usually required for access to meeting sites.

AT THE STATE TRANSPORTATION BUILDING, 10 PARK PLAZA, BOSTON

Thursday, May 4
Boston Region MPO Transportation Planning and Programming Committee and Transportation Improvement Program Agency Input Day 10:00 A.M.
 MPO Conference Room Suite 2150

Wednesday, May 10
Regional Transportation Advisory Council Freight Committee: Tour of the International Cargo Center and Massport Marine Terminal 12:30 P.M.
 Board bus at the Charles Street entrance to the building
 To RSVP, contact Bill Moore at (617) 973-7144 or bill.moore@ctps.org.

Regional Transportation Advisory Council 3:00 P.M.
 Conference Room 4

Thursday, May 18
Boston Region MPO Unified Planning Work Program Committee 9:15 A.M.
 MPO Conference Room Suite 2150

Boston Region MPO Transportation Planning and Programming Committee 10:00 A.M.
 MPO Conference Room Suite 2150

Boston Region MPO Suburban Mobility/Transportation Demand Management Committee 2:00 P.M.
 MPO Conference Room Suite 2150

Monday, May 22
MBTA Rider Oversight Committee 4:15 P.M.
 Conference Rooms 1, 2, and 3

Wednesday, May 24
Access Advisory Committee to the MBTA 1:00 P.M.
 Conference Room 2

Thursday, June 1
Boston Region MPO Transportation Planning and Programming Committee 10:00 A.M.
 Conference Room 4

Call (617) 222-5179 for date
MBTA Board of Directors 1:00 P.M.
 Conference Rooms 2 and 3

AT OTHER BOSTON AREA LOCATIONS

Monday, May 8
Engineering the Road Ahead: The Completed Central Artery/Tunnel Project 8:00 A.M.
 The Federal Reserve Bank
 600 Atlantic Avenue, Boston
 To RSVP, call (617) 439-7700 or e-mail symposium@conventures.com.

Tuesday, May 9
Charles River Basin Citizens Advisory Committee 4:00 P.M.
 Wilmer Cutler Pickering Hale and Dorr
 Hale Room, 26th Floor
 60 State Street, Boston

Wednesday, May 17
Boston Region MPO Candidates Night 7:30 P.M.
 Braintree Town Hall
 One John F. Kennedy Drive, Braintree

Wednesday, May 24
Boston Region MPO Election and Metropolitan Area Planning Council Spring Meeting 9:00 A.M.
 Boston Marriott Burlington Hotel
 One Mall Road, Burlington
 (Route 128 and Route 3A)

Meeting dates and times are subject to change; please call (617) 973-7119 for confirmation. Additional transportation meetings open to the public are listed on the Boston Region MPO Web site, www.bostonmpo.org.

■ Accessibility Agreement cont. from p. 2
 bus and subway services accessible and for improving training and customer assistance involving people with disabilities

• Monitoring compliance through a court-appointed monitor and ongoing undercover surveillance of bus services

The agreement was reached after BCIL, GBLS, and the MBTA conducted joint research on key areas of concern and worked together to identify improvements, a process that has already heightened awareness of disability issues at the MBTA. A public hearing on the settlement will be held on June 15 before U.S. District Judge Morris E. Lasker.

TRANSREPORT

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TRANSREPORT is available in accessible formats to people with disabilities. Contact the Central Transportation Planning Staff Certification Activities Group at (617) 973-7119 (voice), (617) 973-7089 (TTY), (617) 973-8855 (fax), or publicinformation@bostonmpo.org (e-mail).

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