JOURNEY TO 2030 Universe of Projects List To Date

D R A F T

Section 1: Recommended Highway Projects Included in the 2004 RTP

Note: If new cost estimates since the 2004 RTP or 2003 PMT were not available, project costs were inflated at a rate of 3 percent and rounded.

#	Community	Project	Description	Cost	Notes
1	Bedford, Burlington and Billerica	Middlesex Turnpike Improvements	Middlesex Turnpike will be widened by one travel lane in each direction with a raised median from the Burlington town line in Bedford to Manning Road in Billerica.	$16,000,000	The cost reflects the remaining two phases of the project.
2	Beverly to Peabody	Route 128 Capacity Improvements	This project will address safety problems, congestion, and traffic flow on Route 128 from Interstate 95 in Peabody to Brimbal Avenue in Beverly. The initial stage of the project will be a detailed evaluation of all alternatives.	$68,000,000	
3	Boston	East Boston Haul Road/Chelsea Truck Route	Construct a bypass road, utilizing an unused CSX rail right-of-way, that will be an exclusive truck route from Frankfort Street to the Chelsea Street Bridge. The proposed road will run under the Frankfort Street down-ramp and McClellan Highway (Route 1A) overpass, turn right under Neptune Road in the CSX right-of-way between Bremen and Saratoga Streets, pass under the Curtis Street overpass, and connect to Chelsea Street south of the Chelsea Street Bridge. The bypass road will cross over the MBTA's Blue Line tunnel at the intersection of Frankfort and Lovell Streets. This bypass road will be designed for use by Logan air cargo industry freight trucks, rental cars, Park n' Fly buses, and MBTA buses.	$20,000,000	
4	Boston	Route 1A/Boardman Street Grade Separation	Design and construct an interchange to replace the existing traffic signal at Route 1A/Boardman Street. Project includes the relocation of Boardman Street in East Boston approximately 400 feet of the existing location. Additional design features may include Route 1A widening in the vicinity of the interchange. Project will improve traffic safety and traffic flow at this location.	$10,000,000	
5	Boston	Rutherford Avenue	The Rutherford Avenue Corridor Transportation Study contains a design to reconstruct Rutherford Avenue consisting of two components: • A new four-lane bypass road adjacent to the Interstate 93 viaduct for traffic diverted from City Square, with underpasses at the Gilmore Bridge and at Cambridge Street at Sullivan Square • A four-lane roadway for local Charlestown traffic The project includes a redesigned Sullivan Square to accommodate the bypass road connection to Route 99.	$75,000,000	
6	Boston to Newton	Double-Stack Initiative	All bridges crossing over the CSX rail line from Beacon Yards to Route 128 will be raised to accommodate double-stack freight trains.	$20,000,000	
7	Canton	I-93/I-95 Interchange	Components of the Interstate 95/Interstate 93 interchange project are: • Replacement of the I-95 northbound entrance ramp with a direct connector ramp • Construction of a new entrance ramp from University Avenue to I-93 northbound, including the discontinued use of the Green Lodge Street Bridge west of Elm Street • Construction of a realigned, two-lane direct connection between Route I-93 southbound and I-95 southbound, including a new ramp to Blue Hill Drive • Construction of a realigned, two-lane, direct connection from I-95 northbound to I-93 northbound.	$31,000,000	
8	Canton	I-95 Northbound/Dedham Street Ramp and Bridge	Construct a new ramp from Interstate 95 northbound to Dedham Street in Canton and widen Dedham Street over I-95. This will complement the benefits of the recently completed construction of the Dedham Street/I-95 southbound ramp by providing direct access to the town of Canton and the town of Westwood's University Avenue industrial area.	$3,500,000	
9	Concord	Concord Rotary/Route 2	Grade separation of the Route 2, Route 2A, Barrett Mill Road, and Commonwealth Avenue traffic movements. Project will improve safety and reduce delays at this location.	$17,000,000	
10	Concord and Lincoln	Route 2/Crosby's Corner Grade Separation	Realign the section of Route 2 between Bedford Road and Crosby's Corner to the north and convert it into a limited-access roadway. The existing Route 2 alignment will serve as a frontage road, providing access to the adjacent homes and businesses. The newly aligned Route 2 will include two 12-foot travel lanes, separated by a Jersey barrier median strip, and a 10-foot paved shoulder, in each direction. A new bridge will be constructed to carry Route 2 traffic uninterrupted over the Crosby's Corner intersection.	$31,000,000	

Section 1: Recommended Highway Projects Included in the 2004 RTP (cont.)

#	Community	Project	Description	Cost	Notes
11	Danvers and Peabody	Route 1/Route 114 Corridor Improvements	The project includes the addition of a third travel lane in each direction and eliminates the center turn lane on Route 114 between the intersection of Watson Parkway and just east of the Boston and Maine Railroad bridge that crosses over Route 114. Also included in the design concept is the total reconfiguration of the Route 1/Route 114 interchange by creating a modified diamond design. Additional southbound on- and off-ramps between Route 114 and Interstate 95 will be constructed to create a full	$45,000,000	
12	Everett, Malden, and Medford	Telecom City Boulevard	Construct a two-lane, median-divided roadway between Santilli Highway in Everett and Corporation Way in Medford, with a bridge across the Malden River. This new road will link the entire TeleCom City development project, located on both sides of the river, into one unified campus. Santilli Highway and Route 16 in Everett will provide primary vehicular site access; Corporation Way will also provide access from the west side of the campus. The new road, TeleCom City Boulevard, will accommodate public traffic and will improve access between the three communities.	$15,000,000	
13	Everett, Medford, and Revere	Route 16 (Revere Beach Parkway)	Widen Route 16 where necessary to provide a continuous six-lane mainline parkway cross-section between Route 38 in Medford and Sweetser Circle in Everett, except for a four-lane segment in the vicinity of Wellington Circle. Wellington Circle will be replaced with a tight single-point diamond interchange, under which the four-lane section of Route 16 would pass. At the western limit of the project, the Interstate 93, Route 38, and Route 16 ramps will be realigned and relocated where necessary and additional ramps will be constructed. The connection between I-93 and Route 38 will be realigned and reconstructed by switching the I-93 southbound on-ramp and off-ramp, so that the current on-ramp becomes the off-ramp and vice versa. In addition, the on-ramp and off-ramp from Route 38 to I-93 northbound will be relocated to a new grade-separated interchange and combined with a new connection from Route 16 directly onto I-93.	$90,000,000	
14	Framingham	Route 126/Route 135 Grade Separation	Construction of a below-grade underpass (one lane in each direction) on Route 126 beginning on the north at Park Street and on the south near Irving Street. It will pass beneath the MBTA rail crossing and Route 135. Travel lanes will also be maintained at grade at the Route 126/Route 135 intersection with an upgraded signal.	$62,000,000	
15	Framingham	Route 9/Route 126 Interchange	Improve the existing interchange at Route 9 (Worcester Road) and Route126 (Concord Street). The Route 126 bridge is listed in the Statewide Road and Bridge list and its reconstruction would be a major element of this project.	$17,000,000	
16	Framingham to Worcester	Double-Stack Initiative	All bridges crossing over the CSX rail line from Framingham to Worcester will be raised to accommodate double-stack freight trains.	$8,000,000	
17	Hanover	Route 53	Route 53 is widened from Mill Street to Rawson Road from the existing 32-foot cross section to a 66-foot cross section with two lanes in each direction and a center turn lane. A 4-way intersection will be realigned to include Pond Street, Route 53 and Washington Street.	$5,100,000	Note: This project is included in the FY 2006 element of the FY 2006-2010 TIP. It is also included in the 2030 No-Build Network.
18	Lynnfield to Reading	Route 128 Capacity Improvements	This project will address safety problems, congestion, and traffic flow in the corridor. The initial stage in this process will be a detailed evaluation of all alternatives for moving additional persons in this corridor. If existing safety problems are reported, implementation of improvements may be done in phases in order to address more immediate concerns first.	$55,000,000	
19	Malden and Revere	Route 1 Improvements	Widen Route 1 from four to six lanes between Copeland Circle (Route 60) and Route 99. As part of this project, the on- and off-ramps at Salem Street and Lynn Street will be reconstructed to provide acceleration/deceleration lanes, better turning radii, and full turning movements. Also, the connection between Route 99 and Route 1 will be improved by providing a normal right lane merge from Route 99 northbound to Route 1 northbound.	$38,000,000	

Section 1: Recommended Highway Projects Included in the 2004 RTP (cont.)

#	Community	Project	Description	Cost	Notes
20	Marlborough and Hudson	I-495/I-290/Route 85 Connector Interchange	Interchange improvements at the junction of I-495 and I-290 include the construction of a flyover ramp from I-495 northbound to I-290 westbound and a flyover ramp from I-290 eastbound to I-495 northbound. Also as part of this project, the Route 85 Connector Road will be will be widened from two lanes to four lanes from I-495 to Fitchburg Street. Improvements to Route 85 and to intersections along Celluci Highway and Route 85 will also be performed.	$32,000,000	
21	Natick to Wellesley	Double Stack Initiative	All bridges crossing over the CSX rail line from Natick to Wellesley will be raised to accommodate double-stack freight trains.	$20,000,000	
22	Newton and Needham	Needham Street/Highland Avenue	Widen Needham Street to a four-lane cross section (two lanes in each direction) from the Needham Street/Winchester Street/Dedham Street intersection in Newton to the bridge over the Charles River at the Needham town line. The Highland Avenue portion of the project will improve the geometry of the roadway from the Highland Avenue/Webster Street intersection in Needham to the Newton town line. Work will include upgrades and the installation of traffic signals at five intersections. The project will also include the reconstruction of the bridge over the Charles River to accommodate the upgrade in travel lanes.	$7,500,000	
23	Quincy	Burgin Parkway	Build a flyover to separate Burgin Parkway from Centre Street and improve access from Interstate 93 to the Crown Colony Area.	$18,000,000	Note: This project is included in the FY 2006 element of the FY 2006-2010 TIP. It is also
24	Quincy	Quincy Center Concourse, Phase 2	This project continues work from Phase One, which was the construction of a bridge over the MBTA tracks between Burgin Parkway and Parking Way and a new roadway between Parking Way and Hancock Street. Phase 2 of this project consists of the realignment of Revere Road between Hancock Street and Mechanic Street. The new two-lane roadway is proposed as a one way route in the westbound direction to the intersection of Hancock Street.	$7,000,000	
25	Reading and Woburn	I-93/I-95 Interchange	Improve safety at the junction of Interstate 93 and Interstate 95. MassHighway is currently working with an advisory task force to conduct a study that will evaluate and address transportation issues in the interchange corridor through the towns of Reading and Stoneham and the city of Woburn. A full range of alternatives, including interchange improvements and non-highway options, will be developed and analyzed as the study progresses. A recommended plan of future transportation improvements (short-term and long-term), based on the alternatives and community input, will be the product of this study.	$30,000,000	Note: EOT/MassHighway is undertaking extensive public outreach for input into its study for this project. Milestones of this outreach effort can be viewed at www.9395info.com.
26	Revere	Mahoney Circle Grade Separation	Grade separation of Route 60 and Route 1A at Mahoney Circle. Project will improve safety and reduce congestion at the intersection of Route 1A with Route 60.	$30,000,000	
27	Revere	Route 1/Route 16 Interchange	Provide a direct connection from Route 1 southbound to Route 16 eastbound and from Route 16 (Revere Beach Parkway) westbound to Route 1 northbound. The improvements include a signalized double left-turn lane from Route 1 southbound onto Route 16 eastbound and a standard on-ramp from Route 16 westbound to Route 1 northbound.	$4,500,000	
28	Revere	Route 1A/Route 16 Connection	Realign Route 16 (Revere Beach Parkway) and its junction with Route 1A to the south, placing a three-fourths-cloverleaf interchange at the northwest corner of Suffolk Downs. A new signal will be installed on Route 16 providing left turns from Route 1A southbound to Route 16 eastbound. A traffic signal will be installed at the intersection of Route 16 and Winthrop Avenue (Route 145) and the current alignment of Route 16 will be closed north of Route 145 and be converted into a linear park.	$45,000,000	
29	Salem	Boston Street	Boston Street will be widened to three lanes between Route 107 and the Peabody city line to include a center turning lane.	$2,500,000	
30	Salem	Bridge Street	Bridge Street (Route 1A) from Flint Street to the Washington Street Rotary will be widened to two lanes in each direction. The project will also include the reconstruction of the Washington Street rotary.	$3,500,000	

Section 1: Recommended Highway Projects Included in the 2004 RTP (cont.)

#	Community	Project	Description	Cost	Notes
31	Somerville	I-93/Mystic Avenue Interchange	Construct a new underpass grade separating Route 28 northbound and convert the existing underpass to the exclusive use of Route 28 southbound. In addition, a new connector road will be constructed between Mystic Avenue and Middlesex Avenue and the Interstate 93 northbound offramp will be reconstructed to permit the connector road to have access to the Assembly Square Mall area. The Route 28 surface street system will operate in a one-way rotary-style system controlled by four coordinated traffic signals—one more than currently exists. Three other locations will also be coordinated with the four signals mentioned above: the Route 28/Assembly Square Mall entrance, the Mystic Avenue/Wheatland Street intersection, and the Middlesex Avenue/Assembly Square Connector.	$55,000,000	
30	Weymouth, Hingham, and Rockland	S. Weymouth Naval Air Station Access Improvements	The primary benefit of this project is the facilitation of a significant economic development opportunity related to reuse of the Naval Air Station. To support this reuse, as the final plan evolves, transportation improvements will be coordinated and alternatives will be evaluated as part of the ongoing Environmental Impact Review (EIR). The EIR will include alternatives such as new roadway connections between the air station, Route 18, and Route 3, the construction of a regional intermodal facility, and improved bicycle and pedestrian connections. The project(s) identified in the final EIR will be considered for funding as part of the Regional Transportation Plan.	$85,000,000	East-West Boulevard and other connections currently proposed
31	Weymouth	Route 18 Capacity Improvements Project	Widen Route 18 to two continuous lanes in each direction (with four-foot shoulders) between Route 3 in Weymouth and Route 139 in Abington. Sidewalks will also be constructed. The Route 18 bridge over the MBTA Old Colony Line (to Plymouth) will be reconstructed and widened. Intersection improvements (including additional left- and right-turn lanes and some roadway widening between intersections) on Route 18 at West Street, Park Avenue, Columbian Road, and Pond and Pleasant Streets are being constructed as separate projects.	$21,000,000	
32	Weymouth to Duxbury	Route 3 South Additional Lanes	Widen Route 3 from two lanes in each direction to three lanes in each direction from Weymouth to Duxbury. The project also involves design improvements to the interchange ramps at Route 53 in Hanover, Route 139 in Pembroke, and Route 228 in Rockland.	$200,000,000	
31	Wilmington	I-93/Ballardvale Street Interchange	Reconstruction of the existing ramps at I-93 and the construction of new ramps to I-93 in the northeast and southeast quadrants. Route 125 will also be reconstructed in the vicinity of the interchange and the intersection between Route 125 and Ballardvale Street will be altered.	$17,000,000	Note: This project is partially under construction. Route 125 will be widened between Ballardvale Street and I-93 to accommodate a new northbound ramp from I-93 to Route 125. This project is included in the 2030 No-Build Network.
32	Wilmington and Reading	I-93/Route 129 Interchange Improvement Project	Reconstruct the Interstate 93/Route 129 (Lowell Street) interchange by: • Constructing elevated slip ramps connecting I-93 northbound and southbound to Route 129 eastbound and westbound • Widening the existing Route 129 bridge over I-93 • Widening the existing Route 129 bridge over the Boston-Maine Railroad • Relocating the intersection of Route 129 and West Street and realigning the intersection of Woburn Street and Route 129 • Upgrading the signals at the intersections of Route 129/West Street and Route 129/Woburn Street • Widening Route 129 from two lanes to four lanes from the I-93 interchange to Woburn Street, a distance of approximately one mile.	$17,000,000	
33	Woburn	New Boston Street Bridge	Construct a bridge on New Boston Street at the northern end of the Woburn Industrial Park where New Boston Street crosses the MBTA Lowell Branch commuter rail line.	$2,500,000	

Section 2: Recommended Transit Projects Included in the 2004 RTP

#	Community	Project	Description	Cost	Notes
34	Boston	Restore Green Line Service between Heath Street and Arborway	This project would restore service on the Green Line E-branch between Heath Street and Arborway, a distance of 1.9 miles. Rail service in this segment was last operated in 1985 with PCC streetcars. The infrastructure would need to be replaced and upgraded to allow for operation of modern light-rail equipment. Restoration would include replacement of track, replacement of catenary and power systems, installation of accessible station platforms at intermediate stops, and construction of a storage yard at Arborway. This project is currently a SIP and ACO legal commitment.	$95,000,000	Alternative could be signal prioritization to transit vehicles along the Arborway Corridor
35	Boston	Blue-Red Connector	This project would extend the Blue Line from Bowdoin Station in Boston to the Charles/MGH Red Line Station via a new subway, allowing a direct transfer between these lines. The Blue-Red Connector is a SIP, CA/T, and ACO legal commitment.	$222,000,000	Red-Blue Connector possibly part of the North Shore Transit Improvements, also could be a pedestrian connection.
36	Boston	Ferry Expansion: Russia Wharf/South Station	This project will implement a new ferry route at Boston Inner Harbor. This project includes the construction of Russia Wharf and the capital costs of two new ferries to provide service to and from the wharf.	$4,000,000	Cost includes the construction of Russia Wharf ($2,200,000) and the capital costs of two new ferries to provide service to and from the wharf ($1,800,000). The legal commitment of the Commonwealth is the construction of the Wharf only. The MPO is carrying the cost of the Wharf in the 30% expansion category and assigned to the CA/T Project as per an Interagency Agreement with the MBTA. Service would be provided by others.
37	Cambridge, Somerville and Medford	Green Line to Medford Hillside	This project would extend Green Line service from Lechmere Station to Medford Hillside partly via an existing rail freight line and partly beside the Lowell commuter rail line. It would be an alternative to a Blue Line extension to West Medford as proposed in the PMT. A Green Line extension to Medford Hillside is a SIP, CA/T, and ACO legal commitment.	$458,000,000	$100,000,000 needed for maintenance facility
38	Boston	Fairmount Line Improvements	This project would upgrade service on the Fairmount commuter rail line by adding new stations on the existing route and by increasing frequency of service.	$72,500,000	
39	Boston	Silver Line Phase III: South Station - Boylston Connector	This project would construct a new transitway tunnel from South Station to New England Medical Center station with intermediate stops at Boylston and Chinatown stations. The segment would link Phase 1 of the Silver Line, which runs between New England Medical Center and Dudley, with Phase 2 from South Station to Logan Airport via the World Trade Center. The Phase III segment would also allow for direct transfers from all segments of the combined Silver Line with the Red Line, Orange Line, and Green Line. Silver Line Phase III is an ACO legal commitment.	$750,000,000	
40	Boston, Chelsea, Everett, Somerville, Cambridge and Brookline	Urban Ring Phases 1 & 2	The Urban Ring is a multi-phase project. Three phases have been defined and each phase will be additive; that is each new service will add capacity to previous improvements-not replace them. Phase 1 of the Urban Ring consists of a significant expansion in the number of routes and reach of the Crosstown (CT) bus route network within Boston, Brookline, Cambridge, Chelsea, Everett, and Somerville, and the addition of new Express Commuter (EC) service to provide single seat radial and crosstown service from suburban locations into the Urban Ring corridor communities. Phase 1 bus routes will utilize 100 40-foot low-floor CNG powered buses. Maintenance facilities must be expanded to accommodate these vehicles. Phase 2 of the Urban Ring builds upon the bus routes of Phase 1 by adding seven Bus Rapid Transit (BRT) routes through the Urban Ring corridor. Some of the BRT routes in Phase 2 would be new and others would be modified or upgraded versions of Phase I bus routes. Phase 2 would utilize 60' articulated low-floor, low emission buses, segments of exclusive busway, Intelligent Transportation System (ITS) features, and supporting elements to improve connections with radial transit and commuter rail lines. Among the supporting elements would be new or expanded commuter rail stations at Downtown Chelsea, Sullivan Square, Gilman Square, Union Square, Yawkey, Ruggles, and Uphams Corner.	$1,000,000,000	

Section 2: Recommended Transit Projects Included in the 2004 RTP (cont.)

#	Community	Project	Description	Cost	Notes
41	Regionwide	Purchase 100 New Buses	The proposal calls for expanding the MBTA bus fleet by 100 vehicles. These additional buses would allow for improved service frequencies. Routes projected to receive increased service are those with crowding problems, as well as routes operating infrequent service through neighborhoods with high density and high transit dependent populations. Service would be improved in both the peak and off-peak.	$40,000,000	
42	Somerville	Construct Orange Line Station at Assembly Square	This project would add a station on the existing Orange Line at the Assembly Square development in Somerville, between Sullivan Square Station in Charlestown and Wellington Station in Medford.	$34,000,000	
43	Boston, Revere, Saugus and Lynn	North Shore Transit Improvements	This project would extend the Blue Line rapid transit line 4.5 miles from Wonderland Station in Revere to Central Square, Lynn. The alignment would either be parallel to the Newburyport/Rockport commuter rail line or it would make use of the abandoned narrow gauge right of way through Oak Island Center and Point of Pines Center. The MBTA is currently evaluating these options as part of its Draft Environmental Impact Statement (DEIS) for the Revere to Salem corridor. The DEIS will provide additional details on the relative benefits of each alignment. The extension would also include a crossing of the Saugus River, which is a navigable waterway. Consequently, a bridge there would need to accommodate both large vessels on the river and high-frequency rapid transit service.	$527,000,000	

Section 3: Additional Highway Projects Not Included in the 2004 Regional Transportation Plan

#	Community	Project	Description	Cost	Notes
44	Boston	Fenway Park Improvements	Transportation improvements to highways and transit near Fenway Park in Boston to include: • Roadway improvements to the Sears Rotary, Ipswich Street, Maitland Street, Francis Street, Brigham Circle, and Yawkey Way • Planning, design, and construction of traffic management equipment in the study area to be incorporated into Boston's traffic management center • Study to investigate the improvement of traffic flow in and around the area • Enhancements to the MBTA's Fenway, Kenmore, Longwood, and Ruggles Stations • Improvements to make Yawkey a full-time station	$30,000,000	
45	Salem	Commercial Street/Tremont Street	Construct a new Commercial Street connection from Tremont Street to Mason Street in Salem.	$700,000	
46	Salem	Essex Street Conversion	This project would convert Essex Street from a pedestrian mall to a through street.	$2,000,000	Note: This project is currently in preliminary design
47	Marlborough and Northborough	Boundary Street/Goddard Street	The project consists of complete roadway reconstruction to accommodate two travel lanes and two paved shoulders on an improved alignment. The Boundary Street work in Marlborough starts from the intersection at Route 20 to the intersection at Robin Hill Street. The Goddard Road work in Northborough consists of full reconstruction from the intersection of Marlborough Street.	$3,000,000	Note: This project would directly affect surrounding wetlands during construction.
48	Wellesley to Woburn	I-95/Route 128 Capacity	Construct an HOV facility between Wellesley and Woburn.	TBD	
49	Burlington	Route 3A	This project would widen Route 3A from Route 128 North to Bedford Street and include grade changes and sight distance improvements.	$3,500,000	
50	Wilmington, Tewksbury, and Andover	Lowell Junction	The construction of a new highway interchange on I-93 between Exit 42 (Dascomb Road) and Exit 41 (Route 125). The purpose of the project would be to provide improved access from I-93 to the industrial and office properties in the Lowell Junction area. The project would also connect to a planned extension of Burtt Road to Ballardvale Street. Three different alternatives for the interchange have been studied (partial interchange, diamond interchange, and partial cloverleaf).	Depending on the alternative chosen: $5,400,000 to $10,700,000	
51	Boston and Chelsea	Route 1A/ Chelsea Street Bridge Connection	Design and construct a fly-over connection between Route 1A and the new Chelsea Street Bridge. This project will reduce congestion at Day Square in East Boston, which all Chelsea-bound traffic now uses, particularly for trucks going to and from Logan Airport.	$40,000,000	Note: This project was included in the Universe of Projects for the 2004 transportation Plan. The East Boston Haul Road/Chelsea Truck Route addresses the same area and is included in the 2004 Plan. Since that time a number of designs have been studied to relieve congestion East Boston and Chelsea area. A new concept is being reviewed and is included as the Enhanced Haul Road in Boston and Chelsea. A description is included in this Universe list under the Projects Identified Through Planning Efforts section.[1]
52	Littleton	Route 2 Interchange	Construct a new interchange at Route 2 and I-495. This project would provide improved access to the proposed new MBTA commuter rail station in Littleton.	$12,000,000	Note: This project was dropped by EOT due to environmental concerns.[1]

Section 4: Additional Transit Expansion Projects as Identified in the PMT

#	Community	Project	Description	Cost	Notes
53	Boston	Silver Line Extension to Ashmont and Mattapan	This project would extend Silver Line bus rapid transit service beyond Dudley station to Ashmont and Mattapan. Service would follow Warren Street from Dudley to Grove Hall, and would then split into two branches. One branch would be 4.4 miles in length (including the segment between Dudley and Grove Hall) and continue on Blue Hill Avenue to Mattapan station, and the other would be 3.5 miles long and continue along Washington Street to Ashmont. These branches would replace present MBTA bus Routes 23 and 28. Bus priority lanes and sheltered stops containing passenger information would be constructed along the route. ITS technology would be used to monitor and regulate service.	$50,000,000	Note: This project is listed as an "Illustrative Project" in the 2004 RTP.
54	Boston, Chelsea, Everett, Somerville, Cambridge and Brookline	Urban Ring Phase 3	The Urban Ring is a multi-phase project. Three phases have been defined and each phase will be additive; that is each new service will add capacity to previous improvements-not replace them. Phase 3 of the Urban Ring adds a new Urban Ring rail system between the Orange Line at Assembly Square and Dudley Square operating through Sullivan, Lechmere, Kendall Square, MIT, Boston University, Longwood Medical Area, and Ruggles. Light rail or heavy rail technology would be utilized.	$2,600,000,000	Note: This project is listed as an "Illustrative Project" in the 2004 RTP.
55	Regionwide	Suburban Commuter Rail Feeder Bus Services	This project would implement new feeder bus services to several suburban commuter rail stations that currently have no transit service connections.	$9,000,000	
56	Stoughton to New Bedford and Fall River	Commuter Rail to New Bedford/Fall River	This project would extend commuter rail service from the end of the Stoughton Line via a combination of inactive and active rail freight routes to Fall River and New Bedford. Rail passenger service to Boston from Fall River and New Bedford was last operated in 1958.	$720,000,000	Note: Outside MPO area
57	Somerville	New Commuter Rail Station at Union Square	This project would add a new commuter rail station on the Fitchburg commuter rail line near Union Square in Somerville, between the existing Porter Square Station in Cambridge and North Station in Boston. A previous Union Square station was discontinued in 1938.	$5,000,000	
58	Boston, Somerville and Medford	Extend Blue Line from Bowdoin to West Medford	This project would extend Blue Line service from Bowdoin Square in downtown Boston to West Medford via a new subway to Lechmere, then partly via an existing rail freight line and partly beside the Lowell commuter rail line. It would be an alternative to a Green Line extension to West Medford.	$800,000,000	
64	Lynn, Swampscott and Salem	Extend Blue Line from Lynn to Salem	This project would continue the proposed Lynn extension of the Blue Line 5 miles further north to Salem. The Blue Line would be constructed parallel to the Newburyport/Rockport commuter rail line, and the terminus would likely be placed south of the existing portal at the south end of the commuter rail tunnel under Downtown Salem. An intermediate stop would be located at Swampscott. The MBTA is currently evaluating this project as part of its Draft Environmental Impact Statement (DEIS) for the Revere to Salem corridor. It should be noted that this extension of the Blue Line is intended to complement– not replace – existing commuter rail service to the North Shore.	$420,000,000	
65	Boston	Silver Line West Extensions to Allston and Longwood Medical Area	This project calls for the construction of a new bus rapid transit tunnel which would split from the Phase III Silver Line tunnel near Boylston station and continue under Stuart Street and a new alignment to Kenmore Square. From Kenmore, service would continue along the surface on two branches. One would operate to the Longwood Medical Area, and the other would operate to Oak Square, Brighton via the Allston Landing development, Union Square, Allston, and Brighton Center. It should be noted that through its *Access Boston* process, the city of Boston has identified an alternative description for a western extension of the Silver Line that could be achieved at a lower capital cost. This option would involve bus rapid transit along surface streets and the Massachusetts Turnpike through the Back Bay instead of through an underground subway line. However, only the first option is assessed in the PMT.	$630,000,000	

Section 4: Additional Transit Expansion Projects as Identified in the PMT (cont.)

#	Community	Project	Description	Cost	Notes
66	Cambridge	Build New Busways to Alewife Station	This proposal calls for the installation of exclusive bus lanes between Alewife Station and Massachusetts Avenue along Alewife Brook Parkway and between Alewife Station and Lake St. along Route 2. These lanes would improve travel times for bus Routes 62 (Bedford-Alewife), 67 (Turkey Hill-Alewife), 76 (Hanscom Air Force Base-Alewife), 79 (Arlington Heights-Alewife), 84 (Arlmont-Alewife), and 350 (Burlington-Alewife).	$400,000	
67	Boston	Build A New Allston/Brighton Commuter Rail Station	This project would add a new commuter rail station on the Framingham/ Worcester commuter rail line in either Allston or Brighton. It would be between the existing Newtonville and Yawkey stations. Four previous commuter rail stations in Allston and Brighton were all discontinued in 1959 as part of a larger service reduction.	$5,000,000	
68	Westborough	Build Commuter Rail Station on I-495 in MetroWest Area	This project would add a new station on the Framingham/Worcester commuter rail line at Route I-495 in Westborough, between the existing Westborough and Southborough Stations. Both of those stations opened in 2002. Previous commuter rail stations in both towns had been discontinued in 1960.	$130,000,000	Note: Outside MPO area
69	Framingham to Leominster	Commuter Rail Line from Framingham to Leominster	This project would implement passenger service on an existing rail freight line that connects with the Framingham/Worcester Line at Framingham Station. Passenger service was last operated on the southern end of this route in 1937, and on the remainder in 1931. The MBTA completed work in 2001 on a feasibility study that examined a commuter rail extension from Framingham to Northborough. That study provides detailed cost and ridership information for that segment of this larger service corridor.	$440,000,000	Note: Construction would continue outside of MPO area.
70	Salem and Danvers	Commuter Rail Line from Salem to Danvers	This project would implement passenger service on a combination of active and inactive rail freight lines from Salem Station on the Newburyport/Rockport Line through Peabody to Danvers. Passenger service was last operated on this line in 1959. This project is currently being evaluated in the North Shore Major Investment Study which will provide more detailed information about its impacts.	$65,000,000	
71	Needham, Dover, Medfield and Millis	Commuter Rail Line from Needham Junction to Millis	This project would implement passenger service on an existing rail freight line from Needham Junction Station on the Needham Line to Millis. Passenger service was last operated on this line in 1967.	$150,000,000	
72	Fitchburg to Gardner	Extend Commuter Rail from Fitchburg to Gardner	This project would implement commuter service on an existing rail freight line from the end of the Fitchburg Line to Gardner. Passenger service was last operated on this line in 1986.	$120,000,000	Note: Outside MPO area
73	Boston	Operate High-Frequency Readville-Allston Landing Commuter Rail Service	This project would institute new commuter rail service between Readville Station and a new station in Allston using portions of the routes of the Fairmount Line and the Framingham/ Worcester Line, but bypassing South Station. This service would be in addition to rather than in place of other service on those lines.	$40,000,000	
74	Franklin, Bellingham and Milford	Extend Commuter Rail from Forge Park to Milford	This project would implement commuter service on an existing rail freight line from the end of the Franklin Line to Milford. Extensive upgrading of tracks and signals would be required. Passenger service was last operated on the inner end of this line in 1940 and on the outer end in 1920.	$82,000,000	
75	Middleborough, Rochester and Wareham	Extend Commuter Rail from Middleborough to Wareham	This project would extend commuter rail along an existing rail freight line from the end of the Middleborough/Lakeville Line to Wareham. Through passenger service from Wareham to Boston on this route was last operated in 1959. During summer months from 1984 to 1988 connecting service was operated from Cape Cod and Wareham to the Braintree Red Line station.	$42,000,000	Note: Outside MPO area
76	Millbury	New Station at Millbury on Worcester/Framingham Line	This project would add a new commuter rail station on the Framingham/ Worcester commuter rail line in Millbury, near Massachusetts Turnpike Interchange 11. It would be between the existing Worcester and Grafton stations.	$8,500,000	Note: Outside MPO area

Section 4: Additional Transit Expansion Projects as Identified in the PMT (cont.)

#	Community	Project	Description	Cost	Notes
77	Salem	New Station at South Salem on Rockport/Newburyport Line	This project would add a new station on the Newburyport/Rockport commuter rail line south of downtown Salem, between the existing Salem and Swampscott stations. A previous station known as Castle Hill at about the same location was discontinued in the 1950s, and had been served mostly by trains on a branch to Marblehead that diverged there.	$10,000,000	
78	Cambridge	Connect Fitchburg Commuter Rail Line with Red Line at Alewife	This project would add a new station on the Fitchburg commuter rail line near the Alewife Red Line station in Cambridge, between the existing Porter Square Station in Cambridge and Belmont Station. A previous station at this location was discontinued in 1938.	$5,000,000	
79	Newton and Weston	New Commuter Rail Station at Riverside	This project would add a new station on the Framingham/ Worcester commuter rail line near Route 128 on the border of Newton and Weston. It would be between the existing Wellesley Farms and Auburndale stations, possibly replacing the latter. A previous commuter rail station in this vicinity was discontinued in 1977 because of very low ridership.	$12,500,000	
80	Boston	Restore East Boston Ferry	This project would reinstate ferry service between East Boston and Long Wharf or Rowes Wharf on the downtown Boston waterfront. A similar route was run most recently from 1995 to 1997, but was discontinued because of low ridership. Previous ferry service from East Boston had ended in 1952. The project analyzed for the PMT would use an East Boston terminal closer to new development than that of the 1990s service.	$4,000,000	
81	Scituate, Cohasset, Hingham, Hull and Quincy to Boston	Improved Ferry Service from South Shore Communities to Boston	This project would include several elements that could be implemented individually or together. The full project would increase service frequency on the existing Hingham and Quincy/Hull commuter boat routes and establish new routes to Boston from Cohasset and Scituate.	$45,000,000	
82	Boston	Convert Dudley-Boylston Section of Silver Line to Light Rail	This project would convert the 2.4-mile long Dudley-Boylston section of the Silver Line bus rapid transit service to light rail. Service would be operated as a branch of the Green Line, making use of an abandoned Green Line tunnel segment located under Tremont Street, to access Boylston station. Stops on Washington Street between Herald St. and Dudley would remain the same as the present Silver Line.	$435,000,000	
83	Newton and Needham	New Green Line Needham Branch	This project would add a branch to the Green Line, diverging from the D Branch between the Newton Highlands and Eliot stations and following the alignment of a lightly used rail freight line and the outer end of the Needham Commuter rail line to Needham Junction. Commuter rail service to Needham Center and Needham Heights would be discontinued.	$145,000,000	
84	Malden, Melrose, Wakefield and Reading	Orange Line North Extension from Oak Grove to Reading/Route 128	This project would extend Orange Line service from Oak Grove Station to Reading via the Haverhill/Reading commuter rail line right-of-way. Commuter rail service on this line would be discontinued between Boston and North Wilmington. Service to points further north would be re-routed via Wilmington and the Lowell Line.	$565,000,000	
85	Boston and Westwood	Orange Line South Extension from Forest Hills to Route 128	This project would extend Orange Line service from Forest Hills Station in Boston to Route 128 via the Providence commuter rail line right-of-way. Commuter and intercity rail passenger service on this line would also continue.	$400,000,000	
86	Boston and Needham	Orange Line South Extension from Forest Hills to Needham	This project would extend Orange Line service from Forest Hills Station in Boston to Route 128 via the Needham commuter rail line right-of-way. Commuter rail service on this line would be discontinued.	$360,000,000	
87	Braintree and Weymouth	Red Line Extension to Weymouth	This project would extend Red Line service from Braintree Station to South Weymouth, sharing the right-of-way of the Plymouth/Kingston commuter rail line.	$350,000,000	
88	Cambridge, Arlington and Lexington	Red Line Northwest Extension from Alewife to Route 128	This project would extend Red Line service from Alewife Station in Cambridge to Route 128 via the former Lexington Branch railroad alignment (now the route of the Minuteman Bikeway).	$850,000,000	
89	Revere	Wonderland Connector	This project calls for the construction of a station along the Newburyport/Rockport commuter rail line near Wonderland Station in Revere. Various alternatives exist to provide a direct physical link between the Blue Line and commuter rail service including a realignment of the Blue Line and an automated people-mover system. The MBTA is currently evaluating these options as part of its Draft Environmental Impact Statement (DEIS) for the Revere to Lynn corridor.	$80,000,000	

Section 4: Additional Transit Expansion Projects as Identified in the PMT (cont.)

#	Community	Project	Description	Cost	Notes
90	Regionwide	Route 128 Circumferential Bus Service	This proposal calls for providing bus service along Route 128 which would operate every 30 minutes in the peak and every 60 minutes in the off-peak. Service would operate between Beverly and Braintree, with stops provided at major interchanges and at connecting transit facilities. Employer feeder shuttles would link with the circumferential buses. Connections would be made with commuter rail, the Braintree branch of the Red Line, the Riverside branch of the Green Line, and several local bus routes. A general purpose travel lane in each direction would be converted to an HOV lane to improve bus travel times.	$34,000,000	
91	Newton and Watertown	Extend Trackless Trolley #71 from Watertown to Newton Corner	This proposal calls for extending Route 71 Watertown-Harvard trackless trolley service between Watertown Square and Newton Corner. This would provide direct one-seat service between Newton Corner and locations served by Route 71 in Watertown and Cambridge. It would also provide a direct connection between Route 71 and bus routes 553, 554, 556, and 558 at Newton Corner. New trackless trolley wire would be extended over 0.5 miles of Galen Street in Watertown and the trackless trolley fleet would expand by one vehicle to provide the additional service.	$1,750,000	
92	Newton, Boston	Operate High-Frequency Riverside-JFK/UMASS Commuter Rail	This project would institute new commuter rail service between the MBTA's Riverside terminal in Newton and the JFK/UMass station in Dorchester using portions of the routes of the Framingham/Worcester Line and the Old Colony lines, but by-passing South Station. This service would be in addition to, rather than in place of, other service on those lines.	$35,000,000	
93	Wareham, Bourne, Hyannis	Extend Passenger Rail Service from Wareham to Hyannis	This project would further extend rail passenger service beyond what is proposed for the Middleborough/Wareham commuter rail extension, along an existing rail freight line to Hyannis. Through passenger service from Hyannis to Boston on this route was last operated in 1959. During summer months from 1984 to 1988 connecting service was operated from Hyannis to the Braintree Red Line station.	$90,000,000	Note: Outside MPO area
94	Walpole to Foxborough	Operate Full Time Service to Foxborough Station	This project would implement full-time commuter rail service over an existing rail freight line that diverges from the Franklin Line at Walpole Station and runs past Gillette Stadium in Foxborough. Since the 1970s the MBTA has operated special trains to football games and other events at the stadium and the previous one that it replaced. Regularly scheduled passenger service on the line ended in 1933, and was never oriented toward Boston commuting.	$80,000,000	
95	Newton, Boston	Operate High-Frequency Riverside-South Station Commuter Rail	This project would institute new commuter rail service between the Riverside MBTA terminal in Newton and South Station via the Framingham/Worcester Line. This service would be in addition to, rather than in place of, other service on that line.	$35,000,000	
96	Littleton, Ayer	Build Commuter Rail Station along Route 2 at or near I-495	This project would relocate a station on the Fitchburg commuter rail line in or near the former Fort Devens complex on the border of Ayer and Shirley.	$10,000,000	
97	Boston to Salem	High Speed Ferry from North Shore to Boston and the Airport	This project would implement a new high-speed commuter boat route from Salem to Logan Airport and the downtown Boston waterfront. A similar route was run experimentally in 1998, but with much less frequent service than analyzed here.	$20,000,000	
Multi-State Transit Expansion Projects					
98	Boston	North-South Rail Link	This project would provide a connection through downtown Boston between the rail lines that terminate at North Station and those that terminate at South Station, allowing through-routing of trains between North Side and South Side lines.	$10,000,000,000	
99	Providence to Warwick, RI	Extend Commuter Rail from Providence to T.F. Green Airport (RI)	This project would extend commuter rail service along the Amtrak Northeast Corridor route between Providence, Rhode Island and T. F. Green Airport in Warwick, Rhode Island. Passenger service making local stops on this line segment was last operated in 1981, and had consisted of only one round trip per day for many years before that. This project is an ACO legal commitment.	$50,000,000	Note: Outside MPO area and Massachusetts

Section 4: Additional Transit Expansion Projects as Identified in the PMT (cont.)

Multi-State Transit Expansion Projects (cont.)

#	Community	Project	Description	Cost	Notes
100	Haverhill to Plaistow, NH	Extend Commuter Rail from Haverhill to Plaistow, NH	This project would implement commuter service on an existing rail freight and intercity passenger service line, from the end of the Haverhill Line to Plaistow, New Hampshire. Commuter service was last operated on this line in 1967. Intercity service from Portland, Maine was restored in 2001 after extensive track upgrading.	$25,000,000	Note: Outside MPO area and Massachusetts
101	Lowell to Nashua, NH	Extend Commuter Rail from Lowell to Nashua, NH	This project would implement commuter service on an existing rail freight line from the end of the Lowell Line to Nashua, New Hampshire. Passenger service was last operated on this line in 1981.	$40,000,000	Note: Outside MPO area and Massachusetts

Section 5: Projects Identified in Comments on the 2000 RTP, 2001 RTP Update, and 2004 RTP

#	Community	Project	Description	Cost	Notes
102	Arlington and Cambridge	Route 2/Route 16 Interchange	In order to relieve high congestion levels in the Alewife area of Arlington and Cambridge, consider a study to add new roadways and to implement grade separation to re-route traffic under/away from congested area intersections.	TBD	
103	Ashland	Route 135 Grade Separations	Build new interchanges at the intersections of Main Street and Route 135 and Homer Avenue/Chestnut Street and Route 135 in Ashland.	TBD	
104	Bedford	Wiggins Avenue Extension	Reconstruct Wiggins Avenue to improve access to the Great Road/Loomis Street industrial area.	TBD	
105	Boston	Back Bay Massachusetts Turnpike Exit	Construction of a new slingshot ramp in the Fenway section of Boston that will allow motorists in the Back Bay area of Boston to access the Massachusetts Turnpike eastbound. Currently, motorists in the Back Bay must take local streets through downtown to access South Boston or the tunnels to the airport. This ramp would be in the westbound direction of the Mass Pike at a point just west of Massachusetts Avenue. Traffic would then change directions in a slingshot ramp built above the highway between Charlesgate and Massachusetts Avenue.	TBD	
106	Boston	Central Artery/Highway Connections	Create improved highway connections between the Central Artery and other regional highways.	TBD	Note: This comment was received in 2000 while the Central Artery project was approximately 65-70 percent complete. The Central Artery project is now over 98 percent complete with improved highway connections.[1]
107	Braintree	I-93/Route 3 Interchange (Braintree Split)	Transportation improvements on the network of ramps and highway segments that make up the I-93/Route 3 interchange (Braintree Split).	$500,000-38,500,000	Note: A study was completed for this area in March 2006.
108	Braintree	Route 3/Union Street Safety Improvements	Safety improvements at the intersection of Route 3 and Union Street in Braintree.	TBD	
109	Canton	East-West Connector Road	Construct a connector road between Pleasant Street and Turnpike Street (Route 138). Project will eliminate truck traffic from residential streets and direct it to Route 138.	$8,000,000	
110	Danvers	Access Management for Route 1/Route 114	Access improvements along the Route 114 corridor in Danvers.	TBD	Already a project in the 2004 Plan - Danvers/Peabody - Route 1/Route 114 Corridor Improvements.[1]
111	Framingham	Route 9/Temple Street	Transportation improvements at the intersection of Route 9 and Temple Street in Framingham to include roadway reconstruction and signalization.	TBD	This project would be part of the intersection program in the Plan. Does not have to be listed as a separate project in the Plan.[1]
112	Gloucester	Gloucester Rotary	Institute short-term safety improvements by relocating the crosswalk and upgrading signage.	TBD	
113	Hopkinton	I-495/South Street New Interchange	Reconstruction project aligns the I-495 southbound exit with South Street to eliminate the need for EMC-bound vehicles to make a left to cross eastbound South Street traffic.	TBD	
114	Hudson	Washington Street (Route 85) Widening	Widen Washington Street (Route 85) between Brigham Street and Broad Street, a distance of approximately one half mile. Also included would be widening of the approaches at the Washington Street at Broad Street intersection. These improvements are part of a larger set of recommended improvements in Hudson and Marlborough, involving Route 85, the Route 85/I-290 Connector, and the I-290/I-495 interchange.	TBD	
115	Medford	Route 16/I-93 Connection	Improve the existing I-93/Route16 interchange (Exit 31) and construct a new interchange further south at I-93 and Route 16.	TBD	
116	MetroWest Region	MetroWest Regional Bike Trail Network	Construct a bicycle trail network throughout MetroWest and connect each trail with other existing trails in the region.	TBD	This project would be part of the bicycle program in the Plan. Does not have to be listed as a separate project in the Plan.[1]
117	Newton	New Ramp from I-95/Route 128 to Riverside MBTA Station	Construct a ramp from I-95 directly to the Riverside MBTA Green Line Station to remove some Riverside traffic from Grove Street.	TBD	

Section 5: Projects Identified in Comments on the 2000 RTP, 2001 RTP Update, and 2004 RTP (cont.)

#	Community	Project	Description	Cost	Notes
118	Norwood		Norfolk County has conducted a Route 1 Corridor Signalization Study. The recommendation of the study includes the widening and realignment of the intersection at Route 1, Everett Street, and University Avenue to add turning lanes at the intersection only. There would be no widening of travel lanes outside of the intersection.	TBD	This project would be part of the intersection program in the Plan. Does not have to be listed as a separate project in the Plan.[1]
119	Regionwide	Highway/Industrial Park Access	Create improved access to and from industrial parks throughout the region.	TBD	This would be accomplished at a project level analysis and design on a case by case basis.[1]
120	Regionwide	Implement the Double Stack Initiative	Implement the Double Stack Initiative between Worcester and Boston.	TBD	Note: See listings for this project in the 2004 Chosen Projects section above.[1]
121	Regionwide	ITS Roadway Projects	Implement ITS project throughout the MPO region.	TBD	Note: EOT/MassHighway completed the Regional ITS Architecture for Metropolitan Boston framework in March 2005.[1]
122	Regionwide	Modern Traffic Rotaries	Construct rotaries using updated design standards on roadways throughout the region where appropriate.	TBD	This project would be part of the intersection program in the Plan. Does not have to be listed as a separate project in the Plan.[1]
123	Regionwide	Pedestrian Improvements	Create improved pedestrian access throughout the region on roadways and trails.	TBD	This project would be part of the pedestrian program in the Plan. Does not have to be listed as a separate project in the Plan.[1]
124	Regionwide	Bike and Pedestrian Projects	Create improved bicycle and pedestrian access throughout the region on roadways and trails.	TBD	This project would be part of the bicycle/pedestrian program in the Plan. Does not have to be listed as a separate project in the Plan.[1]
125	Regionwide	HOV Lane for buses	Construct or designate HOV lanes exclusively for bus use.	TBD	This project would be part of the high occupancy vehicle lane program in the Plan. Does not have to be listed as a separate project in the Plan.[1]
126	Revere to Lynn	Improved Limited Access Highway	No information available for this project.	TBD	No information available.[1]
127	Sherborn	Route 16/27 Improvements	The project consists of improving safety and rehabilitating the roadway structure along North Main Street in Sherborn for approximately 2400 feet in the center of the town. Also the project consists of realigning the major intersections within the project limits, installing traffic signals, and upgrading existing traffic signals within project limits.	TBD	Note: This project is on hold due to significant wetlands issues on both sides of the project area. Improvements would be made within existing footprint and may possibly include lane width reductions. If this is the case, this project would not add capacity and therefore, not be required to be listed in the Plan.
128	Somerville	Depress Interstate 93	Depress I-93 in Somerville.	TBD	
129	Somerville	Route 28 Improvements	Make transportation improvements to Route 28 in Somerville.	TBD	Note: This project idea is currently being studied by the MPO.
130	Somerville	Extension of Somerville Bike Path (Cedar Street to Lechmere)	Extend the Somerville Bike Path to Lechmere Station from the Minuteman Bikeway.	TBD	This project would be part of the bicycle program in the Plan. Does not have to be listed as a separate project in the Plan.[1]
131	Somerville and Dorchester	Extend the Interstate 93 HOV Lane into the City	Extend both HOV lanes on I-93 into Downtown Boston.	TBD	
132	Subregion (MAGIC)	Highway Mobility on State Routes	No information available for this project.	TBD	The MPO's Congestion Management System addresses this issue.[1]
133	Subregion (MetroWest)	Improvements on Arterial Highways	No information available for this project.	TBD	No information available.[1]
134	Subregion (MetroWest)	New Turnpike Interchanges	No information available for this project.	TBD	No information available.[1]
135	Westborough	Route 9/Interstate 495 Interchange	Reconstruct the existing cloverleaf interchange at I-495 and Route 9.	TBD	Note: Outside MPO area

Section 6: Projects Identified through Planning Efforts

#	Community	Project	Description	Cost	Notes
136	Lynnfield, Peabody and Saugus	Route 1 Capacity Improvements	Widening the existing four-lane segment of the highway to six lanes from Copeland Circle in Revere to Route 99 in Saugus is currently in the 2004 Plan. It would be desirable to make significant improvements on Route 1 through Saugus because of heavy volumes and substandard designs of several interchanges in the area. The intense commercial development greatly limits opportunities for improvement. Bridge replacement and repair combined with minor interchange improvements may be the only possible improvements at this time.	TBD	
137	Boston to Revere	Route 1A Capacity Improvements	Widen the existing four-lane segment of the highway to six lanes from the northern border of the CA/T project to just south of Mahoney Circle and make traffic signal and intersection improvements.	TBD	
138	Acton to Lexington	Route 2 Capacity Improvements	Build a new four-lane, limited-access Route 2 from I-95 (Route 128) in Lexington to Route 111 in Acton.	TBD	
139	Arlington & Cambridge	Route 2/Route 16 Capacity Improvements	Construct additional capacity on Route 2 and 16 in the Alewife area. Improvements may include improved limited access connections, such as on- and off-ramps, improved geometrics, and construction of a new road behind the Fresh Pond Shopping Center.	TBD	Note: This project is the same project as that included under project descriptions in comments in past plans - Arlington & Cambridge Rte 2/Rte 16 Interchange.[1]
140	Raynham to Randolph	Route 24 Capacity Improvements	Add a northbound HOV lane from Route 27 in Brockton to I-93/Route 128.	TBD	
141	Boston to Braintree	Interstate 93 (Southeast Expressway) Capacity Improvements	Plan for the creation of a two-lane, reversible preferential facility on the Southeast Expressway (I-93, Routes 1 and 3) between the Route 3/Route 128 interchange in Braintree and the Central Artery project southern limit at Southampton Street in Boston.	TBD	
142	Somerville to Woburn	Interstate 93 Capacity Improvements	Construct a reversible HOV facility from the northern limit of the Central/Artery/Tunnel project in Somerville to the I/95/Route 128 interchange in Woburn.	TBD	
143	Canton to Foxborough	I-95 Capacity Improvements	Construct a reversible HOV facility from I-495 in Foxborough to Route 128 (University Avenue/I-95/I-93) interchange in Canton.	TBD	
144	Littleton to Wrentham	I-495 Capacity Improvements	Construct an additional travel lane in each direction on I-495 between Route 1 in Wrentham and Route 2 in Littleton.	TBD	
145	Chelsea and Boston	Enhanced Haul Road Proposal	This project provides an alternative design to the East Boston Haul Road/Chelsea Truck Route. It would allow vehicles traveling between the City of Chelsea and the harbor tunnels/Logan Airport, to do so utilizing grade separated roadways. All vehicles could use the new facilities, including trucks, buses, and automobiles. It would provide a connection between the Chelsea Street Bridge and Route 1A southbound and eliminate the current unsafe connection between Chelsea Street and Route 1A at Curtis Street. It allows the continued use of the existing Route 1A viaduct over Saratoga Street, Bennington Street, and Neptune Road.	$12,000,000	
146	Boston	Conley Truck Road	A new preferred truck route alignment in South Boston would create an eastward extension of the current Massport Haul Road, through the Boston Marine Industrial Park (BMIP), over the new (existing) bridge across the Reserved Channel, across the Sithe (old BECo) and MBTA sites, across the Coastal Oil site, and into Conley Terminal.	$20,000,000	Project submitted by Massport
147	Boston	Conley Rail Service	Rail service to Conley Terminal parallel a proposed truck route. A rail study was performed and focused on rail geometry requirements; it did not pursue the development costs. The next step would be to perform a more rigorous rail feasibility study, including an estimate of design and construction costs to develop rail service.	$100,000	Project submitted by Massport - cost would be to perform a second study
148	Boston	Charlestown Haul Road	Massport recently performed a feasibility study of a Charlestown Haul Road to serve the Massport and privately-owned marine terminals in Charlestown. The proposed Haul Road would be developed in the Mystic Wharf rail right of way between Sullivan Square and Moran Terminal, which was acquired by Massport in 2002. Massport requests a placeholder amount for funding the design of this Haul Road, pending the increased demand for rail service and the designation of additional funds to undertake construction.	$2,000,000	Project submitted by Massport - Project Cost is for design of Haul Road

Section 6: Projects Identified through Planning Efforts (cont.)

#	Community	Project	Description	Cost	Notes
149	Boston	Port of Boston Inner Harbor Maintenance Dredging Project	The Port of Boston Inner Harbor Maintenance Dredging Project involves the removal of approximately 1.86 million cubic yards (yd³) of material that has accumulated in the main shipping channel since the area was last dredged in the 1960's, so as to restore these channels to their federally-authorized depths ranging from 35 to 40 feet below mean lower low water (MLLW). This U.S. Army Corps of Engineers project will provide significant economic and strategic benefits to the Port of Boston. Massport requests that $5.5 million be programmed into the TIP as the non-federal share of the project. The funds are expected from the Seaport Bond Bill through the Seaport Advisory Council. The balance of the project cost, $45 million, is expected to be provided through federal operation and maintenance appropriations.	$50,500,000	Project submitted by Massport
150	Boston	Boston Harbor Deep Draft Navigation Improvement Project	The shipping lines frequenting the Port of Boston continue to use larger vessels such that many of the vessels that now call at Conley Terminal require more than 40 feet of water. In 1998, Massport requested that the Army Corps of Engineers conduct a Reconnaissance Study (the first step in the federal channel deepening process) to evaluate dredging the channels serving Conley Terminal and the North Jetty/Massport Marine Terminal to at least 45 feet. This study, which was completed in July 2000, concluded that such a project appeared to be economically justified (i.e., the economic benefits outweigh the costs) and should proceed to the more comprehensive feasibility study stage. We are currently working with the Corps on the feasibility study and permitting process, and the current schedule (if the project is found to be economically justified and funding is secured) is for dredging to begin in 2009. Based on the best information available at this time, the Corps estimates that a 45-foot channel deepening project could require dredging and disposal of 5 to 6 million cubic yards at a total cost of $75 to $90 million. A non-federal sponsor would be required to fund 35% of the improvement dredging cost, or $26 to $31 million.	$75,000,000 to $90,000,000	Project submitted by Massport
151	Boston	Rail Extension to Massport Marine Terminal	Massport recently designated Marine Terminal Development LLC (MTD) to redevelop 30 acres at the Massport Marine Terminal (MMT) in South Boston as a state-of-the-art logistics and bulk/break-bulk facility on approximately 30-acres at the MMT. Three warehouse buildings totaling 440,400 square feet (ft2) will be constructed to house companies involved in freight forwarding, logistics, supply chain management, seafood processing and cold storage, and 6.5 acres behind the North Jetty dock will be used to import, store and distribute waterborne bulk commodities such as cement, salt and forest products. Massport and MTD are interested in extending CSX-operated Track 61 to the site, which would greatly enhance the success and value of the project to the Port of Boston. The proposed rail design and extension is expected to cost approximately $5 million.	$5,000,000	Project submitted by Massport
152	Boston	T Under D	D Street is characterized by six closely-spaced at-grade intersections in the South Boston waterfront district. D Street is the only continuous, north-south street in the district, and this street provides access to I-90 EB and WB via Ramp DB. The Silver Line currently comes to grade from its tunnel alignment and crosses D Street at grade (one of the six intersections). Development in the district continues to come on line, and new projects are added periodically to the 'green book' scenario projected by the Central Artery/ Tunnel project. Today, peak-hour operations are often problematic along D Street. There is concern that, as development occurs, roadway operations may deteriorate to unacceptable levels. Grade separating the Silver Line under D Street (T Under D) would eliminate one at grade crossing in a critical area, improve queuing distances and improve traffic operations in the district. It would also ensure that, in the event of serious traffic congestion, the district's transit service operations would not be at risk due to surface street problems. An early feasibility study has been performed. The projected cost of the grade separation is $65 million if it is constructed prior to or simultaneously with air rights development on Massport's Core Block parcel. If it is constructed after the air rights project is completed, the projected cost increases to $74 million.	$65,000,000 to $74,000,000	Project submitted by Massport

Section 6: Projects Identified through Planning Efforts (cont.)

#	Community	Project	Description	Cost	Notes
153	Boston	Inner Harbor Ferry Vessels	The procurement of state-of-the-art passenger ferry vessels for use on various potential routes in Boston Inner Harbor will strengthen water transportation as an alternative transport mode. Waterfront development projects throughout the harbor are currently in design, permitting, and/or construction – particularly in East and South Boston, -- will create additional demand for new and expanded vessel services. The purchase of two to three new vessels will address several needs, including: providing increased operating speed and efficiency (including fuel conservation), addressing universal access, and offering an increased level of customer service and comfort for passengers. The total estimated cost, depending on vessel specification, is between $2 and $4 million. Financing costs are a large burden for private water transportation providers, who typically have very small profit margins. Therefore, public funding would increase the potential viability and sustainability of additional, Inner Harbor, passenger The vessels would be owned and operated by the MBTA or another suitable public entity.	$2,000,000 to $4,000,000	Project submitted by Massport
154	Boston	South Boston Water Transportation Terminal	Design and construction of a water transportation hub facility in the slip between Commonwealth Pier (the World Trade Center) and the Fish Pier would address a need that has been identified in several studies of Inner Harbor water transportation. This central location along Seaport Boulevard in the South Boston Waterfront is convenient to the Boston Convention and Exhibition Center, the Seaport World Trade Center facilities, and the mixed-use development within the Commonwealth Flats area. A modern water transportation terminal at this location, at a minimum, needs to provide adequate landing capacity designed accommodate various vessel types, provide universal access, offer passenger weather protection, and provide basic landside facilities and signs. Such a facility would provide a visible and central location at which to focus water shuttle and water taxi operations serving the district. The cost to design and construct the facility is estimated to be between $1.5 and $3 million; state funding would greatly expedite the schedule. The facility would be located on Massport property, and the Authority would design, construct, own and maintain the facility.	$3,000,000	Project submitted by Massport
155	Boston to Fitchburg	Fitchburg Line Service Expansion	The service expansion recommendations for the Fitchburg Commuter Rail Line have been defined for implementation in the short-range, medium-range and long-range. Each of the improvement packages includes three elements. The short-range (implemented within the next five years) improvement package includes consolidation of stations, schedule improvements and addition of continuously welded track/design of signal system upgrades. The medium-range (implemented within 5 – 10 years) improvement package includes station improvements, implementation of reverse commute options and signal system improvements. Finally, the long-range (implementation expected to take 10 or more years) improvement package includes the creation of a regional parking facility, additional peak/off peak service, double tracking and extension of service to a proposed station at the Gardner terminus or a proposed Wachusett Station in West Fitchburg.	$330,000,000	Project in planning by MBTA
156	Cambridge, Somerville and Medford	Enhanced Green Line	This project would extend Green Line service from Lechmere Station to West Medford with a spur to Union Square partly via an existing rail freight line and partly beside the Lowell commuter rail line. It would be an alternative to a Blue Line extension to West Medford as proposed in the PMT.	$550,000,000	This project is an alternative for the Green Line to Medford Hillside project in the 2004 Transportation Plan. It is also an air quality commitment to the Central Artery. Different alternatives are being studied at this time. The project is also being reviewed as part of the State Implementation plan (SIP) re-evaluation process.[1]

Section 7: Projects Identified in Comments through Journey to 2030 Outreach Efforts

Highway Projects Included in Comments from Journey to 2030 Outreach

#	Community	Project	Description	Cost	Notes
157	Weston	Route 30/Interstate 90 Interchange Improvements	Improve Route 30 at Interstate 90 interchange to provide two through lanes in each direction on Route 30.	TBD	
158	Milford	Route 16 Bypass Road	Extend Veterans Memorial Drive through to Depot Street for approximately 0.9 miles. With the infeasibility of widening Route 16 through the downtown area, this will provide an alternate location to accommodate additional lanes. It will provide a viable alternative route between Route 109 and Route 140. It will improve traffic circulation in surrounding neighborhoods by reducing cut-through traffic and enhance downtown revitalization efforts by lessening congestion on Main Street.	$5,000,000	
159	Regionwide	HOV lanes on I-495, I-95, and Route	Provide HOV lanes along Interstates 495 and 95 and Route 128.	TBD	
160	Stoughton	Route 24 Interchange	Construct a new interchange on Route 24 to service the industrial park in Stoughton.	TBD	
161	Marshfield	Route 139 Improvements	Increase the travel lanes from two to four lanes between Main Street (Route 3A) to the east and School Street to the west. Also add turning lanes and signalization at intersections along the corridor.	$7,000,000	
162	Hanover	Route 53 Widening	Widen route 53 between Route 123 and Route 3 in Hanover.	TBD	
163	Brookline/Newton	Route 9 Capacity Improvements	CTPS performed a study for this area of Route 9 and recommended a number of improvements as follows: 1. Evaluate the merits of creating a pedestrian connection between the Mall at Chestnut Hill and the Atrium Mall. 2. MassHighway should evaluate the phasing and timing of the signal at Langley Rd. for changes if warranted. 3. Fully actuate the Langley Rd. Intersection. 4. The State Police, the City of Newton and the Atrium Mall management should discuss alternative circulation and traffic management patterns. 5. Implement pedestrian access improvements recommended in the 1998 Route 9 Study. 6. Observe and evaluate the sensitivity of the loop detector at the Woodcliff Rd. approach as recommended in the 1998 Route 9 Study. 7. Install a chain-link fence in the median in the vicinity of Hartford St. to discourage illegal pedestrian 8. Conduct a formal evaluation to determine if pedestrian and signal timings at Elliott and Woodward St. should be changed and if additional pedestrian actuation and audible signals are warranted. 9. Install traffic signals under the Route 9 underpass at Centre St. 10. Align the Woodward and Elliott St. approaches to Route 9, widen the Woodward Street approach, and stripe a third lane along Route 9 eastbound to the east. 11. Install two coordinated traffic signals at the northern and southern U-turn points on Hammond Pond Parkway. 12. Install two synchronized traffic signals to control turning traffic at the intersections of Parker St. with the route 9 ramps. Widen the bridge to provide storage for turning traffic as appropriate. These improvements do not add capacity to Route 9 but do provide improvements to traffic circulation. Implementation of these improvements would not be required to be included in the Plan but could go directly into the TIP.		
164	Somerville	McGrath Highway Grade Change	Lower McGrath Highway to be at grade with the surrounding neighborhood.		

Multimodal Projects Included in Comments from Journey to 2030 Outreach

#	Community	Project	Description	Cost	Notes
165	Quincy	Improve access to Fore River Shipyard	Improve freight and highway access to the Fore River Shipyard. Improved highway access should be along Quincy Avenue (Route 53), East Howard Street, and Washington Street (Route 3A) to accommodate mixed-use development.	TBD	A study will be required to determine all of the issues associated freight movement into and out of this facility.[1]
166	Boston	Freight improvements to and from Conley Terminal along existing rail		TBD	See Conley Rail Service project under "Projects Identified through Planning Efforts."[1]

Transit Projects Included in Comments from Journey to 2030 Outreach

#	Community	Project	Description	Cost	Notes
167	Boston	Kennedy Greenway Streetcar	Implement streetcar service along the Rose Kennedy Greenway to connect North and South Stations	TBD	Further Study Required.[1]
168	Boston to Chelsea	Silver Line Extension	Extend Phase II of the Silver Line from the Airport to Chelsea Commuter Rail Station	TBD	Further Study Required.[1]
169	Mansfield	Foxborough Rail Connection	A Foxborough Rail Connection should consider access to the Tweeter Center	TBD	Further Study Required.[1]
170	Somerville	Green Line Extension to Assembly Square	A Green Line Extension to West Medford should consider a spur to Assembly Square and beyond	TBD	Further Study Required.[1]
171	Waltham to Hudson	Commuter Rail Extension to Hudson	Extend commuter rail from Waltham to Hudson	TBD	Further Study Required.[1]
172	North Shore	Commuter rail spurs in North Shore	Construct commuter rail spurs from Salem to Peabody Square, Route 128, the former Sylvania Plant, and Danvers Square	TBD	Further Study Required.[1]
173	North Shore	Ferry service from Gloucester to Salem	Ferry service from Gloucester to Salem	TBD	Further Study Required.[1]
174	North Shore	Increased headways to North Shore	Increase headways on Commuter Rail service to the North Shore	TBD	Further Study Required.[1]
175	North Shore	Trolley Service in North Shore	Institute trolley service between Saugus and Lynn and/or Salem and Saugus	TBD	Further Study Required.[1]
176	North Shore	Expand destination hubs	Extend the destination envelope of the regional rail system to serve satellite urban areas (Lynn, Salem, Beverly, Malden, etc.). This should occur with or without the North South Rail Link.	TBD	Further Study Required.[1]
177	Regionwide	Increased headways on commuter rail	Commuter rail headways of 30 minutes or less encourage people to use the mode for trips other than for commuting to work, and therefore increase ridership. This has the potential of further changing land use patterns.	TBD	Further Study Required.[1]
178	Regionwide	Intermodal Hubs	Create intermodal transit hubs to facilitate transferring between modes	TBD	Further Study Required.[1]
179	Weston	New commuter rail station/parking facility on Fitchburg Line at Broken Stone property		TBD	The Fitchburg Commuter Rail Line Service Expansion Study prepared for the MBTA by McMahon Associates in association with Kay Nordstrom Engineering provided service expansion recommendations for the Fitchburg Commuter Rail Line. As part of the short-range (implemented within the next five years) improvement package, improvements include consolidation of stations, schedule improvements and addition of continuously welded track/design of signal system upgrades. The Fitchburg Line runs through approximately 2 to 2.5 miles of Weston. At this time there are three stations along on the Fitchburg Line in Weston – Silver Hill, Hastings, and Kendal Green. This comment will be forwarded to be included in the continuing study of improvements to the Fitchburg Line.[1]

[1] A detailed description is not provided in the universe of projects report for this project.

Universe of Programs

#	Community	Project	Description	Cost	Notes
180		Traffic Signal Coordination Program	A number of segments of arterial roadways in the region could benefit from traffic signal coordination. Coordination allows for the smooth flow of traffic through consecutive traffic signals that are spaced closely enough (usually one-fourth mile or less) for a platoon of vehicles to be maintained. Traffic signal coordination is a relatively inexpensive way to extract additional capacity from the existing roadway system without lane additions.		
181		Interchange Improvement Program	Interchanges are key elements of our transportation system that carry high traffic volumes, contain many elements, and can involve a variety of maneuvers, and conflicts among vehicles. Most of the top crash locations in the region are at highway interchanges. In addition, interchanges at which traffic flows smoothly help to keep traffic moving on the expressway and prevent “spillover” to secondary roadways.		
182		Bottleneck Removal and Travel-Lane Continuity Program	Some roadways have segments where lane continuity is interrupted, resulting in traffic bottlenecks. In some of these cases the shoulder lane has been assigned for temporary use for travel during the peak periods. However, demand cannot be accommodated efficiently where lane discontinuities exist. Correcting travel-lane discontinuities can promote safety by eliminating bottlenecks and freeing up shoulders for their use by disabled vehicles.		
183		Roadway Safety Improvements	Safety projects address specific roadway safety issues identified through data analysis performed by the MPO, MassHighway, and other agencies. Safety projects include hazard elimination programs, shoulder improvements, and intersection realignments. The MPO maintains a geographic information system database of crash locations and is able to rank intersections or stretches of roadway most in need of improvement. These rankings are done for motor vehicle, bicycle, and pedestrian modes.		
184		Intersection Improvements	This category includes intersection channelization projects, signal upgrades, and realignments. It does not include intersections or segments of roadway that add additional roadway capacity. An intersection improvement program would use the MPO’s Mobility Management System (MMS) resources to identify intersections to be improved.		
185		Enhancement Projects	The MPO funds various types of transportation enhancement activities, including, acquiring scenic easements, preserving historic transportation infrastructure, and providing landscaping, streetscaping, and other beautification activities.		
186		Bicycle and Pedestrian Projects	The MPO funds multiuse trails, pedestrian amenities, and other enhancement projects. Improvements for bicyclists and pedestrians are a routine aspect of roadway reconstruction projects and are funded under roadway maintenance. Bicycle projects adding connections to the regional bicycle network would be given priority.		
187		Traffic Signal Priority Strategy	Traffic signal priority using hardware and software technologies would enable MBTA buses or light rail to invoke the green signal phase or extend the duration of the green phase so that they could pass through an intersection more quickly. A major benefit of such a system would be that the number of people passing through the intersection would be maximized. Another benefit of signal priority for transit would be improvement in schedule adherence, since bus headways could be actively managed through automatic vehicle location (AVL) technology. Bus bunching could be drastically reduced or even eliminated.		
188		Intelligent Transportation Systems (ITS)	ITS has been employed and will continue to be employed by Boston Region MPO transportation agencies.		
189		High-Occupancy Vehicle (HOV) Lane Program	HOV lanes is another strategy to increase the system’s person-carrying capacity as expansion of the region’s expressway system capacity is becoming infeasible and undesirable.		
190		Suburban Mobility Improvement Program	The Suburban Mobility Improvement program funds capital equipment and other capital-related expenditures of high-occupancy-vehicle services and programs that improve the mobility of residents in areas currently unserved or under-served by public transportation.		
191		Park and Ride Lot Program	The MPO is committed to increasing the available parking capacity at various commuter rail and transit stations throughout the region.		

Universe of Programs (cont.)

#	Community	Project	Description	Cost	Notes
192		Accessibility	The MBTA is working toward full compliance with the Americans with Disabilities Act (ADA) through the Key Stations Plan. Current and future work will focus on bringing the Green Line (vehicles and stations) and the few remaining noncompliant Red Line stations along the Ashmont branch into compliance. Station modernization programs incorporate the provision of accessibility.		
193		Bridge Maintenance and Rehabilitation	This program includes replacing bridge decks, reconstructing bridges, painting bridges, and performing other routine or periodic maintenance. Of the 1431 bridges monitored by MassHighway in the Boston region, 12% are structurally deficient and 34% are functionally obsolete. Where appropriate bridge maintenance and rehabilitation could include providing sufficient vertical clearance to permit double-stack freight movement. A new bridge providing a connection that does not currently exist is considered a regionally significant project and would not be funded under this program.		
194		Major Highway Maintenance	MassHighway oversees the interstate maintenance program and ensures that the system of interstate highways within the region are maintained to an acceptable standard. Work under this category includes reconstruction, resurfacing, signage, striping, and other routine or periodic maintenance.		
195		Roadway Maintenance	MassHighway maintains an ongoing pavement management program to rate the serviceability of the pavement of the region's roadways. Pavement maintenance may be accomplished through surface patching, roadway resurfacing, or full-depth reconstruction.		
196		Revenue Vehicles	The revenue vehicle fleet is one of the most visible and important components of the MBTA service network. It is composed of rapid transit vehicles, light rail vehicles, commuter rail passenger coaches and locomotive units, diesel motor bus coaches, compressed-natural-gas buses, hybrid buses, electric trackless trolleys, RIDE (paratransit) vehicles, and passenger ferries. The MBTA must maintain a schedule of rehabilitation and replacement of its vehicle fleet.		
197		Nonrevenue Vehicles	Nonrevenue vehicles include both work equipment and other nonrevenue vehicles and are used for maintenance, safety, field supervision, and revenue collection.		
198		Track	The MBTA currently operates rapid transit and light rail service over 185 miles of track and commuter rail over 1,300 miles of track; it must keep its track in good working order.		
199		Signals	Train control is an integral part of an operating transit system. The signal system's primary goal is to maintain train separation while attempting to minimize headways and run times.		
200		Power	The MBTA runs power through it own distribution equipment. The power system includes cables, substations, circuit breakers, switch boxes and their heaters, manholes, ductiles, switchboards, and the catenary system for the Green Line and Blue Line, as well as overhead wire networks for the trackless trolley lines. Based on the last Transportation Plan, approximately 4% of the transit funding for maintenance and improvement of the regional system will be allocated to this category.		
201		Yard and Shop	Maintenance facilities, or yards and shops, are where the MBTA conducts regularly scheduled maintenance and emergency repairs on its vehicle fleets.		
202		Station Management Program	The station management program incorporates several projects that are intended to improve MBTA communications with riders. With the installation of automated fare collection equipment, collectors will come out of their booth and act as customer service agents by providing directions and answering questions from customers. The other component of this effort includes the installation of a wide-are network (WAN), which will provide for telecommunications systems. With the WAN as the backbone, the MBTA will mitigate and expand the number of communications devices. These devices include but are not limited to two-way radio systems, security systems, fire alarms, telephones, police/public call boxes, closed-circuit television, public address systems, light-emitting diode (LED) signs, and the Supervisory Control and Data Acquisition (SCADA) system.		

Universe of Programs (cont.)

#	*Community*	*Project*	*Description*	*Cost*	*Notes*
203		Facilities (Including Bus Shelters)	This category includes all administrative buildings for the system, ventilation structures, layover facilities, maintenance and storage buildings, bus shelters, and docking facilities.		
204		Elevators and Escalators	In the draft fiscal year 2006-2011 Capital Investment Program, the MBTA intends to replace and modernize all MBTA elevators and escalators.		
205		Tunnels, Retaining Walls and Culverts	The MBTA must maintain its 19 miles of tunnels, its retaining walls, and 783 culverts throughout the		
206		Bridges	The MBTA must maintain its 560 bridges: 412 railroad bridges, 60 transit bridges, and 88 highway bridges (carrying vehicles over track and rights-of-way).		