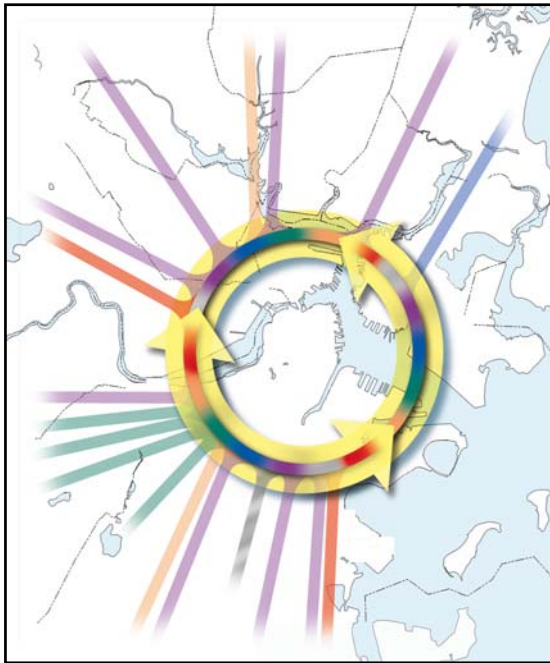


*Urban Ring Circumferential
Transit Improvement Project*



**PHASE 1
ANNUAL
PROGRESS REPORT**

**TO THE
MASSACHUSETTS
EXECUTIVE OFFICE OF
ENVIRONMENTAL
AFFAIRS**

June 2003



Massachusetts Bay
Transportation Authority

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I. INTRODUCTION

The three-phase Urban Ring project builds sequentially over time beginning with improvements to existing bus services – specifically the Crosstown and Express bus routes (Phase I), adding Bus Rapid Transit (BRT) service, numerous intermodal connections and seven new or improved commuter rail stations (Phase 2), and constructing either Green Line or Orange Line technology rail service in the busiest section of the corridor (Phase 3). The three phases of this project are additive; that is, as each phase is implemented, much of the previous routes are retained as a system of complementary and/or feeder services.

The Urban Ring corridor passes through seven municipalities – Boston, Brookline, Cambridge, Somerville, Medford, Everett and Chelsea. A coalition of six of these communities known as the Urban Ring Compact has been an active force in promoting and refining the project to date. Their conviction that the Urban Ring is essential for transportation, land use, environmental and economic reasons has been a key impetus for the project. The Compact is joined by many business and institutional interests that equally view the Urban Ring as a fundamental component for their future growth and success. Many environmental and neighborhood groups who wish to improve their transit access to jobs, education and other activities are also supporters of the Urban Ring project.

The Urban Ring transit service would connect with every existing and some new subway, bus and commuter rail lines and about 100 existing bus routes. Phase 1 is predicted to carry 40,000 daily riders when all the new routes are implemented, and over 100,000 daily riders by Phase 2. In aggregate, by Phase 3 the Urban Ring is expected to carry nearly 300,000 riders daily in 2025.

Reserving right-of-way for both BRT and rail transit corridors is an important component of Phases 1 and 2, and potentially a feature of Phase 3.

The subject of this report is activities leading to implementation of Phase 1 bus services. At present, Crosstown and Express bus routes in the corridor utilize standard MBTA diesel buses. Two changes are contemplated: first is the move to low sulfur fuel and second is the introduction of 40-foot, low-emission, compressed natural gas (CNG) buses. When implemented, these services are expected to operate with 10-12 minute peak hour headways and 20 minutes off peak.

II. STATE/REGIONAL REGULATORY ACTIONS

EOEA Approval

The primary regulatory activity leading to Phase I implementation was the MBTA's filing of an Expanded Environmental Notification Form (ENF) in July 2001, and its subsequent approval in the form of two Certificates issued by EOEA in November 2001. These Certificates approved the three-phased approach and defined the environmental requirements for moving forward. Specifically although Phases 2 and 3 each require an EIR, Phase 1 does not. This decision allows the MBTA to integrate planning for expanded bus routes in the Urban Ring corridor into its regular service planning process.

Regional Transportation Plan (RTP)

A key requirement for implementation of any transportation project in the metropolitan area is inclusion in the long range Regional Transportation Plan and approval of the Plan by the Boston region Metropolitan Planning Organization (MPO).

Urban Ring Phase 1

A key milestone for the Urban Ring was the inclusion of Urban Ring Phase 1 – addition and extension of Express, Crosstown and other routes in the most recent RTP adopted by the MPO in March 2001.

At present three crosstown routes are in service labeled as such. Additional routes were modified as a result of the FY2002 Service Plan to further improve service in the Urban Ring Corridor. While the new services were not labeled as crosstown routes, they are performing that function in that they provide the coverage of crosstown service.

The Urban Ring Phase 1 is listed as one of eleven regionally significant transit projects. Phases 2 and 3 are included in the Illustrative Projects Section of the approved document. The RTP describes the benefits of Urban Ring Phase 1 as “provision of an additional mode option, travel time savings, a reduction in air pollution, and the diversion of passengers from the overloaded downtown transfer stations”.¹

Related RTP Projects

There are several projects in the RTP that are related to and potentially supportive of the Urban Ring project. Some are within the purview of the MBTA, and others within the Massachusetts Highway Department or other jurisdiction. The MBTA is coordinating closely with such projects to maximize benefits to bus operations for Urban Ring Phase 1 as well as subsequent phases of the project.

Program for Mass Transportation (PMT)

Another important regulatory/planning document for transit projects is the Program for Mass Transportation. (PMT) For a project to move from longer range planning into shorter range funding, it must be included in the PMT. The current PMT was approved by the MBTA Advisory Board on May 28, 2003.

The Central Transportation Planning Staff (CTPS) has conducted public meetings to solicit ideas and comments on various transportation projects. The general public suggested transit service ideas in all modes including bus, rail transit, commuter rail, boat, bicycles and general operations covering most of the state. A large number of the suggestions were either wholly or partially related to the Urban Ring.

¹ Boston Region MPO Transportation Plan 2000-2025 p.10-16

CTPS and its PMT Working Committee screened this universe of projects and rated them as high, medium or low priority projects. The approved PMT rates all three phases of the Urban Ring as high priority projects.

III. MBTA SERVICE PLANNING PROCESS

The Massachusetts Bay Transportation Authority's service planning is an ongoing process whereby the MBTA updates and refines its bus route system according to a combination of factors including ridership numbers, public input, equipment availability and the operating budget. An objective set of criteria has been established whereby services in different routes are compared.² New services may be added on an experimental basis, and after operating for some time; they are subjected to these same service criteria to see if they measure up to existing routes.

Due to the financial constraints, the service plan is created as a zero sum process, where the cost of any route added may be balanced by an equivalent savings of a route removed. The MBTA is currently in the analysis phase of the service planning process, whereby all routes are being measured against the Service Delivery Policy standards. When that concludes public meetings will be held to present the recommended service modifications.

The last iteration of the service planning process began well before the issuance of the Urban Ring ENF Certificates in November 2001. By that date, the MBTA had completed both outreach and analysis phases of the service planning process and had produced a preliminary plan for discussion and review. As a result, Phase 1 Urban Ring services were not specifically addressed in this plan though many routes along the corridor were improved.

The following summarizes the most recent bus route changes in the Urban Ring corridor resulting from the on-going service planning process.

CT-2 Bus Route from Longwood Medical Area to Kendall Square in Cambridge was extended to Sullivan Square in Charlestown. Bicycle racks were also added to the buses on this route at the request of many bicycle advocates in the region.

CT-3 Bus Route was modified in the 2001/2002 round of service changes. The segment between Andrew Station and Logan Airport was mostly eliminated due to low ridership resulting from long travel times. Only the very early morning runs were retained to allow Logan workers access to the Airport when the subway is not running. At the same time, extra service was added on the CT-3 route between Andrew Station on the Red Line and Longwood Medical Area, a heavily traveled segment, reducing headways from 20 minutes to 15 minutes during the peak morning hours.

The Route 41 Bus originally between Jamaica Plain and Dudley Station has been extended to JFK/UMass Station providing direct connections to the Red Line and reducing crowding between Uphams Corner and Dudley Station. Sunday service is also being

² Among these criteria are: passenger loading, schedule adherence, net cost per passenger, schedule frequency, and coverage (proximity to densely populated areas of more than 5,000 people per square mile). Ideally bus routes are located within ¼ mile of densely populated areas.

added. The MBTA has produced multi-lingual flyers to advise the public about these added services.

The Routes 1 and 66 Harvard-Dudley Buses have increased peak hour, evening and Sunday service. The MBTA has produced an extensive study of the Route 66 bus.³ Dated December 2001, this report is intended for the Massachusetts Highway Department, the cities of Boston, Brookline and Cambridge and internal use. The purpose is to improve bus flow on this very heavily traveled route by means of some physical improvements to certain intersections, parking and other enforcement, signal timing, consolidation and relocation of bus stops and service increases, including on weekend. Use of Intelligent Transportation Systems (ITS) technologies for signal pre-emption and vehicle location is also considered for the future.

The Route 8 Harbor Point/UMass-Kenmore Bus has more frequent weekend service.

Rationalization of Bays at Dudley Station was another result of the service planning process. Similar destinations were grouped together to allow passenger convenience and choice.

In the next round of service planning, the MBTA will continue to initiate more of the routes recommended in the MIS again dependent on available operating funds and capital equipment. Resources were made available in the last Service Plan by reallocating some of the service that was running to the airport into other crosstown initiatives. It is not yet clear if a similar reallocation will be possible in the current service plan.

IV. CLEAN FUELS

A key component of Urban Ring Phase 1 bus service, and subsequent Phase 2 BRT service, will be the use of low-emission vehicles powered by compressed natural gas. To provide this service, new vehicles will be purchased and the MBTA will fuel and maintain them at a combination of existing and new bus garages. To accomplish this task the following steps have been taken.

60' Compressed Natural Gas (CNG) Bus Purchase - The MBTA has ordered forty-four 60' CNG buses. Seventeen (17) of these will be allocated to the Washington Street portion of the new Silver Line. Currently, it is anticipated that the remainder will be assigned primarily to the Route 39 until LRV service is available on that corridor. The MBTA currently owns seventeen (17) 40' CNG buses that are in use on the Silver Line, which will be reassigned from the Silver Line once the 60' vehicles are available for service.

40' CNG Bus Purchase - Almost three hundred 40' CNG buses have been ordered and will be received over the next couple of years.

Dual-Mode Bus Purchase - Thirty-two dual-mode, diesel/electric buses have been ordered for the Silver Line Transitway in South Boston. Several of these routes will be operated in

³ MBTA Bus Route 66, Arterial Improvement Study, A report produced by the Central Transportation Planning Staff for the Massachusetts Bay Transportation Authority and the Massachusetts Highway Department; December, 2001.

the Urban Ring corridor from South Station to: Logan Airport, Boston Marine Industrial Park and the new Convention Center.

Bus Maintenance Facility Study - The MBTA has conducted a “Bus Maintenance Facility Needs Assessment and Siting Study for New Facilities” and a Draft Report is under review. This effort is a necessary precursor for expanded Phase 1 service being considered.

CNG Fueling Bays - CNG maintenance and fueling bays have been built and are being used at the Charlestown and Cabot garages. A new garage is under construction at Southampton Street. Design of the Arborway Garage is on hold pending negotiations with the Massachusetts District Commission regarding access from the Jamaica Way.

Low Sulfur Fuel Purchase - MBTA has contracted to purchase 3.5 million gallons of Ultra Low Sulfur Diesel Fuel to be used on nearly 1,000 diesel buses. Previously this program was limited to operations out of Cabot and Charlestown bus garages, but will now be extended to other facilities. The new fuel reduces sulfur content from 500 to 15 parts per million, or 95 percent less than conventional diesel fuel. In addition, diesel particulate filters that reduce particulate matter, carbon monoxide and total hydrocarbon emissions by 90% will be installed on buses. Together these changes will make the MBTA fleet compliant with EPA air quality standards nearly four years earlier than required.

V. COMMUTER RAIL CONNECTIONS

Two commuter rail stations along the Urban Ring corridor have opened or been improved, and improvements at a third are underway.

Station at JFK/UMass - A commuter rail station at JFK/UMass has been opened for improved access to Columbia Point and has better intermodal connections between the Old Colony Commuter Rail Line serving the South Shore, and the Red Line and the proposed Phase 1 Urban Ring bus routes.

Daily Service at Yawkey Station - Commuter rail service at Yawkey Station on the Framingham Line has been expanded to a daily schedule. Previously this station was only used on days when the Red Sox were playing at home. Expanding service to Yawkey Station improves access to the Longwood Medical Area, one of the major destination points in the Urban Ring corridor.

Renovated Station and Increased Service at Uphams Corner – The commuter rail station at Uphams Corner on the Fairmont Line, also known as the Dorchester Branch, is being renovated as part of the MBTA’s Fairmont Corridor Improvement Project. The project involves increased frequency of service on the line as well as new and renovated stations, and rehabilitation of bridges.

VI. FEDERAL TRANSPORTATION INITIATIVES

TEA-3 – Transportation Reauthorization Bill - The MBTA is working with a coalition of transportation interests organized through the Executive Office of Transportation and Construction (EOTC) to advocate for increased funding in the re-authorization of TEA-21. This coalition includes not only interests from around the state, but is also cooperating with the other New England states and throughout the northeast region. This effort is just beginning, but its intent is to make the strongest possible case for the transportation needs of the region including their environmental, economic and sprawl prevention benefits.

Working with the Congressional Delegation - Specifically on the Urban Ring, the MBTA and the Compact Communities have been in regular contact with the Massachusetts Congressional delegation in an attempt to earmark funds for the project. To date, there have been annual appropriations sufficient to produce the MIS and complete the DEIR/S for Phase 2.

The next focus will be to earmark funds for the procurement of Phase 1 buses and possibly construction/modification of additional maintenance facilities. Based on the assumptions made in the MIS (ten minute headway at an average speed of 12 mph) a new Phase 1 CT bus route would require one new bus each mile of route plus a 33% allowance for spares, at an estimated \$3 million capital cost. Therefore, in order to advance introduction of an additional Phase 1 CT bus route a request was submitted to Congressman Michael Capuano's office for earmarking that amount in the next yearly transportation appropriation bill.

VII. PHASE 1 LOW-COST MEASURES AND IMPLEMENTATION SCHEDULE

The array of low-cost measures for Urban Ring Phase 1 is generally described in Chapter 3 of the Urban Ring MIS Final Report dated July 2001. The MIS Final Report contains an implementation schedule for each phase of the project. The foregoing sections of this Annual Progress Report amplify the many ways in which the MBTA is pursuing implementation of low-cost measures to make Phase 1 Urban Ring service a reality.

Unfortunately, severe financial constraints currently facing the Commonwealth of Massachusetts in general, and the MBTA in particular have necessitated a reevaluation of the schedule for implementation of several Urban Ring Phase 1 crosstown (CT) and express (EC) bus routes. The MBTA's recently adopted 5-year Capital Improvement Program does not contain sufficient funds to support either the capital or O&M costs of all the Phase 1 bus routes defined in the MIS. Therefore, it is now anticipated that pending availability of funds, the proposed implementation of the majority Phase 1 bus service improvements would occur simultaneously with Phase 2 BRT service, as shown in the attached schedule.

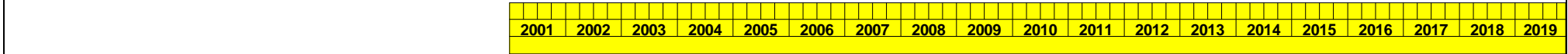
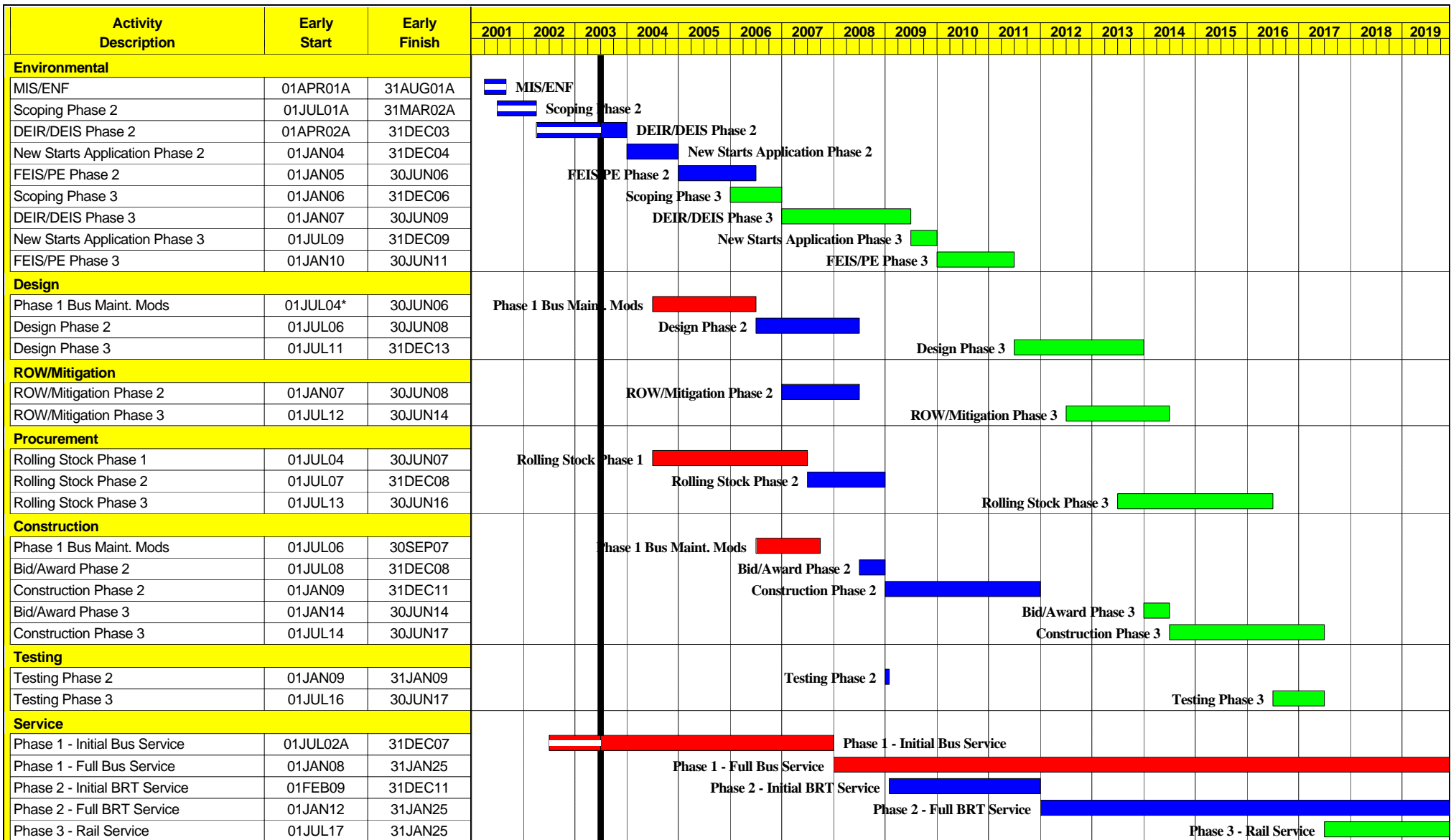
VIII. IMPACT ON BROWNFIELDS REDEVELOPMENT AND ECONOMIC DEVELOPMENT

It is still early in the implementation phase of Phase 1, and therefore not possible to assess the impact Phase 1 CT and EC bus routes would have on Brownfield redevelopment and economic development in the Urban Ring Compact communities. Anticipation of planned transit improvements in the Urban Ring corridor are frequently cited in transportation and economic development planning initiatives at the local level, and for developmental projects located in the corridor that are subject to environmental review. This heightened awareness of the Urban Ring project in general, the proposed phasing strategy and its continued movement toward implementation are seen as having an overall positive impact on the attractiveness of locations along the corridor for Brownfield redevelopment and economic development.

IX. COORDINATION EFFORTS WITH FTA ON PHASE 2

The MBTA has coordinated closely with the Federal Transit Administration (FTA) regarding the environmental review of Urban Ring Phase 2 starting with the submittal of the MIS Final Report and the Phase 2 Expanded ENF in July 2001, followed by the joint state/federal Scoping Meeting held October 3, 2001. Subsequent to those milestone events, the MBTA has provided FTA with early draft copies of the Phase 2 DEIR/S Scoping Summary Report for review and comment, and a copy of the final Scoping Summary Report dated December 2001.

The evaluation of alternative variants; extensive negotiation with CSX regarding use of portions of their right-of-way for Phase 2 BRT busways, and identification of necessary funding sources other than federal or state have necessitated a delay in completion of the Phase 2 DEIR/S to December 8, 2003 and anticipated submission of a Phase 2 New Starts Application to November 2004. As a result, it is anticipated that implementation of BRT Service and of the remaining Phase 1 crosstown routes will occur by the first quarter of 2009.



Start Date 01JAN01
 Finish Date 31JAN25
 Run Date 30JUN03 14:33

	Progress
	Phase 1
	Phase 2
	Phase 3

URBAN RING
 DRAFT Project Development &
 Implementation Schedule
 Phases 1, 2 & 3
 Implemented as Resources Become Available

