



# Moving Forward on Rapid Transit:

## Initial Project

### 1. Overview

The City of Winnipeg's official plan, *Plan Winnipeg . . . 2020 Vision*, includes the implementation of a new **Bus Rapid Transit (BRT)** system as part of a comprehensive approach to improve environmental outcomes, to revitalize the downtown, to provide for more compact urban development, and to strengthen the local economy.

The intent of the BRT initiative is to dramatically improve the quality and attractiveness of public transportation in Winnipeg. The BRT system will integrate several features to improve all aspects of transit travel. These include:

- A comprehensive set of transit priority measures to improve speed and reliability:
  - Exclusive busways in radial corridors for transit and emergency vehicles
  - Graham Avenue Transit Mall
  - On-Street Diamond Lanes
  - Transit Signal Priority System
- Attractive, comfortable, weather-protected stations on the busways and at major on-street bus stops.
- Advanced technology low-floor buses with state-of-the-art propulsion systems, advanced aesthetics and styling, enhanced passenger comfort and security features, and vehicle diagnostic capabilities.
- A new bus communications system with an automated vehicle location (AVL) capability.
- Real time schedule information displays at stations and in major activity centres served by the BRT network.
- On board “next stop” displays and enunciators.
- Integrated recreation paths adjacent to the busways for active transportation (cycling, walking, rollerblading).

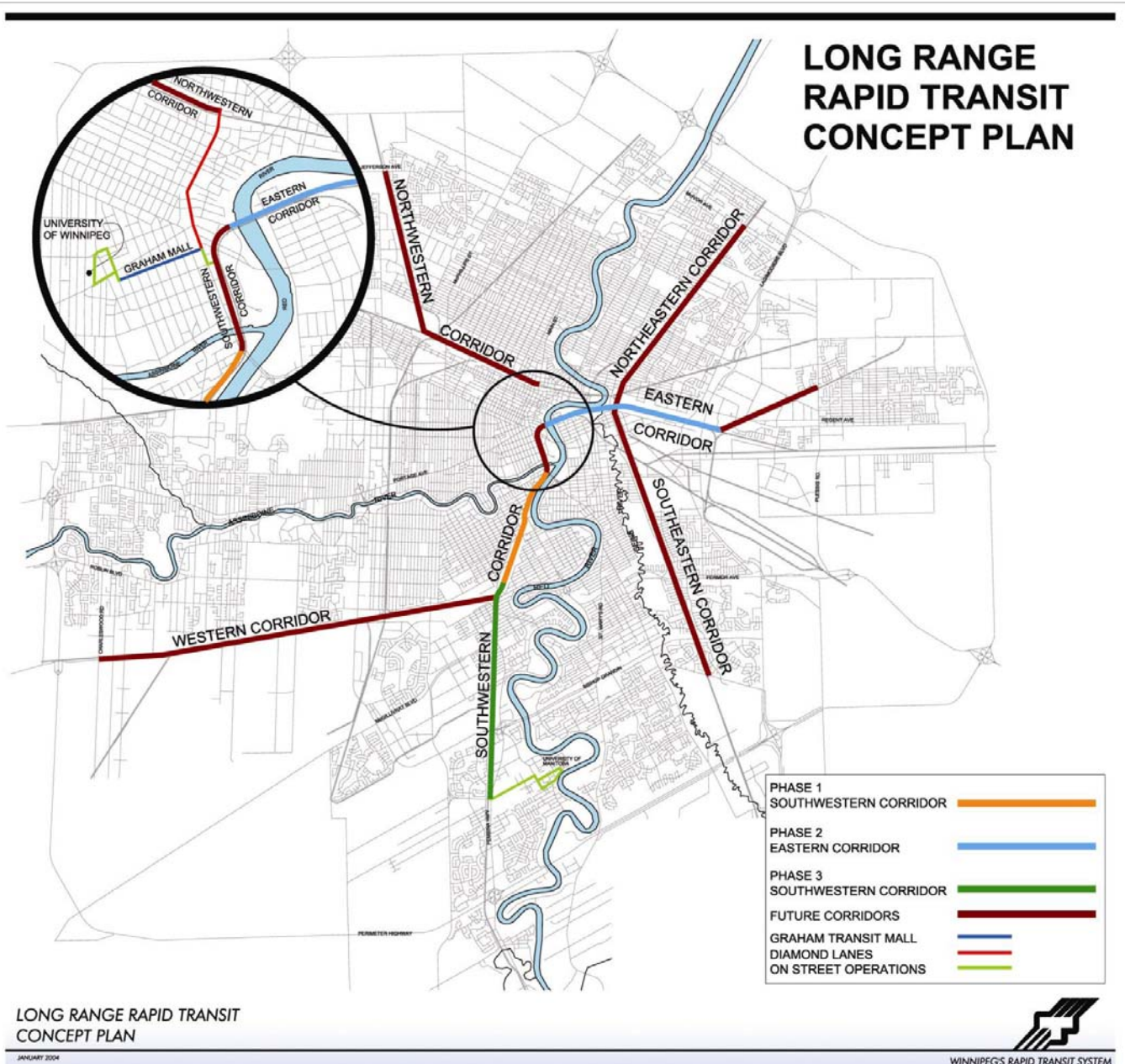
Figure 1 shows the **long range** Bus Rapid Transit Concept Plan for Winnipeg, including the alignments for each of the six busways, the Graham Mall and the on-street diamond lanes.

**Phase 1** of the BRT system involves the initial stage of the Southwestern Corridor (including a 3.4 km busway, on-street diamond lanes on Main Street and Pembina Highway, transit signal priority at at-grade intersections, stations, and a recreation path adjacent to the busway segment) and the introduction of intelligent transportation systems (ITS) to provide real time schedule information and on board “next stop” information for passengers.

**Phase 2** of the BRT system includes the initial stage of the Eastern Corridor (including a 5.1 km busway, on-street diamond lanes on Regent Avenue, transit signal priority at at-grade intersections, stations, and a recreation path adjacent to the busway segment) and the further application of the ITS features introduced in Phase 1.

The agreement announced on March 19<sup>th</sup>, 2004 by the Government of Canada, Government of Manitoba, and the City of Winnipeg includes funding from the **Canada Strategic Infrastructure Fund** for the **complete implementation of Phase 1** and the preparation of the **Functional Design for the Eastern Corridor**.

Figure 1



## 2. Scope and Timing of Initial Project

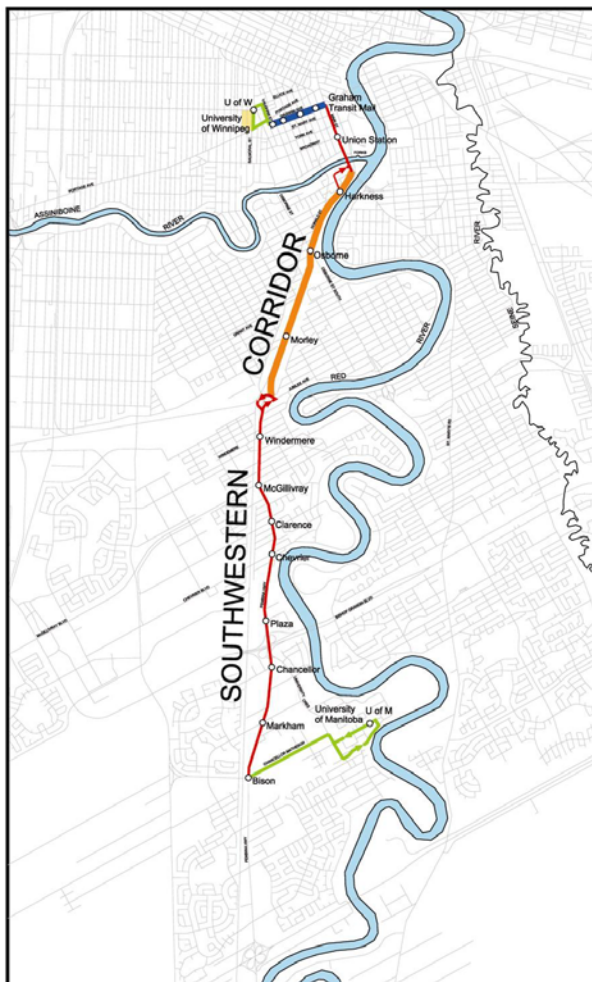
The scope of this initial Rapid Transit project includes the **complete implementation of Phase 1** of Winnipeg's proposed BRT system (see below for details) and the **functional design for the Eastern Corridor**.

Subject to the finalization of the funding agreement with the senior levels of government, it is expected that the project will be completed by **Fall 2007**.

## 3. Phase 1 Details

Phase 1 of the BRT system includes:

- Implementation of the **rapid transit infrastructure for the first stage of the Southwestern Corridor**, and
- Implementation of the **intelligent transportation systems (ITS)** to provide real time schedule information and on board "next stop" information for passengers.



### PHASE 1: SOUTHWESTERN CORRIDOR

- Busway portion  
Queen Elizabeth Way &  
Stradbrook to  
Pembina & Jubilee
- Graham Transit Mall in  
Downtown
- On-Street Rapid Bus on  
Main Street / Pembina Highway  
Diamond Lanes  
Signal Priorities  
Upgraded Transit Stops  
Real Time Schedule  
Information
- Regular On-Street Transit

The specific components of Phase 1 can be summarized as follows:

	<b>Component</b>	<b>Description</b>	<b>Comments</b>
<b>Rapid Transit Infrastructure</b>	<b>Graham Mall</b>	A 9-block downtown street that provides extensive priority for transit, cyclists, and pedestrians.	Graham Mall completed in 1995. Transit stations to be upgraded.
	<b>Main Street Diamond Lanes</b>	Curb lane in each direction reserved for transit and cyclists between Main & Graham and Queen Elizabeth Way & Stradbrook. Transit signal priority to be provided at intersections.	Diamond lanes implemented in 1997. Transit stations on Main Street to be upgraded. Transit signal priority system to be implemented.
	<b>Busway</b>	New grade-separated 3.4 km busway between Queen Elizabeth Way & Stradbrook and Pembina & Jubilee. Includes three stations (Harkness, Osborne, Morley), an overpass of Osborne Street, an underpass of the CN main line, and a recreational path adjacent to the busway.	New facility
	<b>Pembina Highway Diamond Lanes</b>	Curb lane in each direction reserved for transit and cyclists between Pembina & Jubilee and Pembina & Bison. Transit signal priority to be provided at intersections.	New facility. Transit stations at major stops on Pembina Highway to be upgraded. Transit signal priority to be implemented.
	<b>Terminals</b>	Downtown terminal at the University of Winnipeg (Balmoral & Ellice). University of Manitoba terminal on Dafoe Road.	Transit stations at terminals to be upgraded.
<b>Intelligent Transportation Systems</b>	<b>Bus Communications System</b>	New bus radio communications system with an automated vehicle location (AVL) capability. AVL required to support transit signal priority system and advanced passenger information systems.	To be implemented on complete Winnipeg Transit fleet (535 buses)
	<b>Real Time Schedule Information System</b>	New electronic information displays of bus departure times (based on AVL data) at stations and major stops on the Southwestern Transit Corridor. In addition, real-time updates will be automatically provided for schedule information provided by Winnipeg Transit's website and Telebus system.	Real time electronic schedule displays to be implemented at approximately 25 locations
	<b>On Board "Next Stop" Displays and Enunciators</b>	On buses with standing loads or during inclement weather when the windows are obscured, it is difficult for passengers to know when and where to alight from the vehicle. On board electronic displays and enunciators that show/announce the "Next Stop" (based on AVL data) to be implemented.	To be implemented on complete Winnipeg Transit fleet (535 buses)