



Public Consultation Centre
June 17, 19 and 24, 2008
Phase 2, Step 3

Information Handout

SHORT-LISTED RAPID TRANSIT ROUTE ALTERNATIVES



Region of Waterloo

Welcome to the Rapid Transit Public Consultation Centre

Background

Waterloo Region is one of the fastest growing communities in Canada. With a population of 500,000, and expected growth to 729,000 within the next 25 years, the Region is planning now for the challenges and opportunities associated with population and employment growth.

In 2003, Region of Waterloo Council unanimously adopted the Regional Growth Management Strategy, a long-term strategic framework that identifies where, when and how future residential and employment growth will be accommodated. The strategy sets out strong and innovative policies for managing growth in urban areas and townships of the Region. A rapid transit service linking Cambridge, Kitchener and Waterloo with enhanced transit services to the townships is also a key component of the Regional Growth Management Strategy (www.region.waterloo.on.ca/rgms).

Rapid Transit is also a significant part of the Province's Growth Plan for the Greater Golden Horseshoe. The Plan identifies the need for Rapid Transit in Waterloo Region, and recommends that priority funding be given to infrastructure projects that support an integrated regional transportation network for the movement of people and goods throughout the Greater Golden Horseshoe.

Your Input is Important

Public input is an essential and ongoing component of the Rapid Transit Environmental Assessment and has been used throughout the process to help Regional Council make key decisions that will help shape the future of our community.

With your input, Regional Council approved Phase 1 of the Environmental Assessment in 2006 and selected the Rapid Transit Initiative as the preferred transportation strategy for Waterloo Region. Council also approved Bus Rapid Transit and Light Rail Transit as the preferred technologies as part of Phase 2, Step 1, which was completed in 2007.

The purpose of this consultation centre is to get your input on the short-listed rapid transit route alternatives. Your input will be used as part of the ongoing Environmental Assessment to finalize the route alternatives for additional evaluation, and determine which rapid transit system (route and technology) best meets the Region's future transportation needs and growth management objectives.

This handout includes information about:

- How the short list of possible rapid transit route alternatives was developed;
- The two route options that will be evaluated further; and
- Next steps in the evaluation process, including future opportunities to provide your input, to choose a preferred rapid transit route, station locations and technology.

Phase 2: Evaluating Rapid Transit Routes, Station Locations and Technologies

Phase 2 of the Environmental Assessment began in September 2006. The purpose of Phase 2 is to evaluate and rank rapid transit routes, technologies, and station locations and, in consultation with the community, select a Preferred Rapid Transit System that best meets the goals set out in the Regional Growth Management Strategy (RGMS): Enhancing Our Natural Environment; Building Vibrant Urban Places; Providing Greater Transportation Choice; Protecting Our Countryside; Fostering a Strong Economy; and Ensuring Overall Coordination and Communication.

Phase 2 is a three-step process:

Step 1: Completed

Step 1 evaluated 10 rapid transit technologies and their associated route designs. In consultation with the public, Regional Council approved Bus Rapid Transit (BRT) and Light Rail Transit (LRT) operating both on and off road as the short list of technologies for further evaluation in February 2007.

Step 2: Completed

In consultation with the Area Municipalities and the public, the Region finalized the list of top-ranked route and station alternatives in each of the seven segments in the study area. Completed in March 2008, this step included an in-depth evaluation of route, station and technology alternatives based on Transportation, Social/Cultural, Natural Environment and Economic considerations. Results of this evaluation can be reviewed in the handout entitled *Phase 2, Step 2 Evaluation Results*, which is available online at www.region.waterloo.on.ca, or by request from the Rapid Transit Team.

Step 3: Now Underway

Using the top ranked routes/technology alternatives in Step 2, public input and other technical considerations, a variety of rapid transit route alternatives were developed. The Region then evaluated these alternatives and short-listed two routes – a BRT route and an LRT route. The short-listed route alternatives still include a number of “decision-sections” where two or more possible route options exist along short sections within each alternative.

Your input during this Public Consultation Centre will be used to help finalize the rapid transit route alternatives that will be evaluated in further detail. As a final outcome of Step 3, a preferred rapid transit system (including route, station locations and technology) will be identified for consideration by the public and Regional Council. Alternative implementation and staging options will also be considered and evaluated.

The Evaluation Process: Phase 2, Step 3

After reviewing the public input from the January 2008 Public Consultation Centres on the evaluation of routes, station locations and technologies, the Region used the rankings from each of the seven segments of the study area to develop 52 possible route alternatives.

These alternatives were then evaluated using a two-stage process:

1. First, 12 important criteria were identified from Phase 2, Step 2 of the EA that reflect the growth management objectives and transportation needs of the Region. Targets were then set for

each criteria and used to rank the alternatives. Those route alternatives that scored below the targets were dropped from further consideration. **It is important to note that the results of this ranking provided a RELATIVE comparison for routes of the SAME technology. For example, route alternatives using BRT were compared to other BRT routes while routes using LRT were compared only to other LRT routes.**

2. Second, a field review was conducted along each route to identify engineering considerations that could pose obstacles to construction or implementation of the final system. The purpose of this review was to look for engineering challenges that could impact the feasibility of the rapid transit route alternatives. The main considerations were:
 - Major utilities (e.g. gas, water, hydro) that may need to be relocated to accommodate construction;
 - Rail and road bridges with limited right-of-way width crossing rivers and streams, highways, and railway lines;
 - Steep hills or sharp curves in the road and railway lines that could impact the operations of a rapid transit vehicle;
 - Narrow rail rights-of-way that will need widening where freight rail operation could co-exist with the dedicated lanes needed for rapid transit;
 - Narrow road rights-of-way that would need widening or removal of traffic/parking lanes to accommodate dedicated rapid transit lanes;
 - Property access on the on-road sections of rapid transit routes;
 - Local site conditions or other factors that could significantly increase construction costs.

Those sections of the rapid transit route alternatives that had multiple challenges or severe constraints considered too great to reasonably overcome were eliminated from further consideration.

Short-listed Rapid Transit System Alternatives:

The rapid transit routes that achieved the highest rankings, best met the growth management objectives and transportation goals of the Region, and had the fewest or most easily addressed engineering challenges are described below. Although there are some similarities between the two routes, each complete route alternative works best with a particular rapid transit technology (i.e. BRT or LRT).

Both routes include “decision-sections” where alternative routing options are still being considered. These sections are areas along the route where a more detailed evaluation of constraints and engineering considerations, a review of associated costs and additional public and stakeholder input will be required in order to make a decision on the final preferred route alignment.

Maps that show the route alternatives are included in Appendix A, **Short-listed Rapid Transit Route Alternatives**. Here is a description of the two short-listed routes:

Light Rail Transit (LRT) Route

- Begins at Conestoga Mall in Waterloo but could extend along King Street to St. Jacobs Farmers’ Market;
- OPTION A: Follows Kraus Drive and Northfield Drive to the rail corridor through the Research & Technology Park and the University of Waterloo campus and Waterloo Park into Uptown

Waterloo OR follows King Street to University Avenue to the University of Waterloo campus and takes the rail corridor through Waterloo Park into Uptown Waterloo;

- OPTION B: follows Caroline Street OR King Street through Uptown Waterloo;
- Follows King Street West past Sun Life and Grand River Hospital to Victoria Street;
- OPTION C: follows Victoria Street and Charles Street through downtown Kitchener OR King/Francis Street to Duke Street through the downtown;
- Follows Charles Street to Ottawa Street;
- OPTION D: follows along Ottawa Street to the CN Rail corridor (near Mill Street) and down the rail corridor with an option to travel on Courtland Avenue to the hydro corridor to Fairview Park Mall OR continue on Charles Street to King Street and then along the Montgomery/Dixon/Eckert/Kingsway Drive route to Fairview Park Mall;
- The route then follows the CP Rail corridor along King Street East and across the Grand River;
- OPTION E: route follows the CP Rail corridor to Eagle Street North and on to Hespeler Road where it follows this road south to Coronation Boulevard and Water Street OR follows the CP Rail corridor through the Preston core to Concession Road, then onto Coronation Boulevard past Cambridge Memorial Hospital to the Water Street intersection;
- OPTION F: route follows Dundas Street to Beverly Street and down Beverly Street to Wellington Street and the Ainslie Street Transit Terminal OR follows Water Street to Main Street in the Galt core and continues down Water Street to cross over to the Ainslie Street Transit Terminal.

Bus Rapid Transit (BRT) Route

- Begins at Conestoga Mall in Waterloo but could extend along King Street North to St. Jacobs Market;
- OPTION A: Follows Kraus Drive and Northfield Drive to the rail corridor through the Research & Technology Park and the University of Waterloo campus and Waterloo Park into Uptown Waterloo OR follows King Street to University Avenue to the University of Waterloo campus and follows the rail corridor through Waterloo Park into Uptown Waterloo;
- OPTION B: Caroline Street OR King Street through Uptown Waterloo;
- OPTION C: follows Victoria Street and Charles Street through downtown Kitchener OR King/Francis Street to Duke Street through the downtown;
- OPTION D: follows along Ottawa Street to the CN Rail corridor (near Mill Street) and onto Fairway Road with an option to travel on the hydro corridor to Fairview Park Mall OR continue on Charles Street to King Street and then along the Montgomery/Dixon/Eckert/Kingsway Drive route to Fairview Park Mall;
- Follows Highway 8 and Highway 401 using bus bypass shoulders;
- Follows Hespeler Road south to Coronation Boulevard and Water Street and along Water Street into the Galt core, heading south on Water Street to cross over to Ainslie Street near the Ainslie Street Transit Terminal.

Next Steps in the Environmental Assessment Process:

After reviewing public and stakeholder input, the Rapid Transit Project Team will finalize the rapid transit route alternatives. These alternatives will then be evaluated and compared to each other to identify a preferred Rapid Transit System (route, station locations and technology) and conclude Phase 2, Step 3 of the Environmental Assessment. Alternative implementation and phasing will also be considered and evaluated at this stage.

During this evaluation, a cost-benefit analysis will be completed for each of the short-listed routes, including detailed capital and operating and maintenance costs. Routes will also be evaluated for their ability to provide benefits to the community, including:

- encourage a more compact urban form;
- support reurbanization around stations;
- complement pedestrian-friendly urban design;
- reduce the growth of traffic congestion and associated environmental impacts;
- provide rapid transit trip times competitive with automobile travel;
- service core residential and employment areas; and
- connect with Grand River Transit and inter-regional transit.

Phase 2, Step 3 of the Environmental Assessment is anticipated to be completed in fall 2008. The results of the evaluation, and a preferred route, technology and station locations and phasing/implementation strategy for the entire study area from Waterloo to Cambridge, will be presented for public input and Regional Council consideration.

Watch for the Rapid Transit Newsletter for details about future public consultation opportunities. Information will also be posted on our website at www.region.waterloo.on.ca/transitea and sent by e-mail to those who sign up on the Rapid Transit Contact List.

Once the findings of Phase 2 Step 3 have been considered by Regional Council, Phase 3 of the Rapid Transit Environmental Assessment will begin. During this Phase, a preliminary design of the preferred rapid transit system for Waterloo Region will be undertaken.

For more information on the Rapid Transit Initiative or the Rapid Transit Environmental Assessment, visit the Region's website at www.region.waterloo.on.ca/transitea. You can also contact the Rapid Transit Infoline at (519) 575-4757, ext. 3242 or rtinfo@region.waterloo.on.ca.

A Comment Sheet is also available as a separate document. Please complete it and leave it in the box provided, or take it with you and return it to the Rapid Transit Team by July 11, 2008.