

Longwood Road Class EA Study

Responses to comments received regarding Notice of Study Commencement and PIC #1:

#	Comment	Response
1	Four vs. fewer lanes on Longwood Road	<p>Comments indicated that four lanes for motorized traffic are not necessary on Longwood Road, and that there should only be two or three lanes for vehicles, in accordance with <u>Shifting Gears 2009</u>.</p> <p>The approved cycling map in <u>Shifting Gears 2009</u> proposed bike lanes on Longwood Road/Aberdeen Avenue between Main Street and Studholme Drive. In addition, there were two applicable cycling elements recommended in <u>Shifting Gears 2009</u> for implementation:</p> <ul style="list-style-type: none"> • Element #158 was for a multi-use recreational trail on the south side of Aberdeen between Longwood and the TH&B rail bridge. At the bridge, cyclists would dismount to proceed under the bridge, although an option to provide a bike lane or sharrow under the bridge was to be explored. The estimated cost was \$53,950. That element was to complement the existing bike lane on the north side of Aberdeen Avenue. Aberdeen Avenue was to continue to provide four lanes for vehicles. • Element #196 was for revisions to pavement markings on Longwood between Aberdeen and Main, for three lanes plus bike lanes on both sides within the existing curb lines. The estimated cost was \$17,500. The note accompanying the element listing in the table in Chapter 5.1.1 was, "BL with road diet – see Report". The "Report" referred to was the <u>West Hamilton Bicycle Network Review (2006)</u>, which was one of several complementary reports completed in 2006, including the <u>Kirkendall Neighbourhood – Traffic Management Plan – Project File Report (Sept 2006)</u>, and the <u>McMaster Innovation Park and West Hamilton Innovation District Coordination Study Traffic Impact Study (August 2006)</u>. The recommendations of the <u>West Hamilton Bicycle Network Review (2006)</u> were: <ul style="list-style-type: none"> ○ Longwood – Aberdeen to Hwy 403 bridge - interim three lanes plus bike lanes; ultimate four lanes plus bike lanes plus parking ○ Longwood - Hwy 403 bridge to Main - two lanes northbound and one lane southbound plus bike lanes <p>The three lane plus bike lane solution south of the Hwy 403 bridge was intended to apply to a short-term interim period, until such time as area development and traffic volumes on Longwood Road necessitated four lanes and reconstruction to accommodate cyclists, pedestrians, enhanced streetscaping, and urban design features. The three lane plus bike lane solution over the Hwy 403 bridge to Main Street was intended to be the ultimate solution only if a new ramp was added from Main street West at Columbia College on to Hwy 403 westbound toward Ancaster and Brantford; however, the City has since studied the ramp option, negotiated with MTO, and decided not to proceed with further studies or detailed design in the foreseeable future.</p> <p><u>Shifting Gears 2009</u> was approved by City Council in 2009, and subsequent modifications to the document were consistent with the 2009 Council-approved recommendations, so the recommendation for implementing element #196 for Longwood Road, i.e. "BL with road diet – see Report" remained, notwithstanding that it was intended as an interim solution. However, in 2010, during planning and implementation of the Frid Street Extension, the City determined that traffic volumes on Longwood Road had increased to the extent that the interim pavement marking plan for Longwood Road, i.e. three lanes plus bike lanes, could no longer be recommended.</p> <p>The Longwood Road Class EA Study updated both traffic count information and development assumptions for the surrounding area. The traffic projections and micro-simulations prepared for the interim period (approximately 2016) and the ultimate period (approximately 2031) for the Longwood Road Class EA Study confirmed that four lanes were warranted on Longwood Road for those time periods.</p>
2	The lack of bike lanes on Longwood Road	<p>A comment implied that as bike lanes are not recommended for Longwood Road, cyclists would not be provided with suitable cycling infrastructure.</p> <p>The preferred concept for cycling infrastructure on Longwood Road and Aberdeen Avenue is designed to connect the existing bike lanes on Longwood Road north of Main Street to the cycle network connections on Studholme Drive. The preferred concept includes a number of complementary elements between Main Street and Studholme Drive:</p> <ul style="list-style-type: none"> • Separate crosswalks for cyclists across the north and east legs of the intersection of Main Street and Longwood Road to access the cycle track (see description below). The cyclist crosswalks would be in addition to traditional pedestrian crosswalks, and would allow cyclists to ride rather than walk when there is a green signal for the crosswalks. The maximum delay for southbound cyclists in crossing the two crosswalks would be the same as one signal cycle (90 to 100 seconds), the minimum delay would be zero, and the average delay would be half of a signal cycle (45 to 50 seconds). To illustrate, the maximum delay would occur when the cyclist reaches the cyclist crosswalk just as the signal turns green for southbound vehicles, requiring the cyclist to wait for the signal to turn red for vehicles and green for the first crosswalk, and then wait for the green signal at the second crosswalk. The minimum delay would occur when the cyclist reaches the cyclist crosswalk and has a green signal for the first crosswalk, and then an immediate green signal for the second crosswalk. Statistically, the average delay would be mid-way between the minimum and maximum delay. • A 3.7m wide two-way cycle track on the east side of Longwood Road and north side of Aberdeen Avenue, separate from traffic and from pedestrian sidewalks. The cycle track would be accommodated on a proposed new 6m wide bridge over Hwy 403 for Active Transportation (AT), located northeast of the existing Longwood Road Bridge over Hwy 403. The only existing road crossings of the cycle track would be at the new Frid Street Extension and the driveway on the north side of the Atrium Building in the McMaster Innovation Park, but it is possible that another driveway access will be required across the cycle track in the longer term. The cycle track would mean that cyclists would not have to navigate the proposed roundabout at Aberdeen Avenue and Longwood Road. • Improvements under the north abutment of the TH&B rail bridge (words deleted), to accommodate both pedestrian and cyclist connections to the intersection at Studholme Drive. (sentence deleted). • A separate crosswalk for cyclists across the west leg of the intersection of Aberdeen Avenue and Studholme Drive. The cyclist crosswalk would be instead of a traditional pedestrian crosswalk, and would allow cyclists to ride rather than walk when there is a green signal for the crosswalk. The cyclist crosswalk would provide the connections to the on-street cycle routes on Studholme Drive and to the proposed multi-use trail through Chedoke Golf Course to Glenside Avenue. Cyclists northbound on Studholme Drive would continue to use the existing bike box for left turns to access the cycle track, subject to the constraints under the north span of the TH&B rail bridge described above. The traffic signal at Aberdeen Avenue and Studholme Drive would be actuated by push-button or presence-detector, so delay to cyclists would be minimal, as is the case for northbound cyclists on Studholme Drive at Aberdeen Avenue now. <p>In summary, the preferred concept proposes robust and convenient cycling infrastructure between the existing/proposed cycle network elements at Main/Longwood and Aberdeen/Studholme.</p>
3	Conflicts with <u>Shifting Gears 2009</u>	<p>Comment indicated that the proposed cycle track is not consistent with the cycling elements recommended in <u>Shifting Gears 2009</u>.</p> <p>Chapter 4 of <u>Shifting Gears 2009</u> contains the following analysis:</p> <p>"In addition to the four established elements described above (i.e. 1. Multi-use Recreational Trails (off-street, rural & urban), 2. Reserved Bike Lanes (on-street, urban), 3. Signed Bike Routes (on-street, urban), 4. Paved Shoulders (on-road, rural)], other facility designs that were considered are as follows:</p> <p>Bike Lanes Beside the Sidewalk (Behind the Curb)</p> <p>The City considers the design where a bike lane is positioned behind the curb (or beside the sidewalk) as the least preferred option. This design may cause conflicts at intersections and driveways due to poor visibility, is very difficult to manage at signalized or stop-controlled intersections and thus will be avoided unless conditions are ideal for its use (a situation with no intersecting roadways or driveways for an extended distance is preferred)."</p> <p>Having regard to the above analysis contained in <u>Shifting Gears 2009</u>, the Longwood Road Class EA Study considered the relative merits of bike lanes vs. a cycle track, and concluded that a cycle track offered a superior net benefit within the study area, notwithstanding that it would not be "ideal", i.e. no roads or driveways crossing the cycle track. Contributing factors include: avoiding having to negotiate or take a separate route around the proposed roundabout at Aberdeen Avenue and Longwood Road; utilizing space on a new AT bridge separate from the Longwood Road bridge over Hwy 403, rather than requiring the replacement of the existing Longwood Road bridge; and, the few intersecting roads/driveways (currently two, with potentially another in the longer term) over the 850m length of the proposed cycle track.</p>

4	Roundabouts	<p>It was suggested that a roundabout would be worse than a conventional intersection, because of driver unfamiliarity with the concept, pedestrian and cyclist unfriendliness, and/or capacity to handle the traffic demands.</p> <p>The intersection of Aberdeen Avenue and Longwood Road is within the controlled access highway designation of Hwy 403, and is subject to Ministry of Transportation (MTO) approvals for any changes in geometry and traffic control. In 2006 when the Kirkendall Neighbourhood studies were ongoing, the MTO did not support a roundabout. Today, the situation is reversed. After review of the traffic forecasts and micro-simulations, the MTO will only consider a roundabout at this location.</p> <p>There are very good reasons why roundabouts have been gaining support in Ontario and elsewhere:</p> <ul style="list-style-type: none"> • Reduced delay and improved energy efficiency • Reduced collision rates and severity of collisions • Improved response to traffic demand • No traffic signal capital and operating costs <p>There are some downsides to roundabouts, such as challenges for cyclists and pedestrians using them, but those effects can be mitigated, and in the case of Aberdeen/Longwood, almost eliminated through the concentration of cycling and pedestrian activity to the north and east of the roundabout, outside of the roundabout itself.</p> <p>The micro-simulations prepared during the study indicate that the conventional and roundabout options perform in a similar fashion overall, but that the conventional intersection may be more susceptible to operational and safety issues with the weaving from Hwy 403 ramp, and to queuing back onto Hwy 403 in the peak hours.</p> <p>Roundabouts are becoming more and more common in Hamilton. It is imperative that proper signing and pavement markings be implemented in the first instance, in addition to a targeted media campaign, but it is inevitable that roundabouts will become much more common in Hamilton because of the long term benefits.</p>
5	Intersection design in the Netherlands	<p>A link to an on-line video was provided of cycle-friendly intersection design in the Netherlands, http://raisethehammer.org/blog/2425. The City's alternative transportation coordinator has been provided the link, and is also aware of numerous best practices worldwide. The proposed treatment of the Main/Longwood and Aberdeen/Studholme intersections incorporates similar elements to those described in the video, including separate marked crossings for cyclists, in addition to pedestrian crosswalks, but the suggestion to incorporate separate islands as described in the video can be considered at the detail design stage, so the Environmental Study Report will include the recommendation to consider such design elements to improve safety and operations for all users.</p>
6	The TH&B rail bridge construction	<p>The existing space under the rail bridge at Studholme is very limited, and the recommended alternative has regard to the need for a suitable connection between the cycle track and sidewalk on the north side of Aberdeen Avenue west of the bridge, and the intersection of Aberdeen/Studholme east of the bridge.</p>
7	Comments from HCA, Hydro One and City departments	<p>Requirements for permits, sediment control, tree protection and replacement, and appropriate budgets for both capital and operating will be addressed in future phases, including the detail design phase.</p>
8	First Nations comments	<p>The Curve Lake First Nation advised that should excavation unearth bones, remains or other such evidence of a native burial site or any Archaeological findings, it must be notified without delay, in accordance with the City's obligations under the Cemeteries Act to notify the nearest First Nation Government or other community of Aboriginal people which is willing to act as a representative and whose members have a close cultural affinity to the interred person. The Alderville First Nation advice was similar. Notwithstanding that the entire area has been significantly disturbed in the past by industrial development and by road and highway construction, the Environmental Study Report will include recommendations to be carried forward to detail design and construction regarding the obligations and protocols should there be findings of heritage, cultural, and archaeological significance.</p>
9	Alternatives to a ramp at Columbia College	<p>It was suggested that if Paradise Rd was made two way, and the King Street bridge was made two way, a traffic signal could be installed on the King Street bridge where the 403 ramps intersect it, allowing traffic to enter the 403 in either direction from the east and from the west, solving problems with access to homes and businesses on King between Dundurn and Paradise, and relieving pressure at Dundurn/King and Dundurn/Main. Extensive studies were undertaken as part of the investigations of Rapid Transit in Hamilton, including the options to convert Main and King to two-way traffic. The outcome of those studies was that Main and King should remain one-way. Such extensive system-wide investigations are not within the scope of this study.</p>
10	Suggestion that planning for cars and trucks is paramount	<p>While many of the issues are addressed in the response regarding four vs. fewer lanes on Longwood Road, there have been suggestions that the planning has favoured cars and trucks over pedestrians and cyclists. The existing Longwood Road is four traffic lanes within a 20m road allowance. Investigations by both City staff and consultants have determined that interim plans to reduce Longwood Road to three lanes are no longer viable for a number of very good reasons, as outlined in the previous response. The reality is that Longwood Road is an important arterial road with a direct connection to an interchange with Hwy 403. However, the recommended alternative proposes to maintain four lanes, plus turn lanes where appropriate, within an ultimate 36m road allowance, with most of the additional 16m of road allowance space being allocated to the pedestrian and cyclist domain. In other words, the proportion of road allowance dedicated to active transportation and streetscaping will increase from about 30 percent to more than 50 percent.</p>
11	Concern with the Longwood kink through Main	<p>It was expressed that there is a sharp change in the alignment of Longwood Road northbound through Main Street that causes vehicles to deviate from the lane. The Environmental Study Report will recommend that the issue be addressed during detail design.</p>
12	Concern that the Study Area should extend to Aberdeen/Studholme	<p>It was expressed that the Study Area should be extended to include Aberdeen/Studholme, and that the recommended alternative should recommend a suitable connection between the cycle track and sidewalk west of the TH&B Rail Bridge and the intersection of Aberdeen/Studholme, through the area of the bridge.</p> <p>A holistic complete alternative linking the bike lanes and pedestrian domain on Longwood Road north of Main Street with the on-road shared lanes on Studholme Drive (that connect to the rail trail and to the future trail connection to Glenside Avenue) is desirable, and the Recommended Alternative has been modified to complete the necessary connection to Aberdeen/Studholme.</p>
13	Concern with use of bike boxes and unusual cyclist-related features, especially without adequate education and enforcement	<p>Great care must be taken during detailed design to ensure that the intersection designs for Main/Longwood, Longwood/Frid, and Aberdeen/Studholme reflect best practice with respect to pedestrian, cyclist, and motorist interactions. This commitment is included in the Environmental Study Report.</p>