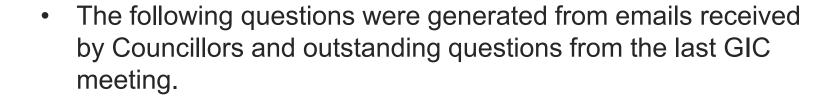


HAMILTON LIGHTRAIL TRANSIT

General Issues Committee April 19, 2017





• Questions related to infrastructure and costs of the project have been included in items 8.3 and 8.4.





Will the MacNab Terminal be relocated?

 There are no plans to relocate the MacNab Transit Terminal as part of the LRT project.



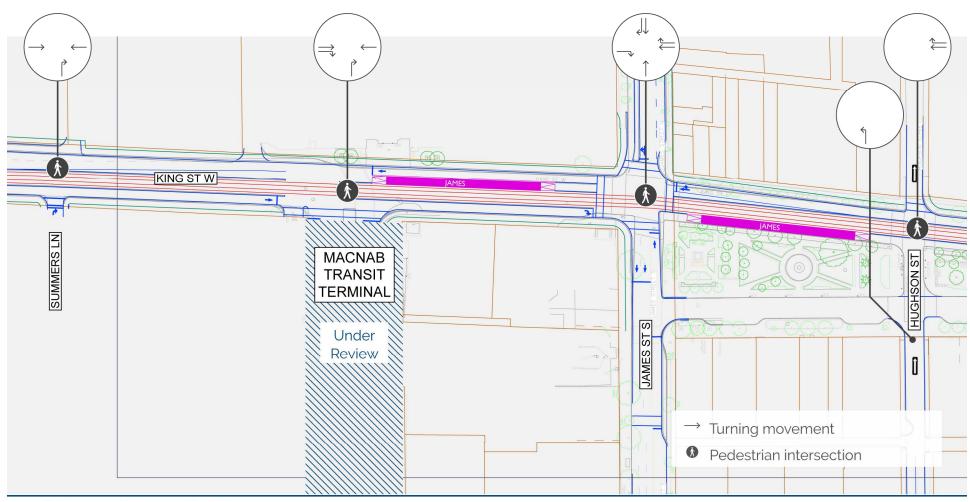


Why isn't there an LRT stop at the MacNab Transit Terminal?

- A full stop at MacNab (or Summers Lane) would have significant property impacts and affect access to local properties.
- The current design can be considered a compromise:
 - Access to the westbound platform is at the MacNab Terminal/King St crosswalk.
 - The eastbound platform would be a 1-2 minute walk to the Transit Terminal from the James Street intersection







↑ Proposed Layout with LRT

What is the width of the sidewalks on the route?

- Sidewalks along the corridor will range from a minimum of 1.5 meters at obstruction points to 2.5 meters (desired width for sidewalks with poles).
- Aligned with AODA requirements.





What will happen to displaced trees?

- The majority of trees along the LRT route will be impacted by construction since the work will take place from building face to building face and utilities must be relocated.
- Project Co. will be required to obtain all necessary construction permits, including tree removal permits.





Is the completion of the B-Line LRT contingent on Council moving forward with the A-Line BRT?

No. The LRT project would proceed regardless of the A-Line decision





Is the work on the A-Line BRT contingent on Council moving forward with the B-Line LRT?

- No. The Province announced that funding is available for the planning and design of the BRT.
- Since the cost of the BRT project is not known at the moment, the funding for the implementation of BRT requires future discussions regardless of the status of the LRT project.





How much faster will LRT be compared to a bus?

- It will take 24-25 minutes for the LRT to travel 14 stops from Queenston Traffic Circle to McMaster University (2024).
- The current HSR B-Line Express has a scheduled time of approx. 24 minutes to travel 10 stops between Queenston Traffic Circle and McMaster University but can take 28-32 minutes depending on traffic, weather, etc. (2017).
- No 2024 estimate for HSR travel time exists.
- The LRT's segregated corridor and signal priority will allow it to maintain its speed and reliable service as traffic congestion increases.





What is the current HSR ridership across the city and on the B-Line?

- The total HSR annual ridership is 22M.
- The total HSR annual ridership for the current B-Line corridor is 9.2M (includes the #1, #10, #51 and #5 buses).
- Figures are from April 2016





What is the cost of the current B-Line service (Eastgate to McMaster)?

The 2015 annual gross cost for the B-Line was \$5.7M.





How many buses are on the B-Line vs alternate buses (i.e. #1 King) on the same route?

- Currently there are 58 buses in the corridor including the #10
 B-Line, the #1 King, #51 University and #5 Delaware
- Once the LRT is in operation there will be approximately 40 buses in the corridor in addition to the LRT the #1 King/#51 University/#5 Delaware buses





How many B-Line stops are there vs the LRT stops?

- The existing HSR B-Line Express service has 10 stops within the LRT Corridor.
 - Note: the current B-Line bus does not stop at the Queenston Traffic Circle area
- The LRT service will have 14 stops. (additional stops are Gage Park, Scott Park, Wellington and Queenston Traffic Circle)





What is the cost of LRT service?

- The companies bidding on the LRT project will compete on cost of construction, operations and maintenance.
- In 2013 City finance staff estimated the net operating impact on transit to be \$2.9M to \$3.5M (depending on service levels)
 - Calculated by adding LRT operations costs to base transit budget, calculating reductions in bus operating costs, factoring in all revenues across system
- Estimates were provided regarding additional City "corridor management" costs. Estimates of \$8.7M annually included increased Public Works costs, lost parking revenue etc.
 - Estimates were based on City operating LRT and are expected to be lower in the DBFOM model
- Region of Waterloo O&M costs are \$8.5M based on March 4,
 2014 report to the Region's Planning and Works Department





How many vehicles/drivers would buses require compared to LRT?

- On opening day, we would require approximately 10 LRT vehicles and as ridership increases over time we would add another car to each LRT vehicle but maintain the same number of drivers.
- A typical LRT vehicle holds a minimum of 130 people compared to a standard bus (44) or an articulated bus (68)
- With HSR buses we would need to add more buses and drivers.





What is the cost of HSR drivers vs cost of an LRT driver?

- The costs related to LRT staff will be included in the operating costs presented by each bidder.
- As LRT ridership increases the need for more drivers will not be significant (unless headways change) as train cars will be "coupled" together to provide double the capacity with one driver.
- The approximate number of buses required to match the capacity of a two-car LRT vehicle is 4:1(articulated bus)





Is the City losing local transit service as a result of LRT?

- No.
- Local bus service will continue to operate on streets parallel to the LRT:
 - For example the #1 King (currently runs on Main E and King E) could run on Dunsmure and Wilson/Cannon (westbound) and Main and Maple (eastbound)
- Other local services may have almost no change:
 - For example the #5 Delaware remains largely unchanged in serving Westdale, West Hamilton, Dundas and Stoney Creek
- Only the #10 B-Line is eliminated and replaced by LRT





Will Westdale still have HSR service?

 Yes. The local HSR service that currently runs along King Street West through Westdale Village will continue to operate.





Will there be continued HSR service on Main Street to access the David Braley Health Centre, Art Gallery, Convention Centre, etc?

 Yes. In addition to the LRT that will provide access to these locations, local bus service will continue on Main and Bay Streets.



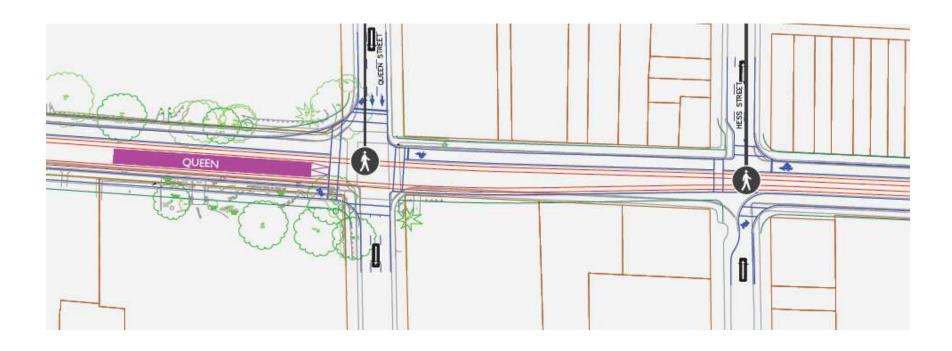
Why is traffic restricted in International Village and between Queen and Hess Streets?

- In International Village and the Gore vehicular traffic is restricted as the right-of-way is narrow. Through this section traffic patterns are as follows:
 - No westbound traffic from Wellington to Catharine (resumes at Catharine)
 - No eastbound traffic at James (resumes at John Street)
- There will be no eastbound vehicular traffic on King St (Queen to Hess) to avoid impacting heritage properties.
 - Vehicles can still use Main Street to travel eastbound or can divert around this area.
 - No properties have driveways on King St in this section

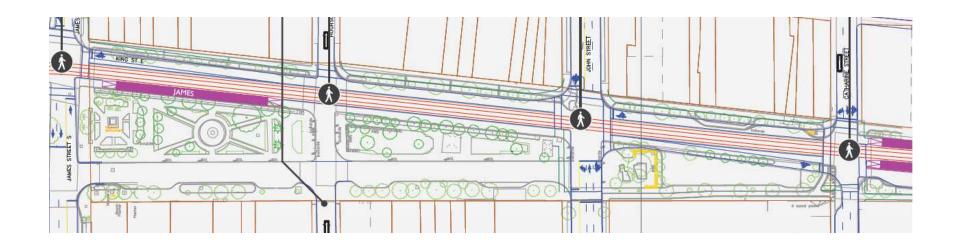




King Street (Queen to Hess)



King Street (James to Wellington)





How could the possible relocation of McMaster Children's Hospital affect the LRT stop?

- LRT Office staff spoke with Hamilton Health Sciences and McMaster University who provided the following comments:
 - At this time there is no plan, commitment or schedule to move the children's hospital from that site.
 - McMaster University owns the building, not the hospital.
 - Some University staff are already based there.
 - McMaster students are the largest single customer for the HSR (every student gets a U-Pass)
 - McMaster and Metrolinx are working on plans for an enhanced transit hub at the McMaster stop.





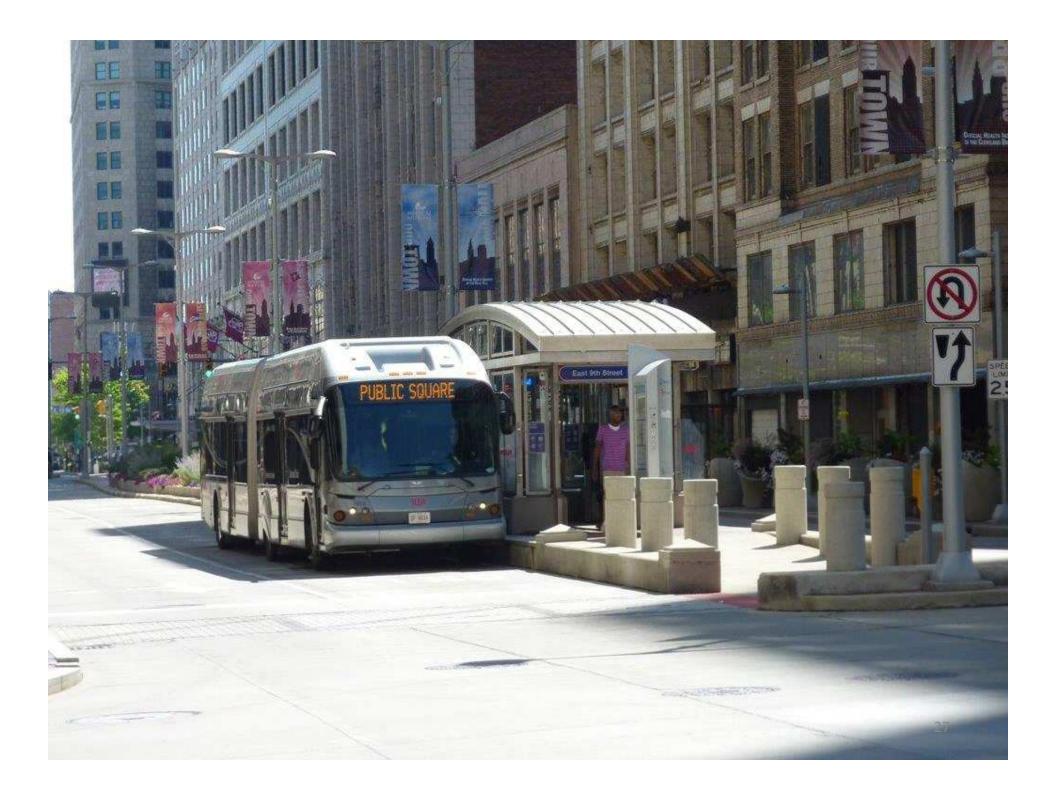
If we had a bus rapid transit (BRT) system instead of LRT would there still be a dedicated guideway?

- Yes. In a true BRT system there would be segregated lane(s) for buses with stop platforms very much like the LRT.
- Guideway is roughly the same width as LRT at approximately 7 metres.
- For example, the Cleveland BRT has dedicated lanes for buses with a lane of vehicular traffic on each side (see photos on the next 3 slides).











Has staff analyzed the growth requirements for upsizing underground pipes?

Yes. Details are provided in the staff report under item 8.4.





How has the capital budget changed from the figures provided in the Rapid Ready report?

- Rapid Ready report provided capital budget estimates for four (4) LRT length options (including McMaster to Queenston)
- Metrolinx will not be providing detailed budget details publicly as the project is now in the procurement phase.
- At a high level, increased costs (compared to the original estimates in Rapid Ready) are in the following categories:
 - Operations Maintenance and Storage Facility
 - Utility relocation
 - Property Acquisition
 - Construction of the underpass





How many commercial and residential units will be impacts by the "full" property acquisitions?

 Approximately 100 commercial units and 150 residential units may be impacted as a result of the projected "full" property acquisitions.





How much land is required for the Queenston Traffic Circle transit terminal and OMSF site? How do these developments affect the tax base?

- Approximately 3.25 acres is required for the stop and transit terminal at the Queenston Traffic Circle
 - Properties in this area contribute approximately \$65,000 in taxes currently
- The OMSF requires approximately 15 acres
 - Properties in this area contribute approximately \$60,000 in taxes currently
- Metrolinx provides payments in lieu of taxes equivalent to the municipal portion of the property tax for all property they acquire **Hamilton**

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Can Councillors have a guided tour of the LRT corridor?

 Yes. Staff will gladly provide tours as requested to help councillors visualize and discuss LRT plans.





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HAMILTON LIGHTRAIL TRANSIT

