



TORONTO WATERFRONT
REVITALIZATION CORPORATION

Toronto Waterfront Revitalization Corporation Analysis of Options to Improve the Gardiner/Lake Shore Corridor Summary of Reports

Technical Briefing Report- Gardiner/Lakeshore Corridor- July, 2004

This is the main report which contains an analysis of the three options TWRC studied – “Replace” - remove the elevated expressway between Dufferin and the Don River and replace the expressway function with a tunnel and an at grade and below grade street; “Transform” - retain and ameliorate the Gardiner through the removal of ramps, undertaking architectural enhancements to the elevated structure and relocating Lake Shore Boulevard from under the expressway; “Great Street” - remove a portion of the elevated expressway and replace with an urban boulevard or Great Street. The report contains an assessment of each of the options’ city building attributes, transportation performance, costs and staging. The report includes information on the technical studies undertaken to support the analysis of the options, historical information about the Gardiner and precedents from other jurisdictions.

The report recommends moving forward with the “Great Street” option. This option entails removing the elevated expressway east of Spadina to the Don River and replacing it with a University Avenue style urban boulevard. The cost estimate for this option is \$490. All the options studied require that the Front Street Extension be built so that existing road capacity can be maintained. All the options also assume that future increases in travel demand will be met by public transit, an assumption taken from the City of Toronto’s Official Plan. While this report does provide cost estimates for each of the options, a business plan is not included as this was outside the scope of work assigned to TWRC.

Micro-Simulation of the Toronto Waterfront Revitalization Plan- December, 2004

Transportation performance of each option was assessed through a micro-simulation that was carried out by Intellican Transportation. The report provides a detailed description of the methodology for the simulation as well as the results. The key performance measures were average speed, inbound and outbound trip times in the morning rush hour, inbound and outbound trip time in the evening rush hour and through trip time in the morning and evening rush hours. TWRC’s preferred option has an increased travel time of three to four minutes during rush hour and a speed reduction of approximately 10 to 15 km per hour. Through trip times increased between two and seven minutes.

Constructability, Structural Engineering Feasibility and Cost Study for the Gardiner Expressway/Lake Shore Boulevard Options- December, 2004

This report contains an assessment of the structural feasibility and constructability of the three options analyzed by TWRC as well as third party review of the cost estimates developed by TWRC. The report sets out a high level staging plan for each option and identifies issues that need to be managed during construction. The report concluded that all three options would have impacts on traffic flow during construction but that these can be kept to a minimum if the actions identified in the report are implemented.

Great Street Approach- Variation 1- Construction Staging Plan and Traffic Disruption- November, 2004

This reports sets out a construction staging plan that minimizes disruption to traffic during construction for TWRC's recommended option. The report found that by building the Front Street Extension and the Richmond Adelaide ramps before beginning construction on the Great Street and phasing the construction of the new boulevard, 80-90% of traffic capacity can be maintained coming into the downtown from the west and 100% from the east.

Transportation Addendum to Technical Briefing Report- Gardiner/Lakeshore Corridor- December, 2004

This report analyzed the feasibility of reducing the 10-lane at grade section to eight lanes and concluded that this possible east Jarvis to the Don River provided the Richmond/Adelaide ramps are widened. The report also analysed a different configuration for the ramps at Spadina that would connect the elevated expressway with the new Great Street. This revision allows for the old ramps to stay in place while the new ramps are being built thereby reducing disruption during construction.

Economic Impact of Gardiner Expressway Alterations- November, 2004

This report provides a high level assessment of the economic impacts associated with the Great Street option. The purpose of the review was to quantify the range and nature of the economic impacts including those from a real estate and development perspective. The study concluded that the Great Street option could generate over \$950 million in total spending impacts, create 8,100 person years of employment, generate \$60 million in PST and \$90 million in GST and allow the City of Toronto to forego committing almost \$120 million for ongoing maintenance of the evaluated expressway.

Additional Transportation Analysis- Reduced Peripheral Improvements- June, 2005

This report provides an analysis of the impact of building the Great Street without the Front Street Extension and widening the Richmond/Adelaide ramps. The report concludes that neither is feasible. Without the Front Street Extension congestion would increase to an unacceptable level and would likely require widening the Great Street to six lanes or more in each direction. While leaving the Richmond/Adelaide ramps at one lane instead of the two recommended in the Great Street option would not result in the same kind of congestion that proceeding without the Front Street Extension would, congestion would increase to an unacceptable level. TWRC is recommending both the

Front Street Extension and the widening of the Richmond/Adelaide ramps as preconditions for the construction of the Great Street option.