
2013 CAPITAL BUDGET BRIEFING NOTE

Transportation Services / Technical Services

F.G. Gardiner Expressway – Current and Planned Rehabilitation

Background:

The purpose of this briefing note is to inform the Budget Committee members of the current and planned activities related to the ongoing rehabilitation of the F.G. Gardiner Expressway between the western limit at Highway 427 and the eastern limit at the Don Roadway and the level of funding required in support of these rehabilitation activities.

Key Points:

- Rehabilitation work is currently underway on the section of the F.G. Gardiner Expressway from Jarvis Street to York Street. It is estimated to cost \$12.2 million and includes the repair to concrete girders and supporting columns. The work will continue until a winter shutdown in late December 2012 and will resume in the early spring for completion in May 2013. This work is expected to extend the life of this section until 2029, with only periodic repairs during this time.
- The deck along various other portions of the F.G. Gardiner Expressway requires replacement and therefore, repairs need to be undertaken over the short term (all funds are expressed in 2012 dollars) as follows:
 - The replacement of the main deck from the Don Roadway to Cherry Street at an estimated cost of \$20 million in 2013 and \$39.5 million in 2014. Detailed design is currently underway and construction is expected to start in the summer of 2013 and be completed by the end of 2014;
 - The replacement of the main deck from Cherry to Parliament Streets at an estimated cost of \$35 million in 2015 and \$35 million in 2016;
 - The replacement of the main deck from Parliament to Jarvis Streets at an estimated cost of \$35 million in 2017 and \$35 million in 2018; and
 - The replacement of the main deck from Rees Street to Strachan Avenue at an estimated cost of \$35 million for each year from 2019 to 2024 (i.e., beyond the current 10 year Capital Plan).

- Specifically, this work will include:
 - The preparation of the design and tender documents for the replacement of the main deck, parapet walls, guiderails and handrails;
 - Repairs to the structural steel superstructure (girders, bracing, bearings);
 - Refurbishing the existing drainage systems;
 - Preparation of a traffic management plan to maintain an appropriate number of lanes of vehicular traffic in each direction on Lake Shore Blvd and on the F.G. Gardiner Expressway;
 - Development of a traffic impact study to identify the traffic control/restrictions required during construction; and
 - The design, relocation and modification of any utilities located on any of the structures.
- The above-noted traffic management plan will be developed to minimize the impact of the Gardiner Expressway rehabilitation and related works on the upcoming Pan Am Games in 2015, recognizing the need to facilitate vehicular and pedestrian movements to and from various venues within this corridor. More information will be made available as plans and events for the Pan Am Games in this area are developed.
- Technical Services staff will be retaining the services of a consulting engineering firm to develop a Strategic Plan for the rehabilitation, repair and maintenance of the F.G. Gardiner Expressway that builds upon the general approach outlined above. The Plan will present costs, time-lines and serve as the "blueprint" for the delivery of all rehabilitation work in a safe and serviceable condition, with "timing" being of critical importance. The Strategic Plan is to be completed by December 2013.
- Technical Services staff proposes to implement the Strategic Plan as a Program Management assignment, outsourced to a consulting engineering firm. The consultant will manage the delivery of the Strategic Plan for the works from 2015 and beyond. It is expected that this will produce lower annual engineering fees over this long term program.
- Attached is a summary table of the total expected budgetary needs for the F.G. Gardiner Expressway. Included also are the base budget figures already contained in the Transportation Services Division's base 10-Year Capital Plan. Inflation is assumed to be 2.5% p.a. and accordingly, all costs are shown in future year's dollars.
- Included on the attached table, in addition to the rehabilitation of the decks, are:
 - anticipated repairs to the bents located beneath the deck structure; and
 - repairs to the at-grade section to the west.
- As outlined in the table, the total project needs for the rehabilitation of the Gardiner Expressway for the 10-year period between 2013 and 2022 total \$505 million. Of this total, \$170 million was included in Transportation's base Capital Plan and \$335 million has been added to provide the balance.
- Budget requirements post 2022 are projected to be a sustained \$15 million yearly (for the elevated and at-grade sections combined) and will be amended and reported on accordingly

as needs change.

- The Strategic Plan will outline in further detail the current and planned activities required for the ongoing maintenance and rehabilitation of the Gardiner Expressway, as discussed generally in this briefing note, will be the subject of a future report to the Public Works and Infrastructure Committee in early 2013.

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Proposed F.G. Gardiner Expressway Budget Plan
 10 Year Budget Plan (12 Year Rehabilitation Strategy)
 (All figures in \$million)

Rehabilitation Activity	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2013-2022	2023	2024
Don Roadway to Cherry St - deck	20.00	39.50	0.25	0.25							60.00		
Cherry Street to Parliament St - deck			35.88	36.77	0.25	0.25					73.15		
Parliament St to Jarvis St – deck					37.69	38.63	0.25	0.25			76.82		
Strachan Ave to Rees St - deck							39.60	40.59	41.60	42.64	164.44	43.71	44.80
Bent Repairs	included	included	3.00	3.08	3.15	3.23	3.31	3.39	3.48	3.57	26.21	3.66	3.75
At-grade Section (including structures)	5.00	10.00	10.25	10.51	10.77	11.04	11.31	11.6	11.89	12.18	104.55	12.49	12.8
Total Project Needs	25.00	49.50	49.38	50.60	51.86	53.15	54.47	55.83	56.97	58.39	505.16	59.86	61.35
Base Budget Already Submitted	16.39	16.52	16.57	16.66	16.94	17.09	17.39	17.39	17.39	17.39	169.74		
Funding Shortfall	8.61	32.98	32.81	33.94	34.92	36.06	37.08	38.44	39.58	41.00	335.42		

Note: Inflation assumed to be 2.5% p.a. – all costs shown in future year dollars.