

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** September 24, 2009

**SUBJECT:** 2010-2014 CAPITAL PROGRAM AND 10 YEAR CAPITAL FORECAST

## **ACTION ITEM**

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### **RECOMMENDATION**

It is recommended that the Commission:

- (1) Approve the following as set out in the detailed TTC 2010-2014 Capital Program Blue Books:
  - (a) the 2010 Capital Budget in the amount of \$1,010.8 million (\$948.5 million after application of an unspecified budget reduction);
  - (b) the 2010-2014 Capital Program in the amount of \$4.327 billion (\$4.265 billion after the application of an unspecified budget reduction);
  - (c) the 2010-2019 10-Year Capital Forecast in the amount of \$7.096 billion (\$7.034 billion after the application of an unspecified budget reduction);
  - (d) the budget for the Toronto-York Spadina Subway Extension with an estimated final cost of \$2.634 billion, including \$223.0 million in 2010 and \$2.494 billion for the years 2010-2014;
  - (e) the budget for the four priority Transit City Plan projects (the SRT, Sheppard East LRT, Finch West LRT and Eglinton Crosstown LRT) with combined announced funding in the amount of \$8.15 billion and including estimated expenditures of \$375.2 million in 2010;
  - (f) the budget for completion of the environmental assessment work on the four remaining Transit City plan projects (Don Mills, Jane, Scarborough Malvern and Waterfront West LRT lines) with a combined estimated cost of up to \$8.7 million, including up to \$1.3 million in 2010;
  - (g) proceeding with up to \$0.925 million in expenditures to December 31, 2009 for preliminary design work for the North Yonge Subway Extension project with such costs to be held in TTC accounts pending City Council approval of the 2010-2014 Capital Program;
  - (h) the Capital Workforce Plan summarized in this report.
  
- (3) Approve amendments to the base 2010-2014 Capital Program as outlined in

Exhibit 5 which includes a reduction of \$8.6 million in 2010, a reduction of \$47.7 million for the years 2010-2014, and a reduction of \$420.5 million for the years 2010-2019;

- (4) Confirm support for the Strategic Funding Packages outlined in this report, and direct staff, in consultation with the City of Toronto, to prepare appropriate requests to the Province of Ontario, Metrolinx, and the Government of Canada in pursuit of funds for the TTC's base and capital expansion needs as outlined in this report.
- (5) Forward this report to the City of Toronto for Council approval and confirmation of funding in the amount of:
  - a. \$948.5 million for the 2010 Capital Budget, \$4.265 billion for the 2010-2014 Capital Program and, \$7.034 billion for the 10-year forecast.
  - b. amendment reductions of \$8.6 million for the 2010 Capital Budget, \$47.7 million for the 2010-2014 Capital Program and, \$420.5 million for the 10-year forecast.
  - c. \$223.0 million for 2010 and \$2.494 billion for the 2010-2014 Capital Program for the Toronto-York Spadina Subway Extension.
  - d. \$375.2 million for 2010 for the four priority Transit City Plan projects.
  - e. Up to \$1.3 million in 2010 for the four unfunded Transit City Plan projects.
- (6) Forward this report to the Ontario Minister of Transportation, the Ontario Minister of Public Infrastructure Renewal, and the Ontario Minister of Finance, for consideration of TTC's base and expansion capital needs and requesting confirmation of funding.
- (7) Forward this report to the Federal Minister of Transport, Infrastructure and Communities, for consideration of TTC's base and expansion capital needs and requesting confirmation of funding.
- (8) Forward this report to Metrolinx for consideration of TTC's base capital program and expansion needs including confirmation of funding for and execution of the associated agreements for work on the four priority projects (\$8.15 billion) as well as preliminary design work on the Yonge North Subway Extension (\$5.7 million).

## **BUDGET HIGHLIGHTS**

The 2010-2014 Capital Program is consistent with the plan approved by the Commission and City Council last year. While project timing and cash flows have been adjusted to reflect more current information, there has been no significant change in the overall budget requirement: after 2008 carry forwards approved by City Council, the 2009 probable and the 2010 request are both lower

than the approved budget and the 2009-2013 five year budget envelope is essentially unchanged – lower by \$9 million - even after factoring in several necessary new state-of-good-repair projects. While there has been progress on the funding front with announcements of expansion funding for the SRT line and the Sheppard East, Finch West and Eglinton Crosstown LRT lines, funding continues to represent the greatest challenge to moving forward with the base capital program and additional expansion initiatives (including the Don Mills, Jane, Scarborough Malvern and Waterfront LRT lines, the Yonge North Subway Extension, Other TTC Recommended projects and Waterfront Toronto initiatives).

Highlights of the 2010-2014 Capital Program are as follows:

- \$1,010.8 million is budgeted for 2010 for the base capital program:
  - \$569 million for infrastructure and related projects, including \$346 million for rehabilitation of buildings, structures, tunnels, bridges, yards and roads, \$48 million for track work, \$100 million for signals, electrical and communications equipment, and \$40 million for various information technology projects and, \$35 million for various facility, equipment and environmental projects.
  - \$442 million for vehicles, including \$218 million toward the purchase of 234 Toronto Rocket Subway Cars, \$97 million toward the procurement of 120 buses and 198 new Wheel-Trans buses, \$74 million toward the purchase of 204 LRV's, \$36 million for bus, subway car and streetcar overhaul programs and, \$17 million for the acquisition or overhaul of various non-revenue vehicles.
  - It is anticipated that the City will apply an unspecified budget reduction of \$62.3 million resulting in a net request of \$948.5 million for 2010. This represents a 10% reduction in non revenue vehicle expenditures in 2010, based on the premise that the TTC historically spends in the range of 90% of its budget excluding revenue vehicle commitments. While staff support a one year unspecified budget reduction, if such a reduction is applied beyond one year, this effectively results in a scope reduction and would understate our budget and funding requirements utilized for long-term planning.
  - Based on current projections, there is a \$114 million surplus in available funding to cover the 2010 budgeted expenditures.
- \$4.327 billion is budgeted for the five years from 2010 to 2014 for the base capital program, including \$2.576 billion for infrastructure and related projects and \$1.751 billion for the procurement and overhaul of vehicles. Based on current funding assumptions, this will leave a funding shortfall of \$482 million for the base program over the next five years. Use of 2009 surplus funds, application of Federal Infrastructure Stimulus Funds and the pursuit of Strategic Funding Packages will all assist in addressing the funding shortfall for the 2010-2014 capital program.
- \$7.096 billion is the estimated requirement for the base capital program for the ten years from 2010 to 2019, including \$4.248 billion for infrastructure and related projects and \$2.848 billion for the procurement and overhaul of vehicles.

- A summary of expenditures for the base program is included as Appendix A.
- Beyond the base program, the following elements are included as part of the 2010-2014 Capital Program:
  - \$223.0 million is required in 2010 and \$2.494 billion from 2010 to 2014 for the construction of the Toronto-York Spadina Subway Extension. This project is fully funded by the City of Toronto, York Region, the Province of Ontario and the Government of Canada.
  - A further \$375.2 million is required in 2010 for the four priority Transit City Plan projects: SRT, Sheppard East LRT, Eglinton Crosstown LRT and, Finch West LRT. The timing, scope, magnitude and governance structure associated with each of these projects is currently under review with the City of Toronto and Metrolinx. The Provincial and Federal governments have announced a total of \$8.15 billion in funding for these projects.
  - An additional \$1.3 million is required in 2010 to complete environmental assessment work on the four remaining Transit City Plan LRT lines (Don Mills, Jane, Scarborough Malvern and Waterfront West).

### **2010-2014 CAPITAL PROGRAM**

With an investment approaching \$11 billion in existing assets (many of which last for decades) and ridership volumes at record levels, the existing transit network must remain the TTC's first priority. The base capital program covers the acquisition of new and replacement transit assets needed by the TTC for the provision of public transit services within the City of Toronto and under contract with adjacent municipalities. In establishing the budget, a life-cycle approach is used. Detailed system inventories of each class of capital asset are maintained. Budgets are set to replace or rehabilitate assets based on condition assessments, engineering standards, legislative requirements or safety/environmental implications. A one-year budget, five-year program and ten-year forecast are developed: all designed to keep the TTC's capital assets in proper working order. The capital plan is constructed using the Commission's long standing capital budget priorities which remain:

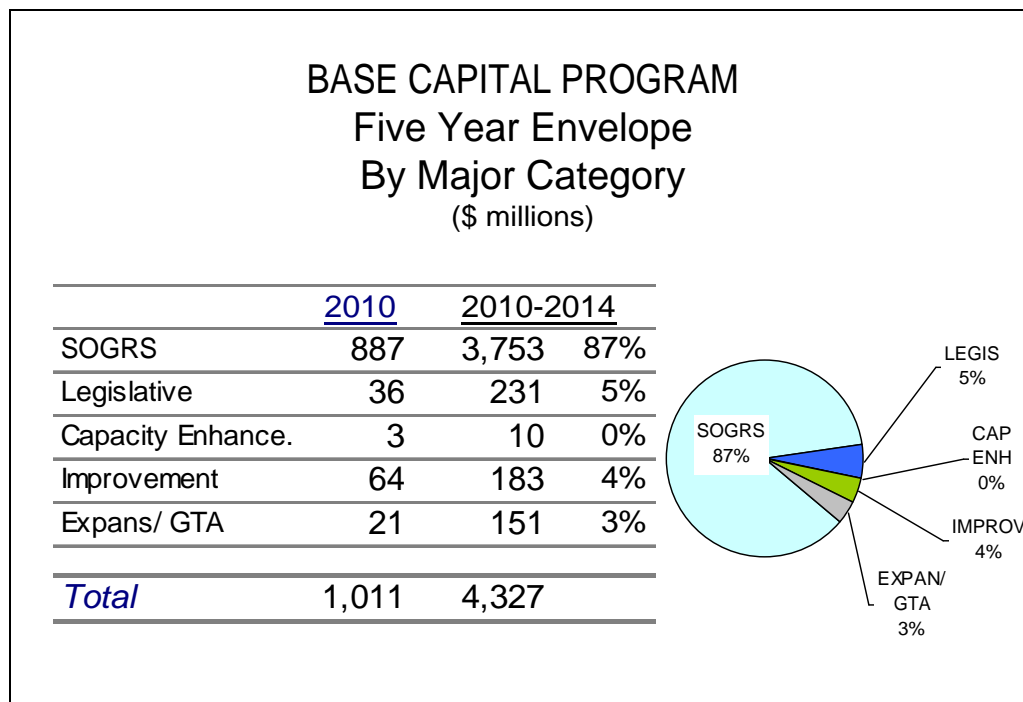
1. State-of Good-Repair and Safety
2. Legislative
3. Capacity Enhancement
4. Improvement
5. Expansion

Each program or project element is described in detail in the 2010-2014 Capital Program Blue Books. Expansion initiatives, including the Toronto-York Spadina Subway Extension, the Transit

City Plan lines as well as the Yonge North Subway Extension, and various Other TTC Recommended projects and Waterfront Initiatives are outside of the base capital program and are discussed later in this report.

Expenditures for the next five years are budgeted in the order of \$4.3 billion as shown in Exhibit 1.

**Exhibit 1**



As can be seen from the exhibit, almost \$4.0 billion or 92% of the capital budget for the next five years is committed to state-of-good-repair/safety and legislative projects. In addition, 40% of budgeted expenditures for the next five years are for vehicle procurements and overhauls. Key elements of the base capital program include expenditures on the following projects over the next five years:

- acquisition of:
  - 385 low floor buses (\$262 million)
  - 360 Toronto Rocket Subway cars (\$631 million)
  - 204 LRV's (\$597 million)
  - 198 Wheel-Trans buses (\$61 million)
- construction of a new LRV storage and maintenance facility (\$342 million)
- installation of automatic train control and re-signaling on the Y-U-S subway line (\$264 million)
- track replacement (\$240 million)

- various signals, electrical and communications projects (\$203 million)
- upgrading of fire ventilation equipment and second exits in the subway (\$181 million)
- the overhaul of revenue service vehicles (\$158 million)
- installation of elevators in the subway (\$183 million)
- upgrades to information technology assets (\$116 million)
- completion of modifications at the Wilson complex to accommodate the new Toronto Rocket subway cars (\$59 million)
- Station Modernization work (\$53 million)
- Completion of the BRT to York University (\$6 million)
- Ventilation Upgrades at Duncan Shop (\$16 million)
- Replacement of Glencairn & Scarborough Town Centre Roof Structure and Skylights (\$11 million)
- A replacement Revenue Operations facility (\$15 million)
- Planning and environmental studies for the Downtown Relief Line (\$5 million)
- Preliminary design work for the Yonge North Subway Extension (\$5 million)
- McBrien Building Renovations (\$27 million)
- Energy Management projects (\$16 million)

Approximately \$7.1 billion is required over the next 10 years for the base capital program as shown in Exhibit 2. It should be noted that this budget forecast reflects the deferral of \$417 million in project costs beyond 2018 as approved by City Council on June 26, 2009 to accommodate the award of the 204 LRV project.

Exhibit 2

(\$ Millions)	2010	2011	2012	2013	2014	2010-2014	2015	2016	2017	2018	2019	2010-2019
<b>Infrastructure</b>	569	611	583	410	403	2,576	379	288	269	266	471	4,248
<b>Vehicles</b>	442	386	434	225	265	1,751	177	210	164	208	339	2,848
<b>TOTAL</b>	1,011	997	1,016	635	668	4,327	556	497	432	474	810	7,096

Expenditures for the next decade are dominated by (i) the need to overhaul and replace aging buses and subway cars (\$1.554 billion), (ii) replacement of subway track (\$199 million), (iii) the acquisition of 204 LRVs (\$1.173 billion), (iv) the construction of a LRV Storage and Maintenance Facility (\$342 million) and replacement of streetcar track work (\$295 million), (v) major structural rehabilitation of the Commission's bridges, tunnels and buildings and structures (\$934 million), (vi) installation of elevators in the subway system (\$330 million), (vii) the upgrade of fire ventilation equipment and second exits in the subway (\$306 million), (viii) installation of automatic train control and re-signaling on the Yonge-University-Spadina line (\$295 million), (ix) introduction of the GTA fare card system (\$137 million), and (x) the need to upgrade the Commission's information technology assets (\$280 million). In addition, several other major projects will be undertaken requiring significant investment including: various signal, electrical and communications projects (\$380 million), modernization of subway stations (\$104 million), roofing rehabilitation at various TTC locations (\$144 million), and completion of modifications at the Wilson complex to accommodate the new Toronto Rocket subway cars (\$59 million).

**BUDGET COMPARISON**

Exhibit 3 shows the change in the base capital program from that approved by City Council in December 2008.

**Exhibit 3**

<b><u>ENVELOPE COMPARISONS</u></b>					
(\$MILLIONS)					
<b>BUDGET COMPARISON</b>			2009 to 2013	2014 to 2018	2009 to 2018
	2009	2010	Envelope	Envelope	Envelope
Approved - Base Capital Program (Excluding SRT Project & Vehicles)	816	1,028	4,386	2,203	6,588
Requested - Base Capital Program (Excluding SRT Project & Vehicles)	796	1,011	4,456	2,627	7,082
<b>Change in Base Program</b>	<b>(20)</b>			<b>424</b>	
City 2008 Carry Forward Request	(79)				
<b>Net Change in Base Program</b>	<b>(99)</b>			<b>424</b>	

Reflects: - \$417M deferral of 6 projects to address 204 LRT Cars  
- Before application of TTC USBR

Excludes: - TYSSE, TCP approved lines: SRT; Shepp E; Finch W; Eglin XTown  
- Below the line

Expenditures in 2009 are projected to be underspent by \$99 million after factoring in \$79 million in carry forwards which were approved by City Council on August 5, 2009, due to project slippages from 2008.

The budget request for 2010 is \$17 million lower than that previously approved by Council primarily as a result of the timing of award of the order for 204 LRVs (-\$19 million) and delays in commencement of construction and design work for the Fire Ventilation Upgrade project (-\$21 million) offset by costs required to replace the Revenue Operations Facility (+\$8 million) and slippage of project work from prior years on the YUS ATC and Resignalling project (+\$11 million).

Expenditures over the five-year period from 2009 to 2013 are projected to increase by \$70 million (when this amount is adjusted by the \$79 million in project carry forwards from 2008, there is a net increase of \$9 million). The primary sources of this increase are slippages from prior years for costs associated with the St. Clair Right-of-Way (+\$22 million), timing of work and cost estimate revisions for the Precast Tunnel Liner Rehabilitation project (+\$23 million), inclusion of a project to upgrade the ventilation at Duncan Shop (+\$16 million), increased estimates for rehabilitation work at McBrien Building (+\$18 million), the need to replace the Revenue Operations facility (+\$15 million), replacement of the Glencairn & Scarborough Town Centre Station roof structures and skylights (+\$11 million), an increase in bus procurements (+\$35 million) and, the inclusion of

planning and environmental studies for the Downtown Relief Line (+\$5 million) and preliminary design work for the Yonge North Subway Extension (+\$5 million). These increases are offset by a reduced budget during this timeframe for several items, the largest of which is associated with the delay in the award of the contract to purchase 204 new LRV's (-\$143 million).

Expenditures over the ten-year period from 2009 to 2018 are projected to increase by \$494 million (up \$415 after adjusting for 2008 project carry forwards) primarily related to: increased bus procurements (+\$90 million), increased surface track replacement costs (+\$48 million), scope and cost estimate refinements for various Signal/Electrical/Communication projects (+\$51 million), increased scope for Tunnel Liner replacements (+\$22 million), the need for various Industrial Facility Improvements (+\$70 million), increased requirements for McBrien Building renovations (+\$25 million), increased cost estimates for subway track work (+\$11 million), increased costs and scope for various elevator and escalator overhauls and replacements (+\$19 million), inclusion of a project to upgrade the ventilation at Duncan Shop (+\$16 million), identification of the need to replace the Revenue Operations facility (+\$15 million) and, replacement of the Glencairn & Scarborough Town Centre Station roof structures and skylights (+\$11 million). The balance (+\$117 million) represents an increase of about 1.8% on the existing program and includes refined scope of work and revised estimates based on updated information.

It is important to note that the base capital program defers \$417 million from the following six projects that were deferred beyond 2018 in order to ensure sufficient City funding would be available for the 204 LRV order:

- Eglinton Bus Terminal Replacement (\$34 million)
- Fire Ventilation Upgrades (\$55 million)
- Station Modernization (\$40 million)
- On-Grade Paving (\$25 million)
- Collector Booth Renewal (\$5 million)
- Mid-Life Bus Rebuilds (\$258 million)

Inclusion of these projects should be re-considered following confirmation of how the recently announced Federal Infrastructure Stimulus Funds for the City of Toronto will affect funds available for the TTC's capital program.

Further details on the changes for specific projects are included as part of the project documentation contained in the Capital Program Blue Books.

## **FUNDING**

The City of Toronto is responsible for funding the TTC's Capital Program. Several Provincial and Federal programs have been introduced (or modified) in recent years that also provide significant contributions toward the base capital program as well as expansionary initiatives that would not otherwise be affordable.

Changes in projected funding since the approval of the 2009-2013 Capital Program include the



following:

- On April 1, 2009, the Province of Ontario announced funding for the following Transit City lines: SRT (\$1.4 billion), Finch West LRT (\$1.2 billion), Eglinton Crosstown LRT (\$4.6 billion). Subsequently, on May 15, 2009, the Province of Ontario and the Government of Canada announced \$950 million in funding for the Sheppard East LRT. It is intended that the City will not contribute toward the cost of these lines and that Metrolinx will play a key role in these projects.
- On June 19, 2009, the Province of Ontario confirmed that it would provide one-third funding for the 204 LRV order (\$417 million). In the absence of any Federal contribution, and following the deferral of projects by the TTC (as noted above), the City of Toronto agreed to provide the remaining two-thirds funding for these vehicles.
- The impact on the TTC of the Federal Infrastructure Stimulus Funds for the City of Toronto as announced on September 11, 2009, has not yet been determined, however, it is anticipated that these funds should assist the City in addressing the TTC's base capital program funding needs.
- The Federal Gas tax allocation to the City of Toronto (TTC) has been reduced slightly based on the latest census population data.

Exhibit 4 summarizes the current projected funding as compared to budgeted expenditures for the TTC's base 2010-2014 Capital Program.

**Exhibit 4**

FUNDING PROJECTION – PROPOSED BUDGET									
TTC 2010-2014 CAPITAL PROGRAM REQUIREMENTS & SOURCES OF FUNDING									
\$ millions	2009	2010	2011	2012	2013	2014	2010-2014	2009-2018	
<b>PROPOSED BUDGET</b>									
Total Gross - Base Capital Program Request	796	1,011	997	1,016	635	668	4,327	7,096	
Unspecified Budget Reduction - City Applied	-	(62)					(62)	(62)	
<b>Proposed Capital Program</b>	<b>796</b>	<b>949</b>	<b>997</b>	<b>1,016</b>	<b>635</b>	<b>668</b>	<b>4,265</b>	<b>7,034</b>	
<b>Funding Sources</b>									
<b>Total Provincial Funding</b>	<b>238</b>	<b>326</b>	<b>250</b>	<b>241</b>	<b>145</b>	<b>156</b>	<b>1,117</b>	<b>1,735</b>	
<b>Total Federal Funding</b>	<b>221</b>	<b>231</b>	<b>176</b>	<b>159</b>	<b>162</b>	<b>174</b>	<b>902</b>	<b>1,693</b>	
TTC Internal (depreciation)	22	24	26	26	25	24	125	239	
Other Reserves / Funding Partners	2	7	9	4	-	-	20	20	
Development charges **	39	31	19	11	11	11	84	140	
<b>Total Other Funding</b>	<b>62</b>	<b>62</b>	<b>54</b>	<b>41</b>	<b>36</b>	<b>36</b>	<b>229</b>	<b>400</b>	
City Debt Target - CFO Recommended **	200	430	407	260	218	193	1,508	1,869	
OBRP Related Debt - Provincial SLD	22	14	4	3	2	4	27	(6)	
City Carryforward - Deferred Debt Issued **	79						-	-	
<b>Total City / Other Funding</b>	<b>364</b>	<b>505</b>	<b>466</b>	<b>304</b>	<b>256</b>	<b>232</b>	<b>1,764</b>	<b>2,262</b>	
<b>Total Funding</b>	<b>823</b>	<b>1,063</b>	<b>891</b>	<b>705</b>	<b>563</b>	<b>562</b>	<b>3,783</b>	<b>5,690</b>	
<b>Funding Shortfall (Surplus)</b>	<b>(27)</b>	<b>(114)</b>	<b>107</b>	<b>312</b>	<b>72</b>	<b>105</b>	<b>482</b>	<b>1,344</b>	

Note: Funding for the Spadina Subway Extension, Transit City Projects, Yonge North Subway Extension, Other Recommended TTC and Waterfront projects are shown separately from the base program requirements.

For the base capital program Exhibit 4 shows that:

- For 2009, based on currently projected expenditures there is a net surplus of \$27 million.
- For 2010, after applying an anticipated 10% unspecified budget reduction of \$62.3 million, there is a surplus of \$114 million compared to anticipated expenditures.
- For 2010-2014 there is projected to be a \$482 million funding shortfall, and for the 10 years 2010-2019 there is a \$1.344 billion funding shortfall.

No funding has been assumed beyond what has been currently committed to or announced by the Provincial and Federal governments and it will be necessary to identify appropriate tools to address these funding shortfalls: use of the 2009 funding surplus, an increase in the City debt envelope available to the TTC as a result of Federal Infrastructure Stimulus Funds becoming available, consideration by the City of the use of a longer debenture period for debt issuances that are more in line with the life of the assets, and continued pursuit of funding for identified Strategic Funding Packages.

An overview of the various Provincial, Federal, Municipal and other funding sources and a ten-year summary is provided in Appendix B.

#### Strategic Funding Packages

While expansion of the transit system is critical to the long-term viability of the City of Toronto and

the broader GTA, given the Commission's capital investment priorities and the existing ridership base, it would be inappropriate to spend money on system expansion if state-of-good-repair replacement and rehabilitation of the existing system is not fully funded. While progress was achieved this past year with the agreement of the Provincial and Federal governments to provide funding for various transit expansion projects, only the funding announced for the SRT project provided any relief to the base capital program shortfall as the remaining Transit City Plan LRT lines were not previously part of the base or state-of-good-repair capital program.

To address the substantial projected base program funding shortfalls noted above, staff has continued to meet with City, Provincial, Metrolinx and Federal officials. Discussions are ongoing in an effort to obtain additional funding for transit projects that meet common strategic objectives that link the TTC's priority state-of-good-repair needs with Transit City Plan initiatives and the Metrolinx Regional Transportation Plan.

The following Strategic Funding Packages have been identified and should continue to be pursued with the intent of securing additional funding to address the funding gap for the base program:

1. Streetcar Network – While one-third provincial funds have been secured for the acquisition of 204 LRV's to replace the TTC's current fleet of streetcars that are reaching the end of their 30-year life (\$1.252 billion), staff has been engaged in discussion with Provincial officials to gain their support to pick up an additional one-third share of the cost of the vehicles as well as the full cost of the required Maintenance & Storage Facility (\$345 million) as both of these projects are a necessary pre-cursor to the expansion of the LRT network under Transit City Plan.
2. Automatic Train Control – In 2007 the Province agreed to fully fund the installation of Automatic Train Control and Re-signalling of the Yonge-University-Spadina line as part of a Quick Wins program initiative. While the commitment was substantial and work is progressing, the announcement was limited to the Quick Wins term of 2009-2012 and there remains a funding shortfall of \$99 million for this project for the remaining scope to 2016. This work is necessary not only to replace the 50 year old signals, but, to assist in the introduction of automatic train control which will enhance the vehicle capacity of the line.
3. 126 H6 Subway Car Replacement – A Federal one-third share (\$104 million) is still being pursued to match the Provincial funding already received for this \$312 million project to replace the H6 subway car fleet with Toronto Rocket cars.
4. Accessibility – the Accessibility for Ontarians with Disabilities Act (AODA) requires full accessibility by 2025. The TTC is moving forward to achieve this goal with its bus fleet by 2012, its stations by 2020 and light rail by 2018. A Provincial commitment for long-term sustainable funding for accessibility would assist with projects underway or required to meet AODA requirements such as vehicle modifications and standards compliance (\$103 million), installation of elevators in all stations (\$326 million) and, Wheel-Trans vehicles (\$61 million) - as well as a contribution towards the Wheel-

Trans operating budget.

5. GTA Farecard – funding in the amount of \$140 million has been identified under the Canada Strategic Infrastructure Fund, however, it is currently estimated that this project will cost in the order of \$417 million to implement for the existing transit system and vehicles.

If full funding for these Strategic Funding Packages is received there will be sufficient funds available to address the 2010-2014 base capital program shortfall identified in Exhibit 4. This would enable the TTC to adequately address its state-of-good-repair needs and, at the same time, subject to funding, continue to move forward and expand the transit network as set out in the Transit City Plan and the Metrolinx Regional Transportation Plan.

### **CAPITAL WORKFORCE PLAN**

At the end of 2009, the TTC had an approved capital workforce of 1,362. More than half of these positions were for hourly-rated workers who perform major rehabilitation work on the Commission's assets covering everything from track installation to structural work in the subway to signals, electrical and communication equipment work to revenue vehicle rebuilds. The bulk of the remaining positions are for design and project management for major capital projects. The positions are tied to specific capital projects.

In addition, the Commission utilizes external consultants, mostly for design and IT project services, when the volume or skill of internal employees is not sufficient to complete the capital program. The TTC has undertaken an analysis of both traditional engineering/construction work and IT project work and has developed multi-year plans that will bring work in-house, where cost-effective and where there is enough long-term work to warrant the hiring of full-time employees and reduce the dependence on consultants. Also, an additional 83 positions have been incorporated into the 2010 budget to provide support for Transit City Plan initiatives and a further 8 positions have been included to support the Toronto-York Spadina Subway Extension project. Finally, administrative areas including Human Resources, Legal, Materials & Procurement and Finance Departments are reviewing resource requirements necessary to effectively support the Toronto-York Spadina Subway Extension project and Transit City Plan initiatives.

In order to meet the requirements of the capital program it is proposed that the capital workforce increase as follows in 2010:

<b>AREA</b>	<b>2009</b>	<b>2010</b>	<b>CHANGE</b>
Engineering/Construction	307	319	12
Spadina Subway Extension	22	30	8
Transit City Plan	65	148	83

ITS Projects	49	57	8
All Other	919	999	80
<b>Total</b>	<b>1,362</b>	<b>1,553</b>	<b>191</b>

These capital positions will be included in the 2010 TTC Organization Charts, which list each position at the Commission.

**AMENDMENTS**

In addition to the projects included in the base capital program as outlined in this report, staff recommends that the Commission amend the base program to reflect changes that were identified after the cut-off date for assembly of the budget for certain projects as outlined in Exhibit 5.

Exhibit 5

<b>TTC 2010-2014 CAPITAL PROGRAM BUDGET SUMMARY OF AMENDMENT ITEMS</b>							
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2010- 2014</u> <u>2015-2019</u>
Future Bus Purchases	-	-	(32.8)	3.1	0.1	0.2	\$ (29.4) \$ -
Mid-Life Bus Rebuild	-	-	(0.6)	(7.6)	(10.1)	(19.7)	\$ (38.0) \$ (372.8)
Subway Asbestos Decontamination Facility	-	0.5	-	-	-	-	\$ 0.5 \$ -
Overhaul of CLRVs	-	-	-	9.8	9.2	-	\$ 18.9 \$ -
ALRV Midlife Overhaul Lawrence-Allen	(0.8)	(11.2)	(9.4)	(8.7)	-	-	\$ (29.2) \$ -
Revitalization Study	-	0.2	0.2	-	-	-	\$ 0.3 \$ -
Transit Signal Priorities Expansion (TCBP)	0.1	1.9	9.1	9.1	8.0	1.2	\$ 29.2 \$ -
	<b>\$ (0.7)</b>	<b>\$ (8.6)</b>	<b>\$ (33.6)</b>	<b>\$ 5.7</b>	<b>\$ 7.2</b>	<b>\$ (18.3)</b>	<b>\$ (47.7) \$ (372.8)</b>

As can be seen from the table, the net overall impact of these amendments is to reduce the requested budget: by \$8.6 million in 2010; by \$47.7 million for the 2010-2014 capital program, and; by \$420.5 million for the ten-year 2010-2019 capital forecast. The single largest amendment relates to the removal of the balance of funds previously identified for bus rebuilds. A complete review of the requirements for the bus overhaul programs and/or an early bus replacement program will be undertaken in time for consideration as part of the 2011 budget cycle. Additional information on these budget amendments is contained in Appendix C.

**HOW TO HANDLE THE GROWTH**

With the rapid growth in the GTA and the City of Toronto over the past decade or so, and with the projected growth in population, employment and economic activity projected for the region over the coming decades, there is clearly a need to significantly expand Toronto's and the GTA's transit system network. TTC's annual ridership level has grown from 372 million in 1996 to over 470 million in 2009: approaching 30% growth at a time when the City of Toronto population has grown by less than 10%. As a result of this growth, the TTC has struggled at times over the past several years to keep up with daily ridership. As in the 1970's and 1980's, continuous investment in new or improved transit capacity is required to sustain ridership levels and achieve ridership growth.

With the TTC in the midst of a decade-long level of record retirements of transit operators and other skilled employees, with practical limits on the numbers of new hires that can be adequately trained, with the lead time for ordering buses at 2 years and rail vehicles at 3 to 4 years, with the lead time to design and construct new maintenance facilities at up to 5 years and with major rail expansion taking even longer, planning for growth is a highly complicated and critical exercise. Federal and Provincial (Metrolinx) funding announcements in the spring of this year for the SRT line and the Sheppard East, Finch West and Eglinton Crosstown LRT lines are welcome commitments to help meet the future transit needs of the City of Toronto. However, without guaranteed and predictable long-term capital and operating funding, growth can be speculative and must not be pursued at the expense of the existing transit network which remains the TTC's highest priority.

The TTC's long-term plans for accommodating the growth envisioned by the City of Toronto's Official Plan and growth plans for the GTA generally fall into the following areas:

### The Subway System

The Yonge-University-Spadina subway is largely operating at maximum capacity during rush hour, particularly southbound from Finch station in the mornings, utilizing the existing technology of the line. To increase that capacity, the TTC has the following plans:

- The Toronto Rocket (TR) Trains: 234 new subway cars are on order at a cost of \$692 million and are designed to be 3 times more reliable than the most reliable cars (T1) the TTC currently runs and, as a result of their design; the trains can carry an extra 10% more riders than current trains. This increase in reliability and extra passenger carrying capacity effectively means we can carry more riders on the existing system than we are currently able to. In addition, a \$312 million project for the replacement of 126 H6 cars will result in a significant option price reduction as well as earlier realization of associated benefits such as: increased safety, reliability and efficiency through the exclusive operation of the TR fleet on the Y/U/S line. Details of the Subway Car Fleet Plan are included in Appendix D.
- YUS Re-Signaling and Automatic Train Control: One of the most significant initiatives the TTC has for increasing the capacity of the Yonge Subway is the \$342 million project to re-signal the Yonge subway line. The existing signal system was installed when the line was built over 50 years ago. By replacing it with industry standard, state-of-the-art signaling equipment and equipping the line with automatic train control, closer headways

(the time between trains) coupled with the new TR subway trains will result in a significant increase in carrying capacity and regularity of service will be achieved.

- Union Station 2<sup>nd</sup> Platform: Design of this second platform is underway and this \$138 million project is funded through Waterfront Toronto. When completed, it will help alleviate the current overcrowding of the station. It will also significantly increase the passenger boarding capacity of the station and should markedly reduce the dwell time at the station for trains loading and off-loading customers; contributing to more regular service on the YUS subway.
- The Toronto-York Spadina Subway Extension (TYSSE) project is an 8.6 km extension of the Spadina Subway line that will involve the construction of six new stations. Of the six stations, three will be located in Toronto, two in York Region, and one will straddle the boundary line between Toronto and York Region. The extension will run from the existing Downsview Station to Vaughan Corporate Centre and will span 6.2 km in Toronto and 2.4 km in York Region.
  - The estimated final budget for the entire project is \$2.63 billion and is fully funded by the City of Toronto, the Regional Municipality of York, the Province of Ontario and the Government of Canada.
  - Project costs are currently under review to assess increased escalation costs, unforeseen technical issues and elements which were not previously included as part of the budget.
  - Environmental Assessment (EA) approvals have been received, project management contracts are in place, design is underway, tunnel boring machines have been ordered and meaningful construction should begin in 2010.
  - Project duration is expected to be seven (7) years with revenue service commencing in late 2015.
- Yonge North Subway Extension to Highway 7: The Metrolinx Regional Transportation Plan includes the extension of the Yonge subway north to Highway 7. A budget allocation in the amount of \$5.7 million (to be shared 75%/25% by York Region/City of Toronto) has been included in the base program to 2010 to proceed with conceptual design to protect the project from a property and cost/risk perspective and to properly define the scope, budget and schedule for the project should funding become available. All of the Yonge subway related projects noted above are required prior to the extension of this line in order to ensure sufficient carrying capacity, reliability and regularity south of Finch to accommodate the ridership generated by this extension. As TTC project management is currently in place to manage the conceptual design effort and it is expected that York Region will confirm their commitment for a 75% share of project costs on September 24, 2009, and since Metrolinx is expected, once the project is fully funded, to reimburse municipal costs for environmental assessment, property protection and design costs, it is recommended that approval be granted in the amount of \$925,000 to allow conceptual design work to proceed now and through to December 31, 2009. Such costs will be held in TTC accounts pending City of Toronto approval of the budget.

- Downtown Relief Line: The Metrolinx Regional Transportation Plan has identified a “Downtown Core” transit line - that would connect the east and west ends of the Bloor-Danforth subway line via a curved line passing through the downtown core -as a possible future project. In order to assess/confirm the planning concept and identify the preferred alignment, technology, station locations and configuration, \$5 million has been included in the base capital program in 2010 and 2011 to proceed with planning and environmental studies.
- Other Capacity Issues: In the longer term, adding a 7<sup>th</sup> car to the Toronto Rocket trains, improvements to the movement of trains at the terminal stations to allow quicker turnaround time and the possible installation of platform edge doors will all be examined to further enhance the carrying capacity of the YUS subway.

### Bus Fleet

The Commission is in the process of replacing its aging buses with modern, accessible buses. Once completed, the TTC will have the largest fully accessible bus fleet in Canada. Details of the bus fleet plan are shown in Appendix E.

To complement the Transit City LRT, the Commission at its meeting of August 26, 2009, endorsed the Transit City Bus Plan (TCBP) which provides for major improvements to TTC bus service over the next five years as follows:

- Bus service every 10 minutes or better on 21 Transit City Bus Network routes during the day and evening, daily, starting in the fall of 2010.
- New or enhanced express bus service on 15 Transit City Bus Network routes, starting in the fall of 2014.
- New or enhanced express bus service on three future Transit City LRT corridors, starting in the fall of 2011.
- Introduction of 20-minutes-or-better service on all other TTC bus routes during the day and evening, daily, starting fall 2011 and fall 2012.

The new plan also proposes additional on-street route supervisors, transit signal priority at 1,150 intersections, 10 new queue jump lanes at some of the city’s busiest intersections, and 75 more bus shelters at locations specified by the TTC. When fully implemented, the TCBP will attract up to an additional 7.5 million customer trips annually. The cost of the network is estimated at \$77 million to build and \$39 million (net) annually to operate.

The current Wheel-Trans bus fleet will be replaced by 2010 with 110 low-floor Friendly buses with plans to expand the fleet by a further 88 vehicles from 2011 to 2014. Details of the Wheel-Trans bus fleet plan are outlined in Appendix F.

### Streetcar and LRT Network

The existing Streetcar Lines are all either freshly rehabilitated or are in the process of being



rehabilitated. Where practical, such as on St. Clair Avenue, the lines have been converted to lines within segregated rights-of-way to remove them from mixed traffic in an effort to improve the regularity of the service. In addition, transit priority measures are being installed to improve transit vehicular movement. Lastly, and most importantly, a new fleet of 204 accessible modern LRV's (Light Rail Vehicles) will be received over the next few years to replace the aging existing fleets that are approaching the end of their useful life and a replacement \$345 million LRV Maintenance and Storage Facility will be constructed to accommodate these vehicles. Details of the Streetcar Fleet plan are included in Appendix G.

### Transit City Rail Plan

In June 2007 the Province of Ontario announced \$17.5 billion in available funding for the implementation of the MoveOntario 2020 Rapid Transit Program in the Greater Toronto and Hamilton Area (GTHA) over the next 12 years, including the City of Toronto 2007 Transit City Light Rail Plan. Under the Province's Transit Project Assessment Process Regulations the TTC's Transit City Program management team in unison with City Planning staff has advanced planning initiatives for each of the Transit City LRT lines:

- Scarborough Rapid Transit
  - The Provincial government has announced \$1.4 billion in funding for this project.
- Finch West and Eglinton Crosstown LRTs
  - The Provincial government has announced \$1.2 billion and \$4.6 billion respectively for each of these lines
- Sheppard West LRT
  - The Provincial and Federal governments announced \$950 million in funding for this project.
- Don Mills, Jane, Scarborough Malvern and Waterfront West LRTs
  - No funding has as yet been announced for these lines, however, a total of up to \$8.7 million is required to complete necessary environmental assessment work, including up to \$1.3 million in 2010.
  - The Executive Committee of the City of Toronto at its meeting of September 8, 2009, requested that "the \$8.7 million for environmental assessments for other Transit City lines be funded through offsets within the TTC's 2009 Approved Capital Budget". As noted earlier in the report, both 2009 expenditures and the 2010 proposed budget are below the allocations approved by Council and will be adequate to meet this request.

While funding has been announced for each of the Scarborough RT, Sheppard East, Finch West and Eglinton Crosstown LRT lines, discussions are ongoing with Metrolinx with respect to the development of a series of agreements that will be required to confirm the timing, scope, magnitude, and governance issues associated with each of these lines and to set out the TTC's

responsibilities for program and project management. The 2010 budget requirement for these lines is \$375.2 million.

Other

Several other projects are either recommended by staff or are included as part of the Waterfront Initiatives coordinated by the Toronto Waterfront Revitalization Corporation as follows:

- Other TTC Recommended Projects at an estimated cost of \$1.297 billion over the next 10 years include: \$277 million for the GTA Farecard (integrated ticketing system) project, \$195 million for the Bremner Streetcar Expansion and associated vehicles, \$494 million for Platform Screen Doors, \$46 million for Warden Station Phase 2 redevelopment, \$99 million for various Accessibility for Ontarians with Disabilities Act (AODA) vehicle modification and standards compliance initiatives, \$53 million for Islington Station Improvements, \$38 million for the acceleration of certain roofing and on-grade paving work, \$29 million for Transit Signal Priority Expansion (recommended to be included in the base program by amendment), \$27 million for the redevelopment of the Toronto Coach Terminal, \$10 million for a Transit Visitors Centre, \$10 million for University Subway Station Renaissance, \$6 million for secure bicycle parking and, \$6 million for security cameras on subway cars.
- Waterfront Initiatives at an estimated cost of \$354 million over the next 10 years include: \$182 million for the East Bayfront Streetcar and Station expansion (including vehicles), \$123 million for construction of a second platform at Union Station, \$34 million for the West Donlands Streetcar Line (including vehicles) and, \$15 million for the Portlands Streetcar expansion.

Details of the Toronto-York Spadina Subway Extension, Transit City Plan and Other TTC Recommended and Waterfront Toronto initiatives are included in the 2010-2014 Capital Program Blue Books.

The total budgetary request for the base capital program, Toronto-York Spadina Subway Extension, Transit City Plan, Other TTC Recommended Projects and the Waterfront Toronto Initiatives is in the order of \$25 billion over the next 10 years. The expansion plans contained in this report and the associated ridership projections are achievable, if the required funding is made available from the Commission's funding partners.

**BUDGET CONCLUSIONS**

The TTC is charged with the responsibility of providing efficient, safe and affordable public transit to the residents of the City of Toronto. The Capital Program detailed in this report and the supporting documentation sets out how to keep the existing system in a state-of-good-repair, maximizing the use and life of assets and providing for substantial expansion of the network over the next decade or so. The plans contained in this report ensure the City of Toronto can achieve the Transit City vision, complete with extensive interconnections to GO Transit and 905 transit systems to form a comprehensive network throughout the GTA region.

The following conclusions or observations can be made:

1. The 2010-2014 Capital Program is consistent with the plan approved by the Commission and City Council last year.
2. The TTC's priorities for capital investment remain unchanged.
3. The 2009-2013 budget envelope is unchanged (down by \$9 million after the 2008 carry forwards).
4. The 2010 budget is \$17 million below the Council approved amount contained in the 2009-2013 Capital Program
5. The proposed 2010 budget is affordable within existing City approved debt guidelines. After factoring in committed Federal and Provincial funding programs for the TTC there is a \$114 million funding surplus for 2010.
6. There is a funding shortfall of \$482 million for the base capital program over the five years from 2010-2014 and a shortfall of \$1.344 billion over the ten years from 2010-2019. Use of 2009 surplus funds, application of Federal Infrastructure Stimulus Funds and the pursuit of Strategic Funding Packages will all assist in addressing these funding shortfalls for the base capital program.
7. While additional funding has been announced by the Province and the Federal governments for four of the Transit City Plan initiatives, much remains to be done to resolve the need for long-term, stable and predictable capital funding for the base capital program so that expansionary initiatives can proceed while maintaining the existing system in a state of good repair.
8. Additional funds (beyond those for the base capital program) must be secured in order to proceed with the "below-the-line" initiatives that have been identified under Transit City Plan, the Metrolinx Regional Transportation Plan, Other TTC Recommended Items and the Waterfront Initiatives.
9. Funding of the Strategic Funding Packages outlined in this report will help significantly to address the base capital funding shortfall. These packages must be pursued with the Provincial and the Federal governments in order to ensure that these critical state-of-good-repair projects can proceed as planned.

The TTC represents an integral part of the transportation system of the City of Toronto and the GTA. Maintaining the existing system is critical to ensuring that existing peak ridership levels upwards of 470 million can be adequately serviced in a safe, efficient and cost effective manner. Expanding the system is necessary to meet demand and to ensure that the City's Official Plan can be achieved. However, while the plans are practical and achievable, they are dependent upon funding from all three orders of government - for both the base program and the numerous system expansion opportunities outlined in the capital budget.

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September 17, 2009  
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Attachment:                   Appendix A - 2010-2014 Capital Program Summary  
                                  Appendix B - Summary of Funding Programs  
                                  Appendix C – Summary of Amendments  
                                  Appendix D – Subway Car Fleet Plan  
                                  Appendix E – Bus Fleet Plan  
                                  Appendix F – Wheel-Trans Bus Fleet Plan  
                                  Appendix G – Streetcar Fleet Plan

Supporting Documents:       TTC 2010-2014 Capital Program Blue Books

**SUMMARY OF FUNDING PROGRAMS****APPENDIX B**

Funding for the TTC Capital Program is provided through various funding programs administered by all three levels of government (Canada/Ontario/Toronto) which are summarized in Attachment 1:

**BASE CAPITAL PROGRAM FUNDING SOURCES**

## 1. Ontario Bus Replacement Program (OBRP)

- The intent of this program is to provide long-term, sustainable transit funding for municipalities through payments for up to 33% of the cost of replacement bus purchases. Program Guidelines and Allocations are issued annually. The allocation is Province-wide on the basis of fleet plans and is paid when contracts are awarded for delivery within the calendar year, noting that the first priority is the allocation of funds to specialized transit needs. In early 2008 the Province announced changes to this program by committing to provide up to 33.30% funding of conventional bus contract costs in annual payments over a 12 year period. As a result, the City will be fronting the bus expenditures (11/12<sup>ths</sup> and declining) over the amortized funding life through self liquidating debt. Annual payments to the municipalities will include an amount to cover applicable interest costs. Specialized bus funding is provided at 33.30% upfront (not amortized).

## 2. Ontario Rolling Stock Infrastructure Funding

- As a result of the cancellation of the Ontario Transit Vehicle Program (OTVP) in 2006, ongoing funding for TTC's rolling stock was no longer addressed under the new OBRP. The Province subsequently announced and paid \$150 million towards TTC's rolling stock requirements, noting the unique nature of multi-modal transit operations in Toronto. This funding was paid in March 2007 into a City reserve fund and to the end of 2008 \$113.8 million has been drawn. The remaining reserve funds (\$43.3 million including interest earned) will be applied to applicable vehicle project funding and will be largely depleted by 2009.

## 3. Golden Horseshoe Transit Investment Partnerships/ Transit Technology and Infrastructure Program (GTIP/TTIP)

- The provincial payment of \$31.1 million in March 2007 has been applied against capital project expenditures to 2008 (\$24.8 million) with the remaining \$6.9 million (including interest earned) available in a City reserve fund to be applied against future projects. Partial funding is being allocated to the Islington Station Redevelopment project, along with expected proceeds from redevelopment of part of the existing property.

#### 4. Gas Tax

- Since announced in October 2006, the Provincial gas tax funding has been at 2 cents per litre, allocated on a 70% ridership/ 30% population basis. This has generated about \$162 million per year (October – September). Of this total funding, the City has applied the first \$91.6 million to the TTC operating budget funding annually leaving approximately \$70 million per year for capital funding. In March 2009, the Provincial government announced the allocation for 2009 based on an increased total for Ontario of \$321 million (from \$314 million in 2008). Based on the 70/30 allocation basis (unchanged) the funding for 2009 increased to \$164.1 million for Toronto, and future year funding allocations have been assumed to remain at this level. An adjustment to 2009 reflects the extra funding for 2008 announced in 2009. A further adjustment will be required for SRT funding applied to 2008 for which full funding has been announced by Metrolinx under the SRT Project, and this will result in the need to reapply past funding to other eligible projects.
- Federal gas tax funding increased from 2 cents per litre in 2007 to 2½ cents in 2008, allocated on a 100% population basis. This funding, which increased to a cap of 5 cents per litre in 2009, was made permanent in the spring Federal 2008 budget. It will provide approximately \$163 million for 2009; however under the recently established framework agreement, the funding for the next 4 year period 2010-2013 will be reduced to \$154.8 million per year based on the updated 2006 Census population information.

#### 5. Canada Strategic Infrastructure Fund (CSIF)

- This was established as a tri-partite funding agreement under which the City of Toronto, the Province of Ontario and the Federal Government each committed to contribute \$350 million (for a total funding of \$1.05 billion) towards a series of specific TTC projects. With the exception of the funding for the GTA Farecard, the Province has pre-paid its share of this agreement to the City.
- The Provincial payment of \$275.6 million in March 2007 fully addressed the remaining commitment (of the original \$303.3 million) under this program as announced in March 2004, excluding funding for the GTA Farecard project. These funds were deposited in a City reserve fund and \$186.6 million has been applied against capital expenditures to 2008, with the remaining \$103.1 million (including interest earned) to be applied over the years 2009-2014. An amended contribution agreement to allow changes to shared project costs is currently awaiting City approval.
- The Federal Contribution Agreement was executed on March 18<sup>th</sup>, 2008 and the first claims covering 2007/8 have been paid and audited totalling \$113.3 million. Further claims for 2008/9 will be submitted upon approval of Canada's project description requirements.

- The GTA Farecard project component funding (\$46.7 million for each government) funding will be provided after the acceptance of an approved business case. An amendment to the agreement was filed and approved on June 17, 2009 to amend the Contribution Agreement to make the delivery date for the Farecard Business Case twenty one (21) months from the original signing date of the Contribution Agreement (December 18, 2009).

#### 6. Other Provincial Funds

##### \$57 million Capital Reserve

- \$57 million was provided by the Province to the City in 2008 which has been set aside in a reserve fund for use against the TTC Capital budget in 2009. Interest earned in 2008 for this reserve totalled \$0.982 million and no projects to date have been applied against this reserve account. Since 2009 capital will be underspent and sufficiently funded, this reserve is expected to be fully drawn down in 2010.

##### \$1M Bikelinx Funding

- \$1.183 million was provided by the Province in March 2008 for the installation of bike racks on buses. More than half of the funds have been applied and the remaining \$0.497 million (including interest) is expected to be exhausted in 2009.

#### 7. Metrolinx Quick Wins

- In November 2007, the Metrolinx board (formerly the Greater Toronto Transportation Authority (GTTA) approved a number of Quick Wins projects including a Subway Capacity package (\$440.9 million) and Transit City Plan (TCP) EA's (\$7.1 million) for 2008-2012. The subway capacity package included the YUS ATO and crossovers projects funded at 100% (\$189 million), the next subway car order (21 trainsets) (\$104 million) and the Yonge BRT (\$17 million). The TCP EA's are not included in the funding table and approval of this project (fully funded) will result in no further funding impact. This Quick Wins funding package was confirmed in the March 2008 Provincial budget plus \$93 million for the current subway car order and \$386 million was paid and deposited into City reserve funds in March 2008 to be applied to the approved capital projects.
- At the end of 2008, the reserve funds available totalled \$392.6 million including interest to be applied to future project costs for the approved projects.
- At the time of announcement, Metrolinx outlined the intention to fully fund the ATC project for capacity improvements on the Yonge South subway line including the remaining scope outside of the Quick Wins term of 2009-2012. After netting out the additional reserve interest earnings on the advanced payment, the cost to complete the project scope (further \$142.1 million) will require an additional funding commitment of \$129.7 million (\$98.7 million to 2014). Since this funding is not yet committed, it has not been included in the funding projections based on the direction of City staff.

#### 8. 204 LRV Funding

- It was previously assumed that provincial long term funding would be in place after 2008 to address ongoing funding for TTC's unique rolling stock requirements. This assumption included a funding share of the 204 LRV project (\$1.252 billion) to replace the current fleet of aging streetcars. On June 19, 2009 the Province of Ontario confirmed that it would provide one-third funding for the 204 LRV order (\$417 million) and this funding is assumed to flow on the basis of contract milestone payments; however the details of that funding program and any required agreement has not yet been confirmed.

## 9. Long Term Funding Requirements

### Provincial Long Term Vehicle Funding

- Further to the LRV replacement order, staff has been engaged in discussion with Provincial officials to gain their support to pick up an additional one-third share of the cost of the 204 LRV cars as well as the full cost of the required Maintenance & Storage Facility (\$345 million) as both of these projects are a necessary pre-cursor to the expansion of the LRT network under Transit City Plan. Since this funding is not yet committed, it has not been included in the funding projections based on the direction of City staff.

### Federal Building Canada Fund - BCF

- In its March 2007 budget, the Federal government announced the creation of a Building Canada Fund for large projects which will be application based, noting that three funding programs including CSIF were being replaced (for which no new commitments would be announced). Discussions followed with each Province towards the signing of framework agreements under which the program would be managed, and this agreement with Ontario was signed in July 2008. Canada agreed to cooperate with Ontario in reviewing Metrolinx's Regional Transportation Plan and to discuss the initial projects through the Infrastructure Framework Committee. Projects identified under this process will receive priority consideration for funding under the BCF. The first project announced under BCF was the Toronto-York Spadina Subway Extension. No other funding commitments are known or currently identified for public transit in Toronto under this program.
- Subsequent to CSIF, long-term funding was previously assumed at a 1/3 share of future rail vehicle procurements under the BCF or another available Federal funding program. This had included 204 LRT cars, 36 SRT cars and 126 subway cars for total anticipated Federal funding in 2009-2013 of \$352 million. Subsequently, Metrolinx announced full funding for the SRT corridor and Canada advised that no Federal funding was available for the 204 LRV Car order. Staff is still pursuing a Federal one-third share of the 126 H6 Subway Car Replacement project (\$104 million) to match the Provincial funding already received on these cars. Since this funding is not yet committed, it has not been included in the funding projections based on the direction of City staff.



## 10. Transit-Secure

- Federal government funding for terrorism and passenger security projects is provided under this program.
- Funding of \$1.5 million was announced in November 2006 (Round 1) for TTC capital security projects and a contribution agreement was executed in July 2007. Round 3 funding of \$6.4 million was announced in September 2007 for the subway station CCTV project. Subsequently, Round 4 funding of \$0.9 million for 3 TTC projects was announced by Transport Canada in January 2008, for which an amending contribution agreement was executed in July 2008. This funding is effective for expenditures June 23, 2006 through to March 31, 2009.
- This program is now complete. An audit was conducted and completed in 2008 and at the end of June 2009, all supporting documentation was sent to Transport Canada to complete their reporting requirements and file the final claim totalling \$6.270 million. Payment of this final claim is pending.

## 11. Public Transit Capital Trust (PTCT)

- The federal government has pre-paid this program through the Province. The dollars shown are being held in a reserve by the City and will be drawn on as expenditures are made.
- A one-time investment from this fund was allocated to Provinces by the Federal government for transit capital, and the Province of Ontario distributed this to municipalities based on transit ridership. PTCT funds of \$222.6 million were paid in March 2007 and were deposited in a City reserve fund to be used for transit capital funding. Of this amount, \$75.0 million was designated as the Federal government's initial funding towards the Toronto-York Spadina Subway Extension; however the Province provided a top-up payment of \$75.0 million to cover these funds diverted from the PTCT. The initial funding draw of \$74.1 (Federal share) was applied for 2006 and the \$75.0 top-up draw (Provincial share) was applied for 2007. The 2008 funding draw (Federal Share) amounted to \$75.7 million, leaving a reserve fund balance \$6.1 million (including earned interest) of Federal funding which is available to apply to projects in 2009.

## 12. Infrastructure Stimulus (ISF)

- Early in 2009 the Federal government outlined Canada's Economic Action Plan to stimulate the economy by fast-tracking new infrastructure spending. The City submitted an application by May 1 for its highest priority, funding for the 204 LRV project; however that was not accepted. Subsequently the City submitted over 500 applications for projects including 23 identified by the TTC. On September 11, 2009 the Federal government announced funding of for 19 approved TTC projects in the amount of \$61.1 million, and these projects must be addressed in the period September 2009 to March 2011. The detailed program requirements have not yet been clarified.

### 13. TTC Depreciation

- TTC self funds a portion of certain assets through cash flow and pays for the unfunded portion over the useful life of those assets through annual depreciation charges to the operating budget. The portion of capital expenditures to be funded through depreciation is presented in the table.

### 14. Other Reserves

- This funding is derived from specific agreements with 3<sup>rd</sup> parties or from other City funds such as the net proceeds on sale of transit properties (held in reserve by the City on behalf of the TTC). The key elements of this funding relate to land acquisition reserve funds for Islington and Warden, Kipling TTC station modifications and Toronto Community Foundation funds for station renaissance.
- In addition, as identified in the Metrolinx Regional Transportation Plan, the extension of the Yonge Subway north to Highway 7 in York Region has been included (\$5.7 million) in the base program to 2010 to proceed with conceptual design to protect the project from a property and cost/risk perspective and to properly define the scope, budget and schedule for the project should funding become available. It is expected that York Region will confirm their commitment for a 75% share of project costs on September 24, 2009, with Toronto to pay the other 25%. Further it is expected that once a Provincial commitment is announced, Metrolinx will reimburse municipal costs for environmental assessment, property protection and design costs. Funding for this project has not yet been factored in.

### 15. Development Charges

- Based on the latest available City projections, approximately \$83.5 million in development charges funding will be available to fund TTC growth projects over the next five years. City Council approved a new development charges by-law on February 2009 which came into force on May 1, 2009 for which the development charge revenue will become a more significant source of City capital financing over the next five years. The impact of this by-law has not yet been determined by the City or factored into the funding projections.

### 16. City Debt

- The City of Toronto has approved annual debt targets for the TTC Capital Budget. There is some flexibility in these numbers to the point that underspent amounts may be carried forward to the subsequent year, with the approval of City Council. This source is also used to provide for the City share of capital funding agreements with other levels of governments, except the Toronto-York Spadina Subway Extension into York Region. The City share of that project funding includes sources of a project-specific development charge and monetization of a Toronto Hydro Bond.

- As a result of the change in up-front Provincial funding of buses under OBRP, the City of Toronto will issue self liquidating debt to cover the deferred Provincial contribution (11/12<sup>ths</sup>) and will subsequently receive payment (including interest) from the Province over a 12 year period. This amount will be applied as an adjustment to the debt target each year.
- The table also identifies \$79 million in funding from the City in 2009 for certain projects expenditures not made in 2007 and 2008 which are carried forward to 2009.
- Based on direction from City Finance, the current projected funding shortfalls do not assume any funding beyond what has been currently committed to or announced by the Provincial or Federal governments and it will be necessary to identify appropriate tools to address this shortfall. This will include consideration of the following: the use of the 2009 funding surplus; an increase in the City debt envelope available to the TTC as a result of Federal Infrastructure Stimulus Funds becoming available; consideration by the City of the use of a longer debenture period for debt issuances that are more in line with the life of the assets; and continued pursuit of funding for identified Strategic Funding Packages.
- On June 26, 2009, City Council approved two-thirds funding for the 204 LRV Car order, when in the absence of any Federal contribution, the TTC committed to the deferral of work on six projects beyond 2018 (\$417 million) in order to ensure sufficient City funding would be available. Inclusion of these projects should be re-considered following confirmation of how the recently announced Federal Infrastructure Stimulus Funds for the City of Toronto will affect funds available for the TTC's capital program.

#### ISF projects

- The impact on the TTC of the Federal Infrastructure Stimulus Funds for the City of Toronto as announced on September 11, 2009, has not yet been determined, however, it is anticipated that these funds should assist the City in addressing the TTC's base capital program funding needs. Federal ISF funding of \$190.0 million was announced for the City of which \$61.1 million is approved for specific TTC projects, leaving \$128.9 million in funding which is expected would result in a reduction to overall City debt impacts.

### **NON-BASE CAPITAL PROGRAM FUNDING SOURCES**

#### 17. Toronto-York Spadina Subway Extension

- In March 2006, the Provincial Government announced approval and a funding contribution of \$670 million (based on the original estimated cost in \$2006) for the Toronto-York Spadina Subway Extension into York Region and this funding was deposited in the MoveOntario Trust. In January 2008, the Province announced a further contribution of \$200 million (based on the current project cost estimate of \$2.634 billion) and these funds have been deposited in the MoveOntario Trust.

Work is in progress to establish processes for handling expenditures, claims and funds releases amongst the parties (MOT, City, York, TTC) and once established initial funds

will be drawn from the trust. No funding has been accrued to 2007.

- On March 6, 2007 the Federal Government announced that it would contribute funding for the Toronto-York Spadina Subway Extension into York Region with the amount capped at \$697 million for the project. The first \$75 million was designated from the Federal Public Transit Capital Trust funds and was provided to the Province to be placed in the MoveOntario Trust. The remaining \$622 million is to be provided through the new Building Canada Fund, with a business case recently approved by Treasury Board and subject to the execution of a contribution agreement in the fall of 2008. Under the terms of agreement, no expenditures are eligible for Federal funding until approval has been received and no funding has been accrued to 2007.

#### 18. MoveOntario 2020 / Transit City Plans

- On June 15, 2007, the Provincial Government announced a 12-year \$17.5 billion action plan to deliver 52 rapid transit initiatives in the GTA and Hamilton. This plan is to be financed by the Province over 50 years with no municipal contribution and the Federal government was asked to cover at least a third of the program cost. This plan included the TTC's Transit City Plan (TCP) (7 new light rail lines), subway extensions to York Region (Spadina and Yonge), the Yonge BRT and the SRT extension. This program is designed to substantially enhance transit in the City of Toronto and the GTA and is the source of funding for the TTC's Transit City Program. These programs are shown separately from the base program and will require no municipal funding, however, the Province is seeking a Federal contribution of one-third funding.
- Work is well progressed on the TCP Environmental Assessments which have received Provincial funding (\$7.1 million) and this funding was paid into City reserves in March 2008, and was fully drawn as of the end of 2008. Staff is engaged in discussion with Metrolinx and Provincial officials to review the allocation of this funding to priority projects (announced) and unfunded (yet unannounced) Projects.
- On April 1, 2009, the Province of Ontario announced funding for the following Transit City lines: SRT (\$1.4 billion), Finch West LRT (\$1.2 billion), Eglinton Crosstown LRT (\$4.6 billion). Subsequently, on May 15, 2009, the Province of Ontario and the Government of Canada announced \$950 million in funding for the Sheppard East LRT. It is intended that the City will not be required to contribute toward the cost of these lines and that Metrolinx will play a key role in these projects. While funding has been announced for each of the Scarborough RT, Sheppard East, Finch West and Eglinton Crosstown LRT lines, discussions are ongoing with Metrolinx with respect to the development of a series of agreements that will be required to confirm the timing, scope, magnitude, and governance issues associated with each of these lines and to set out the TTC's responsibilities for program and project management.

#### 19. Waterfront Toronto Funding

- This is the source of funds for the construction of a second platform at Union Station, amongst other waterfront projects. This funding is sourced from all 3 levels of government based on direct agreements with Waterfront Toronto.

## Subway Fleet Plan

## APPENDIX D

The Subway Fleet Plan as outlined below is the basis for two sections of the TTC's Capital Program: Program 4.12 – Subway Car Purchases; and Program 4.16 – Subway Car Overhaul.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
H4 Retirement													
H5 Retirement													
H6 Retirement													
TR Procurement (H Replacement)													
TR Procurement (Spadina)													
TR Overhaul 6 Year													
T1 Overhaul 10 Year													
T1 Overhaul 15 Year													
T1 Overhaul 20 Year													

The Subway Fleet Plan includes the purchase and delivery of 360 new cars between 2010 and 2012, designated the Toronto Rocket (TR). The purchase of 234 TR subway cars to replace the H4 and H5 car fleets was approved for \$710 million in the 2006-2010 Capital Program. Following confirmation of funding from the City, the Province and the Federal Government, a contract was signed in December 2006. The purchase of 126 cars to replace the H6 fleet early was approved for \$312 million in the 2009-2013 Capital Program. Funding commitments from the City and the Province are in place. An assessment was conducted on the possibility of extending the life of the H6 fleet, but the NPV analysis indicated that the most cost effective option was to proceed as planned with early retirement. An option is available in the current contract to add on these cars, along with the Spadina cars (9 trains), but it must be exercised by June 2010. In addition, consideration must be given to the timing of the procurement of these option cars since the Spadina cars are not required until 2015.

The plan will facilitate one car type per line (TR's on YUS & T1's on BD), accommodate a 1.35% annual ridership growth, and most importantly, build on the City vision of a modern, high capacity transit system. (Note: an assessment is currently underway to determine required facility modifications to support the one car type per line and the resulting impacts will be presented as part of the 2011 budget cycle.) The Toronto Rocket trains will provide improved capacity (approximately 10%), improved passenger comfort, information and safety, and improved energy consumption.

A comprehensive maintenance program is required to maintain the T1 subway vehicle fleet in a state of good repair. This program is based on scheduled maintenance at regular intervals and incorporates work recommended by the manufacturer together with that found necessary by service experience. It includes the overhaul of major car components at 5-year intervals on T1 cars until retirement at 30 years. The detailed scope for the Toronto Rocket has yet to be determined, but has been scheduled at a six-year interval, based on manufacturer recommendations.

## **Bus Fleet Plan**

## **APPENDIX E**

The Bus Fleet Plan as amended and shown below identifies the quantity and types of buses necessary to conduct operations in accordance with the Commission's transit service requirements. It contains a schedule for new bus procurements (Capital Budget – Section 4.11) and bus overhauls (Capital Budget – Section 4.13).

The Commission currently operates approximately 1,744 40-foot transit buses. By the end of 2010, the average age of the bus fleet will be 5.5 years as the result of a major replacement program that began in 2003. However, the average is made up of two extremes. The large number of new buses is offsetting a number of 27 year old GM buses on extended life programs. Except for retained older buses (to be retired by 2012) the fleet will be fully accessible by 2010.

The Commission operates 694 hybrid buses and supports a procurement strategy for buses that use the best technology available to reduce emissions that affect smog, ozone depletion and greenhouse gases.

The Bus Fleet Plan is based on the replacement of buses after 18 years of service due to a reduction in service reliability and an increase in maintenance costs. Additional buses in the Bus Fleet Plan have been included to address service improvements, bus transit city, ridership growth, city construction projects, and bus maintenance spares for new bus technologies. Contingency buses are required for warranty repairs, unplanned construction, maintenance projects, and emergencies. Over the next 5 years, 385 buses will be procured.

A complete review of the requirement for bus overhaul programs and/or an early bus replacement program will be undertaken in 2009/2010 and proposed during the 2011 Capital Program submission. This may result in funds that have been deferred to post 2019 being brought back into the 10 year budget envelope.

	<2008	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Model</b>													
GMC DSL (1980-83)	173	73	52	58	12	30							
ORION V DSL (1991)	106	38	68										
ORION V DSL LE (1996-97)	185					18	63	57	47				
NOVA RTS DSL LE (1998)	52	2							9	43			
FLYER DSL LF (1999)	51	30	21							51			
ORION VII DSL (2003-07)	662												
ORION VII HYBRID (2006-10)	374	190	130										
ORION VII / TBD (2010-19)				120	40	105	35	85	55				
<b>AVAILABLE</b>	1603	1682	1744	1806	1834	1891	1863	1891	1890	1796	1796	1796	1796
<b>Peak Service</b>		1477	1476	1565	1600	1653	1632	1657	1661	1571	1555	1587	1588
<b>Mtce. Spares</b>		209	214	220	207	213	206	209	204	194	187	190	191
<b>REQUIRED</b>		1686	1690	1785	1807	1866	1838	1866	1865	1765	1742	1777	1779
<b>CONTINGENCY</b>		(4)	54	21	27	25	25	25	25	31	54	19	17

**Wheel-Trans Bus Fleet Plan**

**APPENDIX F**

Wheel-Trans continues to provide door-to-door and fixed route service (Community Bus) with buses as well as with accessible and sedan taxis. The current fleet of 147 Wheel-Trans buses have exceeded the expected 7-year ELF design life cycle, and as such 110 low-floor Friendly buses will be purchased over 2009/10 with an option to purchase an additional 88 buses over 2011-2014 from American Bus Products, Inc bringing the fleet size to 198 buses. The bus rebuild program provides vehicle reliability and additional capacity until new buses are received.  
(

The bus fleet projection is based upon a 3.5% increase in demand post 2010; the impact of AODA legislation which reduces the unaccommodated from 2% to 0.5% in 2011; 50% of customers accommodated on buses as per agreement; upgrading WTIS scheduling system linked with technology improvements such as AVL/GPS on buses; alternative service delivery strategies and policy changes such as the need for large capacity vehicles throughout the day; and directing customers on Wheel-Trans service to integrate more with the conventional accessible transit network.

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Fleet Available (Rebuilds included)	147 (35)	188 (50)	198 (80)	198 (58)	198 (38)	198 (18)
Buses Scheduled for Retirement	0	(59)	(26)	(22)	(20)	(20)
Procurements	41	69	26*	22*	20*	20*
Fleet Available (End of Year)	188	198	198	198	198	198

\*Optional Vehicle Purchase

## Streetcar Fleet Plan

## APPENDIX G

The Streetcar Fleet Plan as outlined below is the basis for two sections of the TTC's Capital Program: Program 4.18 – Purchase of Streetcars; and Program 4.15 – Streetcar Overhaul.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
CLRV OH (132Cars)													
ALRV Mid Life OH (52 Cars)													
CLRV Retirement													
ALRV Retirement													
LRV Procurement													

The Streetcar Fleet Plan includes the procurement and delivery of 204 new LRV cars between 2012 and 2018 to replace the entire CLRV and ALRV fleet, provide for normal ridership growth, congestion relief, and fleet flexibility (e.g. higher than expected ridership growth or maintenance spares ratio). The contract for this procurement was executed in June 2009 with Bombardier. Funding was provided one-third from the Province and two-thirds from the City.

This procurement provides an opportunity to acquire one fleet of fully accessible articulated low floor LRVs with common technology and operating characteristics. The replacement of all non-articulated cars with articulated cars reduces operating costs given that fewer cars (and fewer operators) are required for a comparable level of service.

In addition to replacing the existing fleet, the Bombardier contract has a provision to acquire additional vehicles for Transit City. The Transit City vehicles will be a variant of the replacement LRVs but will still allow for some commonality of spare parts and maintenance. This will include the provision of cabs at both ends of the cars (eliminates the requirement for track loops); doors on both sides of the cars, and couplers/trainlines that would allow vehicles to operate in a multiple unit consist. No decision has been made yet on this option order for Transit City.

Overhaul programs are required for existing streetcar fleets to ensure their operability until the arrival of the new LRV cars. The 2009-2013 Capital Budget called for the overhaul of 132 CLRV's that are now past their 30 year design life and a midlife overhaul of all ALRV's. However, it has since been determined that not overhauling the ALRV's and retiring them first, along with rebuilding all of the CLRV fleet will result in approximately a \$10 million savings. The 2010-2014 Capital Budget as amended reflects this change.



