

# Analyst Briefing Notes

## Budget Committee Review

(October 29, 2007)

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October 30, 2007

**PART I: CAPITAL PROGRAM****Executive Summary**

- The 2007 Approved Capital Budget of \$266.298 million was 84% spent as at June 30 2007. Expenditures by year-end are projected to be \$248.176 million, or 93% of the 2007 Approved Capital Budget. Of the \$18.122 million under expenditure, \$10.311 million in 2007 cash flow funding will be carried forward into 2008. The projected under expenditure is primarily attributed to the Waste Diversion Project, the new staff facilities at Dufferin Transfer Station and work on the perpetual care of former landfill sites.
- The 2008 Recommended Capital Budget; 2009 to 2012 Plan and 2013 to 2017 Estimates total \$579.300 million of which \$459.366 million is for the Program's 5-Year Capital Plan, requiring debt funding of \$15.210 million. The 5-Year Capital Plan, excluding carry forward funding of \$10.311 million, assumes:
  - \$15.210 million in debt funding which is below the 5-Year debt guideline by \$92.900 million, because the Program is moving to a user rate based funding model in mid-2008;
  - \$313.500 million is user rate recoverable debt, fully recovered from the new Solid Waste user rates to be implemented starting July 1, 2008;
  - \$41.781 million in funding from the Perpetual Care of Landfill Reserve Fund.
  - \$88.875 million in external funding from the private sector.
- The Recommended 5-Year Capital Plan includes changes required to the 2007 to 2011 Capital Plan to achieve a 70% Diversion target by the year 2010, as was reported to Council at its meeting of June 19, 20 and 22, 2007. The Recommended 2008 to 2012 Capital Plan incorporates the additional projects required to achieve this 70% diversion goal, and accelerates some of the diversion projects included in the original 2007 to 2011 Capital Plan approved by Council in March 2007.
- The Recommended 5-Year Capital Plan requires cash flows of \$75.815 million in 2008, \$68.837 million in 2009, \$125.280 million in 2010, \$111.426 million in 2011 and \$88.319 million in 2012.
- The 2008 Recommended Capital Budget with a total cash flow of \$75.815 million includes:
  - previously approved project commitments and new/change in scope projects requiring 2008 cash flow of \$65.504 million gross funding with \$15.210 million funded by debt, \$7.380 million funded by reserve funds and \$42.914 million funded by user rate recoverable debt. This cash flow combined with carry forward funding of \$10.311 million for 2007 projects brings the total 2008 Recommended Capital Budget to \$75.815 million gross;

- future year commitments of \$21.829 million in 2009, \$6.164 million in 2010 and \$1.089 million in 2011 are required for SSO Additional Processing Capacity, Residential Collection, the Green Lane Landfill Development and Weighscale System Upgrade projects.
- The 2008 Recommended Capital Budget of \$65.504 million (excluding one-year carry forward funding) is allocated 92% to Legislated projects at \$60.553 million and 8% to State-of-Good-Repair projects at \$4.951 million.
  - Legislated projects include major Diversion Facilities as well as Perpetual Care of Landfills and the Green Lane Landfill Development project.
  - State-of-Good-Repair projects such as the Bermondsey and Ingram Yard projects ensure asset management to maintain these facilities related to residential collection. Also included are Transfer Station Asset Management projects carried forward from 2007 as well as similar new projects for 2008.
- The 2008-2012 Capital Plan provides funding for 5 major projects:
  - Diversion Facilities: ongoing design and construction of additional Source Separated Organics (SSO) processing capacity, 6 reuse centres, new recycling and residual waste containers, SSO multi-unit residential containers, and residual waste processing facilities.
  - Perpetual Care of Landfills: ongoing maintenance of closed environmentally sound landfill sites after primary operations have ended. Includes the old landfills under the jurisdiction of the former area municipalities.
  - Transfer Stations Asset Management: ongoing operational improvements that are required to meet safety, health, operational and environmental requirements such as the Gas Handling Act and Ministry of Environment (MOE) standards.
  - Residential Collection: ongoing renovation and retrofit to Collection Yards.
  - Green Lane Landfill: ongoing development and operational improvements operation of the new landfill. These include cell development, landfill gas control system, site services/ final cover/ storm control, and other remediation costs.
- The program does not have a backlog of State of Good Repair projects.
- The Recommended 5-Year Capital Plan results in operating impacts of \$1.773 million in 2008, \$1.906 million in 2009, \$4.951 million in 2010, \$3.811 million in 2011 and \$2.637 million in 2012.

### **Recommendations**

The City Manager and Chief Financial Officer recommend that:

1. the 2008 Recommended Capital Budget for Solid Waste Management Services with a total project cost of \$21.380 million and a 2008 cash flow of \$75.815 million and future year commitments of \$29.082 million be approved. The 2008 Recommended Capital Budget consists of the following:
  - a) New Cash Flow Funding for:
    - (i) 14 new sub-projects with a 2008 total project cost of \$21.380 million that requires cash flow of \$19.630 million in 2008 and future year commitments of \$1.750 million in 2009;
    - (ii) 5 previously approved sub-projects with a 2008 cash flow of \$45.874 million and future year commitments of \$20.079 million in 2009, \$6.164 million in 2010 and \$1.089 million in 2011; and
  - b) 2007 approved cash flow for 4 previously approved sub-projects with carry forward funding from 2007 into 2008 totalling \$10.311 million;
2. new debt service costs of \$0.456 million in 2008 and incremental costs of \$1.673 million in 2009 resulting from the approval of the 2008 Recommended Capital Budget, be approved for inclusion in the 2008 and future year operating budgets;
3. operating impacts of \$1.773 million in 2008, and (\$0.604) million that emanate from the approval of the 2008 Recommended Capital Budget be considered within the overall scope of Solid Waste Management Services' 2008 operating budget;
4. all sub-projects with third-party financing be approved conditionally, subject to the receipt of such funding during 2008 and if such financing is not forthcoming, their priority and funding be reassessed by City Council relative to other City-financed priorities and needs;
5. the 2009-2012 Capital Plan for Solid Waste Management Services totalling \$393.862 million in project commitments and estimates, comprised of \$68.837 million in 2009, \$125.280 million in 2010, \$111.426 million in 2011; and \$88.319 million in 2012 be approved;
6. The General Manager of Solid Waste Management Services report back to the Public Works and Infrastructure Committee prior to the start of the 2009 Budget process, on the strategies to deliver the aggressive 5-Year Capital Plan, addressing the implementation challenges with the with respect to timelines, site locations, environmental assessments, and readiness to proceed for facilities related projects;
7. The General Manager of Solid Waste Management Services report to the Budget Committee, as part of the 2008 Operating Budget process, on the specific rate structure and timing for the introduction of the Solid Waste user rate based system in 2008;

### 2007 Capital Variance Review

2007 Budget to Actuals Comparison - Total Gross Expenditures (\$000s)					
2007 Approved	Actuals as of June 30 (2nd Qtr Variance)		Projected Actuals at Year End		Balance
\$	\$	% Spent	\$	% Spent	\$ Unspent
266,298	224,352	84	248,176	93	18,122

#### Comments / Issues:

The 2007 Approved Capital Budget of \$266.298 million was 84% spent as at June 30, 2007. Actual expenditures by year-end are anticipated to be \$248.176 million, or 93% of the 2007 Approved Budget, resulting in projected 2007 cash flow funding of \$10.311 million being carried forward into 2008. The year-end under-spending in the 2nd quarter is mainly attributed to the following projects.

- Diversion Facilities – The major portion of the under-spending (\$7.180 million) is attributable to the following:
  - the Residual Waste Containers Project. Due to long production lead times, this project funding will be carried over to 2008.
  - Anticipated under-spending in the Mechanical - Biological Treatment Facility Project (\$1.999 million) will be carried forward to 2008 for the design and specifications of the Residual Waste Processing Facilities.
  - The under-spending in the Reuse Centre Project (\$2.310) is driven by the recent Council decision not to build the centre at Ingram site, and the amount will be carried over to future years.
  - Funding for Transfer Station Modification Project (\$1.127 million) was originally requested for the completion of Bermondsey and Scarborough covered bunker, and this project is permanently deleted as part of the 2007 Cost Containment initiatives.
  - The under-spending of the Residual Waste Processing Facility project (\$0.485 million) is attributed to Council's recent decision to not submit the Proposed Terms of Reference to the Ministry of Environment, thereby not initiating an Individual Environmental Assessment process. This project has been deferred as a capital cost containment measure.
- Transfer Station Asset Management - The major portion of the under-spending (\$1.744 million) is attributable to the new staff facilities at Dufferin Transfer Station. This project will be deferred to 2008 due to delays in finalizing the design specifications process to meet the new Toronto Green Development Standards.

- Perpetual Care Landfill - A major portion of the under-spending (\$0.490 million) is attributable mainly to work on the leachate collection system extension at Thackery Landfill, which will be deferred until 2008, due to design delays. The planting of trees on Brock West (\$0.150 million) is no longer required this year. Other under-spending is attributable mainly to the postponement of investigative and remedial work at various old landfills, and a slower than anticipated investigation, design and approval process.

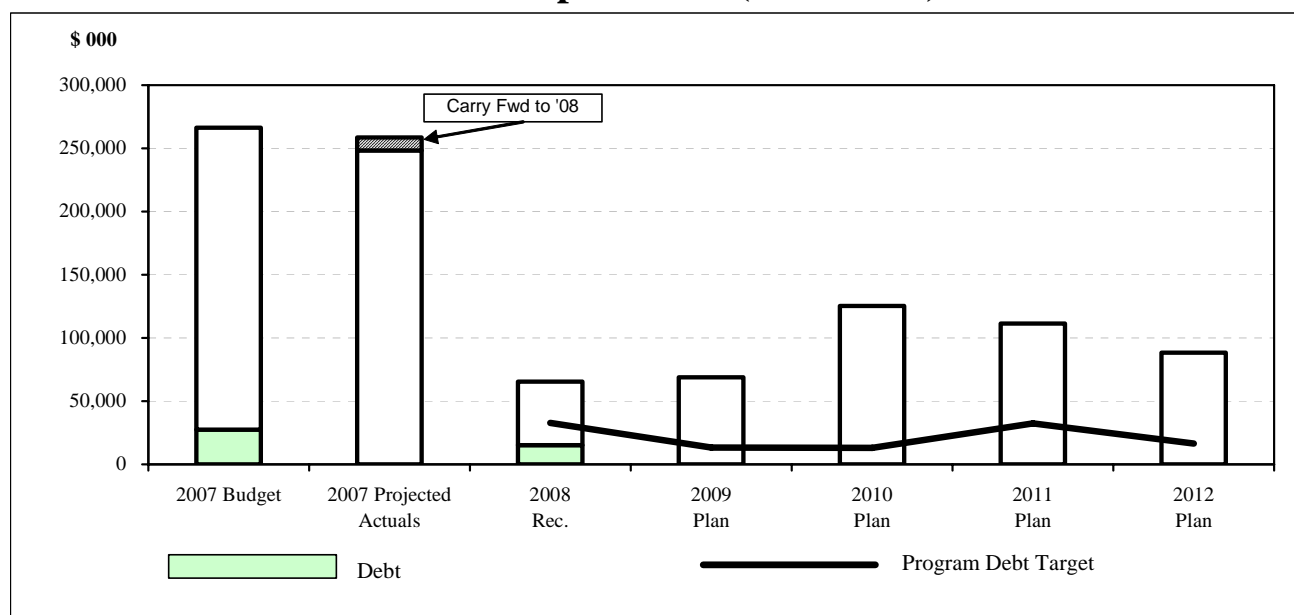
Analysis of actual expenditures to date and commitments in SAP, and the Program's historical spending capacity, indicates that additional 2007 funding to be carried forward into 2008 will likely be required. The 2007 carry forward funding will be reviewed once year-end actual expenditures are known.

## Cost Containment Impact

As a result of 2007 cost containment, the following capital projects have been deferred from the Solid Waste Management 5 Year Capital Plan.

Cost Containment Summary (Deletion of Capital Projects)						
	2007	2008	2009	2010	2011	2012
<b>Impact on Capital</b>						
Residual Waste Management Facility - Environmental Assessment Terms of Reference	(485)					
Transfer Station Modification - Bermondsey & Scarborough Covered Bunker	(1,127)					
<b>TOTAL</b>	<b>(1,612)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Impact on Operating</b>						
Residual Waste Management Facility - Environmental Assessment Terms of Reference	0					
Transfer Station Modification - Bermondsey & Scarborough Covered Bunker	0					
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Impact on Debt Service Charges Deferred</b>	<b>(48)</b>	<b>(177)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 5-Year Capital Plan (2008-2012)



			5-Year Plan					
2007			2008	2009	2010	2011	2012	2008-2012
Budget	Projected Actual							
<b>Gross Expenditures:</b>								
2007 Capital Budget & Future Year Commitments	266,298	248,176	46,094	2,579	3,884	19,203	0	71,760
Recommended Changes to Commitments			(220)	17,500	2,280	(18,114)	0	1,446
2008 New/Change in Scope and Future Year Commitments			19,630	1,750	0	0	0	21,380
2009 - 2012 Plan Estimates			0	47,008	119,116	110,337	88,319	364,780
1-Year Carry Forward to 2008		10,311	➡					
<b>Total Gross Annual Expenditures &amp; Plan</b>	<b>266,298</b>	<b>258,487</b>	<b>65,504</b>	<b>68,837</b>	<b>125,280</b>	<b>111,426</b>	<b>88,319</b>	<b>459,366</b>
<b>Program Debt Target</b>			<b>32,893</b>	<b>13,288</b>	<b>13,108</b>	<b>32,350</b>	<b>16,471</b>	<b>108,110</b>
<b>Financing:</b>								
Recommended Debt	27,456		15,210	0	0	0	0	15,210
<b>Other Financing Sources:</b>								
Reserves/Reserve Funds	18,532		7,380	7,745	8,269	8,876	9,511	41,781
Development Charges								0
Federal								0
Provincial								0
Other External					30,000	34,375	24,500	88,875
User Rate Recoverable Debt	220,310		42,914	61,092	87,011	68,175	54,308	313,500
<b>Total Financing</b>	<b>266,298</b>		<b>65,504</b>	<b>68,837</b>	<b>125,280</b>	<b>111,426</b>	<b>88,319</b>	<b>459,366</b>
<b>By Category:</b>								
Health & Safety								0
Legislated	258,110		60,553	62,624	120,580	107,226	84,119	435,102
SOGR	8,188		4,951	6,213	4,700	4,200	4,200	24,264
Service Improvement								0
Growth Related								0
<b>Total By Category</b>	<b>266,298</b>		<b>65,504</b>	<b>68,837</b>	<b>125,280</b>	<b>111,426</b>	<b>88,319</b>	<b>459,366</b>
Yearly SOGR Backlog Estimate (not addressed by current plan)			0	0	0	0	0	0
Accumulated Backlog Estimate (end of year)			-	-	-	-	-	0
<b>Operating Impact on Program Costs</b>			1,773	1,906	4,951	3,811	2,637	15,078
<b>Debt Service Costs</b>			456	1,673	0	0	0	2,129

\* Note that the 1-Year Carry Forward reflects the latest estimate as used in the 2007 2nd Quarter Capital Variance Report.

## **5-Year Capital Plan Overview**

### **Overview**

- The 5-Year Capital Plan (2008 Recommended Budget and 2009-2012 Plan), which totals \$459.366 million excluding 2007 funding carried forward into 2008, places a primary emphasis on fulfilling legislated requirements for Solid Waste Management Services and achieving a Council approved diversion target of 70% by 2010.
- Solid Waste Management Services staff reviewed their Waste Diversion plans in early 2007, and reported back to Council at its meeting of June 19, 20 and 22, 2007, on the changes required to the 2007 to 2011 Capital Plan to achieve a 70% diversion target by the year 2010. The 2008 to 2012 Recommended Capital Plan incorporates the additional projects required to achieve this 70% diversion goal, and accelerates some of the diversion projects included in the approved 2007 to 2011 Capital Plan approved by Council in March 2007.
- 95% or \$435.102 million of the 5-year recommended cash flow is allocated to Legislated projects for Diversion Facilities, Perpetual Care of Landfills, and Residential Collection, and 5% or \$24.264 million is allocated to State of Good Repair projects relating to Transfer Stations Asset Management and Residential Collection.
- The 2008-2012 Capital Plan which totals \$459.366 million, excluding carry forward funding of 2007 funding into 2008, provides funding for 5 major projects:
  1. Diversion Facilities: This project encompasses the design and construction of additional Source Separated Organics (SSO) processing capacity, 6 reuse centres, new recycling and residual waste containers, SSO multi-unit residential containers, and residual waste processing facilities. These initiatives are necessary to increase diversion of the waste stream currently managed by the City of Toronto. The total cost over 5 years is \$364.168 million, excluding 2007 carry forward funding.
  2. Perpetual Care of Landfills: This project encompasses a variety of capital subprojects considered necessary for the ongoing maintenance of closed environmentally sound landfill sites after primary operations have ended. These include: monitoring, consulting and remedial measures related to surface water, ground water, landfill gas and ambient air; maintenance of leachate and gas control systems; correction of soil erosion/settlement on slopes and the repair of roadways. This project includes the old landfills under the jurisdiction of the former area municipalities. The total cost over 5 years is \$41.781 million. This project is funded from the Perpetual Care of Landfill Reserve Fund.
  3. Transfer Stations Asset Management: This project includes miscellaneous operational improvements that are required to meet safety, health, operational and environmental requirements such as the Gas Handling Act and Ministry of Environment (MOE) standards. They include: preservation of infrastructure, additional facilities to enhance services, energy conservation measures, reduction of off-site impacts, and improvements to operating efficiency. The total cost over 5 years is \$19.264 million.
  4. Residential Collection: This project includes several activities which have a total cost of \$5.000 million over 5 years for renovation and retrofit to Collection Yards.



5. Green Lane Landfill: This project includes various development and operational improvements necessary for the ongoing operation of the landfill. These include cell development, landfill gas control system, site services/ final cover/ storm control, and other remediation costs. The total cost over 5 years is \$29.153 million.
- The Recommended 5-Year Capital Plan reflects debt funding of \$15.210 million which is below the 5-Year debt guideline by \$92.900 million, because Solid Waste Management Services is moving to a user rate based funding model similar to Toronto Water, in mid-2008. The Recommended 5-Year Capital Plan also reflects user rate recoverable debt of \$313.500 million with the debt repayment fully recovered from the new Solid Waste user rates to be implemented starting July 1, 2008, and external funding from the private sector of \$88.875 million.
  - The 10-Year Capital Program includes the costs of 3 waste diversion projects which are assumed to be 50% financed by public interest through partnerships to help reduce debenture requirements. 50% of these 3 projects has a 4 year cost of \$91.475 million from 2010 to 2013, as follows:
    - a. Additional Single Stream Processing Capacity - 50% (\$12.500 million).
    - b. Replacement Composting Facility – 50% (\$3.975 million).
    - c. Residual Waste Processing Facility – 50% (\$75.000 million).

The \$91.475 million upfront cost from public interest partners for 50% of the construction of these projects, may be recovered through higher operating costs charged by the partners to the City for the operation of these 3 diversion facilities.

Projects to be Funded with Partners (\$000s)	2008	2009	2010	2011	2012	2013	TOTAL 2008-17
<b><u>Waste Diversion Facilities:</u></b>							
1. Additional Single Stream Processing Capacity – 50%				2,500	7,500	2,500	12,500
2. Replacement Composting Facility – 50%				1,875	2,000	100	3,975
3. Residual Waste Processing Facilities - 50%			30,000	30,000	15,000	0	75,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>30,000</b>	<b>34,375</b>	<b>24,500</b>	<b>2,600</b>	<b>91,475</b>

**Multi-Year Debt Affordability Target**

The Solid Waste Management Services' future year budget trend is driven primarily by the City's waste diversion goal of 70% Diversion by 2010. In order to help promote diversion and fund the increased costs for diversion, the Solid Waste Management Services will be moving to a user rate based system similar to Toronto Water, and charge fees based on size of bin or container collected. The majority of costs in the Diversion Facility project are for SSO additional processing capacity which will be completed in 2012, new recycling and residual waste containers and the establishment of reuse centres for diversion of durable goods, which results in gross expenditure requirements that are significantly higher than the those in the previous 2007 to 2011 5-Year Plan.

The Recommended 2008-2012 Capital Plan of \$459.366 million (excluding carry forwards) reflects a debt funding level of \$15.210 million, which is below the 5 year debt affordability guideline for Solid Waste Management Services of \$108.110 million by \$92.900 million. This debt room has been allocated to other City priorities. This is because Solid Waste Management Services is moving to a user rate based funding model similar to Water, as of July 1, 2008. The 5-Year Capital Plan also reflects a user rate recoverable debt of \$313.500 million with the debt repayment fully recovered from the new Solid Waste user rates to be implemented starting July 1, 2008, and private sector funding of \$88.875 million.

**Recommended Changes to the 2007 – 2011 Capital Plan**

City Council approved 2007-2011 Capital Plan at its meeting of March 7, 2007. The following table highlights the major changes from the 2007-2011 Capital Plan approved in March and the 2008-2012 Recommended 5-Year Capital Plan.

**SOLID WASTE MANAGEMENT SERVICES**

**Changes to Projects Between 2007 and 2008 Ten Year Capital Programs (\$000's)**

2007-2016 Capital Projects/Sub-Projects	2006 Carry Forward	2007	2008	2009	2010	2011	2012	2008 to 2012	2013 to 2017	Total 2008 - 2017
<b>PROJECTS INCLUDED IN 10 YEAR PROGRAM</b>										
<b>GROSS COSTS</b>										
1. Transfer Station Asset Management			(2,393)	363	100	100	100	(1,730)	500	(1,230)
2. Residential Collection			1,310	(590)	90	(410)	(410)	(10)	(2,050)	(2,060)
3. Green Lane Landfill										
3.1 Landfill Purchase										
3.2 Development			1,664	4,869	5,358	4,411	6,908	23,210	31,210	54,420
4. Perpetual Care of Landfills			666	176	135	136	136	1,249	680	1,929
5. Waste Diversion Facilities										
5.1.0 Residual Waste Facilities - EA & Design			(500)	750	500	(500)		250		250
5.1.1 Residual Waste Facilities - Construction				(2,000)	42,000	(40,000)	(49,000)	(49,000)		(49,000)
5.2 Additional SSO Processing Capacity				17,500	16,500	(8,950)	(6,800)	18,250	1,800	20,050
5.3 Collection Vehicles			(254)					(254)		(254)
5.4 Reuse Centres			(1,550)	6,310	7,000	2,000	4,000	17,760		17,760
5.5.0 Recycling Containers (Carts)										
5.5.1 Residual Waste Containers (Single Homes)										
5.5.2 Replacement SSO Containers (Single Homes)			100	9,000	9,000	1,900		20,000		20,000
5.6.0 Transfer Station Modifications										
5.6.1 Transfer Station Modifications			(4,000)	4,000						
5.7 Container Line Upgrade										
5.8 SSO Multi-Unit Res Containers										
5.9 Multi-Unit Residential Levy			(240)					(240)		(240)
5.10 Mandatory Diversion Enforcement - Vehicles				570				570		570
5.11 Tractor Trailers				490	245			735		735
5.12 Curbside Collection of Durable Goods			1,770					1,770		1,770
5.13 Recycling Upgrades for Multi-Units			865	1,816	1,816			4,497		4,497
5.14 Diversion Facilities Retrofit				1,000	1,500	1,500	1,500	5,500	7,500	13,000
5.15 Additional Single Stream Processing										
5.16 Replacement Composting Facility			(3,750)	(4,000)	(200)	3,750	4,000	(200)	200	
6. Clean and Beautiful City										
<b>TOTAL GROSS COSTS</b>			(6,312)	40,254	84,044	(36,063)	(39,566)	42,357	39,840	82,197
<b>TOTAL NET COSTS</b>			(17,683)	(13,288)	(13,108)	(32,350)	(24,100)	(100,529)	(20,500)	(121,029)
<b>DEBT TARGET</b>										
<b>OVER (UNDER) DEBT TARGET</b>			(17,683)	(13,288)	(13,108)	(32,350)	(24,100)	(100,529)		

**Program Capacity and Readiness to Proceed**

Because of the major purchase of the Green Lane Landfill in early 2007, \$224.352 million or 84% of the 2007 Approved Budget of \$266.298 million has been spent up to June 30, 2007. Deferrals and delays are generally attributable to managing the procurement process, lengthy and complicated contract negotiation processes, lengthy design specification processes, appropriate land acquisitions, and the various approval processes. These issues limit the Program's ability to spend 100% of the 2007 Approved Capital Budget. The Program however, is projecting a spending rate for year end of 93%, or an additional \$23.824 million of spending in the last half of 2007.

Solid Waste Management Services will face significant capacity issues given the magnitude of the cash flow projected in the Recommended 5-Year Capital Plan. The Recommended 5-Year Capital Plan expenditure levels are substantial with \$65.504 million in 2008, \$68.837 million in 2009, \$125.280 million in 2010, \$111.426 million in 2011, and \$88.319 million in 2012.

From a readiness standpoint, the need to procure suitable sites, construct facilities, find markets for diverted material, and complete Environmental Assessments on those proposed sites present some major challenges in meeting the Program 70% diversion targets by 2010.

**Backlog of Projects – Unmet Needs**

The program does not have a backlog of State of Good Repair projects.

**Capital Project Highlights**

Strategic Priorities:

The Solid Waste Management Services Multi-Year Business Plan was approved by Council and the Works Committee in June 2005. The Business Plan provides a long-term overview of the actions and decisions that will be required to meet Toronto's waste diversion goals and to secure dependable long-term management of residual solid waste over the next decade.

The previous Council had made diversion of solid waste a priority, and had set a target of achieving 60% diversion by 2008. In continuing to improve on the City's Diversion goals, Council at its meeting of June 19, 20 and 22, 2007, supported and approved the Mayors objective of 70% Waste Diversion by 2010. The Recommended 2008 to 2012 Capital Plan has been prepared towards achieving the 70% diversion goal.

This more aggressive target of 70% Diversion by the year 2010 requires an acceleration of the projects in the current capital program, and the addition of projects which have been excluded in the past in order to meet debt affordability guidelines.

## SOLID WASTE MANAGEMENT SERVICES

## 10 Year Capital Program to Support 70% Diversion (\$000's)

2007-2016 Capital Projects/Sub-Projects	2006 Carry Forward	2007	2008	2009	2010	2011	2012	2008 to 2012	2013 to 2017	Total 2008 - 2017
<b>PROJECTS INCLUDED IN 10 YEAR PROGRAM</b>										
<b>GROSS COSTS</b>										
1. Transfer Station Asset Management	3,569	3,864	2,201	4,463	4,200	4,200	4,200	19,264	21,000	40,264
2. Residential Collection	207	4,104	2,750	1,750	500	0	0	5,000	0	5,000
3. Green Lane Landfill										
3.1 Landfill Purchase	0	222,855	0	0	0	0	0	0	0	0
3.2 Development	0	1,777	3,918	6,185	6,742	5,400	6,908	29,153	31,210	60,363
4. Perpetual Care of Landfills	0	6,585	7,380	7,745	8,269	8,876	9,511	41,781	53,224	95,005
5. Waste Diversion Facilities										
5.1.0 Residual Waste Facilities - EA & Design	2,355	870	1,500	3,000	3,000	500	0	8,000	0	8,000
5.1.1 Residual Waste Facilities - Construction	0	0	0	0	60,000	60,000	30,000	150,000	0	150,000
5.2 Additional SSO Processing Capacity	0	1,000	1,000	18,500	19,000	15,300	13,200	67,000	1,800	68,800
5.3 Collection Vehicles	0	0	0	0	0	0	0	0	0	0
5.4 Reuse Centres	900	1,450	450	9,310	10,000	5,000	4,000	28,760	0	28,760
5.5.0 Recycling Containers (Carts)	0	7,180	21,295	0	0	0	0	21,295	0	21,295
5.5.1 Residual Waste Containers (Single Homes)	0	7,180	21,295	0	0	0	0	21,295	0	21,295
5.5.2 Replacement SSO Containers (Single Homes)	0	0	100	9,000	9,000	1,900	0	20,000	0	20,000
5.6.0 Transfer Station Modifications	700	427	0	0	0	0	0	0	0	0
5.6.1 Transfer Station Modifications	0	0	500	4,000	0	0	0	4,500	0	4,500
5.7 Container Line Upgrade	0	710	0	0	0	0	0	0	0	0
5.8 SSO Multi-Unit Res Containers	0	0	480	1,008	1,008	0	0	2,496	0	2,496
5.9 Multi-Unit Residential Levy	0	0	0	0	0	0	0	0	0	0
5.10 Mandatory Diversion Enforcement - Vehicles	0	0	0	570	0	0	0	570	0	570
5.11 Tractor Trailers	0	0	0	490	245	0	0	735	0	735
5.12 Curbside Collection of Durable Goods	0	0	1,770	0	0	0	0	1,770	0	1,770
5.13 Recycling Upgrades for Multi-Units	0	0	865	1,816	1,816	0	0	4,497	0	4,497
5.14 Diversion Facilities Retrofit	0	0	0	1,000	1,500	1,500	1,500	5,500	7,500	13,000
5.15 Additional Single Stream Processing	0	0	0	0	0	5,000	15,000	20,000	5,000	25,000
5.16 Replacement Composting Facility	0	0	0	0	0	3,750	4,000	7,750	200	7,950
6. Clean and Beautiful City	565	0	0	0	0	0	0	0	0	0
<b>TOTAL GROSS COSTS</b>	<b>8,296</b>	<b>258,002</b>	<b>65,504</b>	<b>68,837</b>	<b>125,280</b>	<b>111,426</b>	<b>88,319</b>	<b>459,366</b>	<b>119,934</b>	<b>579,300</b>
<b>TOTAL NET COSTS</b>	<b>8,189</b>	<b>19,267</b>	<b>15,210</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,210</b>	<b>0</b>	<b>15,210</b>
<b>DEBT TARGET</b>		<b>19,267</b>	<b>32,893</b>	<b>13,288</b>	<b>13,108</b>	<b>32,350</b>	<b>16,471</b>	<b>108,110</b>		
<b>OVER (UNDER) DEBT TARGET</b>		<b>0</b>	<b>(17,683)</b>	<b>(13,288)</b>	<b>(13,108)</b>	<b>(32,350)</b>	<b>(16,471)</b>	<b>(92,900)</b>		

A table showing a full list of the Solid Waste Management Services Capital projects that are included in the 10 Year capital program is shown above. The gross costs for the Solid Waste Management Services capital projects that are in the 10-Year Capital Plan are:

- \$459.366 million for projects in years 2008 to 2012, and
- \$119.934 million for projects in years 2013 to 2017.

This represents a total gross cost over the next 10 years of \$579.300 million for the required Solid Waste Management Services capital projects, or an increase of \$82.197 million over last year's 10 Year Capital Program. During the 2008 to 2012 period, the incremental annual Operating cost of the additional diversion initiatives will increase by \$15.1 million by year 2012.

The 70% Diversion report approved by Council in June 2007 identifies over 20 individual waste diversion initiatives that when combined, will allow the City to achieve its diversion goals. The Recommended 5 Year Capital Plan provides the infrastructure to achieve 70% diversion by 2010.

The Recommended 5-Year Capital Plan provides funding for 5 major projects:

- Diversion Facilities (\$364.168 million), with the majority of costs to be incurred in 2008, 2011 and 2012.
- Perpetual Care of Landfills (\$41.781 million)
- Green Lane Landfill Development (\$29.153 million)
- Transfer Stations Asset Management (\$19.264 million)
- Residential Collection (\$5.000 million)

The Recommended 5-Year Capital Plan continues with major expansions of the diversion activities during this timeframe including:

- Expanding the Green Bin program to include apartments & condominiums
- Expanding the range of recyclable materials in the blue box to include: polystyrene and plastic film.
- Establishing reusable goods drop-off centres to provide residents with one-stop location for reusable goods.
- Providing single home residents with larger recycling containers that will increase their ability to recycle.
- Providing single home residents with new residual waste containers to implement the new volume based rate system and encourage diversion.
- Building additional Source Separated Organics processing capacity that will increase capacity to allow for expansion, and provide long term stability for the Green Bin program.

Solid Waste Management senior staff may face pressures operationally due to tight timelines assumed, and the potential issues presented by site location, environmental assessments, and the various approval processes.

It is recommended that General Manager responsible for Solid Waste Management Services report back to the Public Works and Infrastructure Committee prior to the start of the 2009 Budget process, on addressing the implementation challenges with the Recommended 5-Year Capital Program with respect to timelines, site locations, environmental assessments, and readiness to proceed for facilities related projects.

## Operating Budget Impact – 5-Year Plan

### Incremental Operating Impact Summary

Incremental Operating Budget Impact	2008	2009	2010	2011	2012
<b>2008 Recommended Capital Budget</b>					
Program Costs (net) (\$000s)	1,773.0	(604.0)			
Approved Positions	18.0	(3.0)			
<b>Debt Service Charges (\$000s)</b>	<b>456.3</b>	<b>1,673.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Recommended 2009-2012 Capital Plan</b>					
Program Costs (net) (\$000s)	0.0	2,510.0	4,951.0	3,811.0	2,637.0
Approved Positions	0.0	33.0	10.0	17.0	(1.0)
<b>Debt Service Charges (\$000s)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total</b>					
Program Costs (net) (\$000s)	1,773.0	1,906.0	4,951.0	3,811.0	2,637.0
Approved Positions	18.0	30.0	10.0	17.0	(1.0)
<b>Debt Service Charges (\$000s)</b>	<b>456.3</b>	<b>1,673.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<i>Debt service cost of repayment of principal and interest is calculated according to corporate guidelines, in the following manner: 3.0% Year 1, and 14% for subsequent years.</i>					

### Program Operating Impacts

The Recommended 2008 Capital Budget will result in incremental impacts on the Operating Budget in 2008 and 2009 as follows: \$1.773 million for 2008 and (\$0.604 million) in 2009 mainly due to incremental costs for Recycling Containers and Curbside Collection of Durable Goods.

The Recommended 5-Year Capital Plan results in incremental operating costs of \$1.773 million for 2008, \$1.906 million for 2009, \$4.951 million for 2010, \$3.811 million for 2011 and \$2.637 million for 2012, for the following projects:

2008-2012 Capital Projects/Sub-Projects		2008 (\$000s)	2009 (\$000s)	2010 (\$000s)	2011 (\$000s)	2012 (\$000s)	2008-12 (\$000s)
Diversion Facilities	Mandatory Diversion Enforcement		1,140	1,140			2,280
Diversion Facilities	Recycling Containers	1,404	(1,465)				(61)
Diversion Facilities	Reuse Centres		447	1,040	1,387	693	3,567
Diversion Facilities	SSO Multi-Unit Containers		923	2,771	2,424	162	6,280
Diversion Facilities	Residual Waste Processing Facilities					1,782	1,782
Diversion Facilities	Curbside Collection of Durable Goods	369	861				1,230
<b>TOTAL</b>		<b>1,773</b>	<b>1,906</b>	<b>4,951</b>	<b>3,811</b>	<b>2,637</b>	<b>15,078</b>

### Debt Service Cost

The 2008 Recommended Capital Budget contains \$15.210 million of debt funding with new debt service costs of \$0.456 million in 2008 and incremental costs of \$1.673 million in 2009. As Solid Waste Management Services will be moving to the user rate based funding system in mid 2008, any debt requirement over the \$15.210 million amount will be self-funded through the Solid Waste user rates in 2008 and beyond.

### Total 2008 Recommended Cash Flow & Future Year Commitments (\$000s)

	2006 & Prior Year Carry Forwards	2008 Previously Approved Cash Flow Commitments	2008 New Cash Flow Recommended	2008 Total Cash Flow Recommended	2008 Debt Target	2007 Carry Forwards	Total 2008 Cash Flow (Incl 2007 C/Fwd)	2009	2010	2011	2012	2013-2017	Total Cost
<b>Expenditures</b>													
Previously Approved		45,874		45,874		10,311	56,185	20,079	6,164	1,089			83,517
Change in Scope													
New			1,770	1,770			1,770						1,770
New w/Future Year			17,860	17,860			17,860	1,750					19,610
<b>Total Expenditure</b>		<b>45,874</b>	<b>19,630</b>	<b>65,504</b>		<b>10,311</b>	<b>75,815</b>	<b>21,829</b>	<b>6,164</b>	<b>1,089</b>			<b>104,897</b>
<b>Financing</b>													
Debt		15,210		15,210	32,893	3,131	18,341						18,341
Subsidy (SCPI)													
Prov. Subsidy/Grant													
Development Charges													
User Rate Recoverable Debt		30,664	12,250	42,914			42,914	21,829	6,164	1,089			71,996
Federal Grants													
Reserves/Res Funds			7,380	7,380		7,180	14,560						14,560
<b>Total Financing</b>		<b>45,874</b>	<b>19,630</b>	<b>65,504</b>		<b>10,311</b>	<b>75,815</b>	<b>21,829</b>	<b>6,164</b>	<b>1,089</b>			<b>104,897</b>

#### Comments / Issues:

- The 2008 Recommended Cash Budget is \$75.815 million gross, with future year commitments of \$21.829 million in 2009; \$6.164 million in 2010; and \$1.089 million in 2011. 2007 approved cash flow for 3 previously approved sub-projects with carry forward funding from 2007 into 2008 totals \$10.311 million. This funding is required for Residual Waste Containers (\$7.180 million), Transfer Station Asset Management projects to address State of Good Repair (\$2.581 million), and for Reuse Centres (\$0.550 million).
- The 2008 Recommended Capital Budget, previously approved sub-projects with a 2008 cash flow of \$45.874 million and a future year commitment of \$20.079 million in 2009, \$6.164 million in 2010, and \$1.089 million in 2011. The majority of this recommended funding is provided for Additional SSO Processing Capacity (\$24.280 million), New Recycling Containers (\$21.295 million), New Residual Waste Containers (\$21.295 million), and Green Lane Landfill Development (\$3.307 million). There are 14 new & change in scope sub-projects.
- The recommended new cash flow funding will include Diversion Facilities (\$5.665 million), ongoing maintenance of Perpetual Care of Landfills (\$7.380 million), continue Transfer Station Asset Management (\$2.071 million), enhanced Residential Collection (\$4.500 million), and Development of Green Lane Landfill (\$1.764 million).



## **2008 Recommended Capital Budget**

### **2008 Recommended Capital Budget versus Debt Target**

For the year 2008, the Recommended Capital Budget of \$65.504 million (excluding carry forwards) reflects a debt funding level of \$15.210 million, which is below the 2008 debt affordability guideline for Solid Waste Management Services of \$32.893 million by \$17.683 million as Solid Waste Management is will be converting to a user rate based funding system as of July 1, 2008.

It has been assumed that that there are no Provincial grants or external funding for the 2008 Capital Budget. Perpetual care expenditures are funded from the Perpetual Care of Landfill Reserve. Therefore the 2008 Recommended Capital Budget of \$65.504 million will be funded by reserves/ reserve funds (\$7.380 million), conventional debt (\$15.210 million), and recoverable debt from the Solid Waste user rates (\$42.914 million).

### **Recommended Capital Budget by Category**

The 2008 Recommended Capital Budget has 95% of funding allocated to legislated projects while State of Good Repair projects account for the remaining 5%.

**PART II: ISSUES FOR DISCUSSION****2008 Capital Budget Issues**

There are no 2008 Capital Budget issues for Solid Waste Management Services.

**5-Year Capital Plan Issues****Achieving the 70% Diversion Target – Readiness to Proceed**

The Solid Waste Management Services' future year budget trend is driven primarily by the City's Waste Diversion Initiative. The 2008 to 2012 Recommended Capital Plan has been prepared based on reaching a waste diversion target of 70% by 2010. The majority of costs in the Diversion Facility project are for SSO additional processing capacity which will be completed in 2012, new recycling and residual waste containers and the establishment of reuse centres for diversion of durable goods, which results in gross expenditures that are significantly higher than those in the 2007 to 2011 Capital Plan approved by Council in March 2007.

The 2008-2012 Recommended Capital Plan of \$459.366 million (excluding carry forward funding) reflects a debt funding level of \$15.210 million, which is below the 5 year debt affordability guideline originally set for Solid Waste Management Services of \$108.110 million by \$92.900 million. The \$15.210 million of debt represents 50% of the 2008 debt target (less \$1.236 million transferred to Fire Services within Cluster 'B'), and reflects the fact that Solid Waste Management will be converting to a user rate based funding system starting July 1, 2008. The 5-Year Capital Plan will also be funded by \$315.500 million of User Rate Recoverable Debt, \$88.875 million of public interest partnerships, and \$25.500 million from Reserve Funds.

The 2008-2012 Capital Plan totals \$459.366 million, excluding carry forward of 2007 funding into 2008, and provides funding for 5 major projects:

- Diversion Facilities (\$364.168 million), with the majority of costs to be incurred in 2008, 2011 and 2012.
- Perpetual Care of Landfills (\$41.781 million)
- Green Lane Landfill Development (\$29.153 million)
- Transfer Stations Asset Management (\$19.264 million)
- Residential Collection (\$5.000 million)

The 5-Year Capital Plan continues with major expansions of the Diversion activities during this timeframe including:

- Expanding the Green Bin program to include apartments & condominiums

- Expanding the range of recyclable materials in the blue box to include: polystyrene and plastic film.
- Establishing reusable goods drop-off centres to provide residents with one-stop location for reusable goods.
- Providing single home residents with larger recycling containers that will increase their ability to recycle.
- Providing single home residents with new residual waste containers to implement the new volume based rate system and encourage diversion.
- Building additional Source Separated Organics processing capacity that will increase capacity to allow for expansion, and provide long term stability for the Green Bin program.

The plan to reach 70% Diversion is very aggressive, given all the activities discussed above that are required to be completed. Solid Waste Management Services staff may face pressures operationally due to tight timelines assumed, and the potential issues presented by site location, environmental assessments, and the various approval processes.

Thus, the General Manager of Solid Waste Management Services is requested to report back to the Public Works and Infrastructure Committee prior to the start of the 2009 Budget process, on the strategies to deliver the aggressive 5-Year Capital Plan, addressing the implementation challenges with the with respect to timelines, site locations, environmental assessments, and readiness to proceed for facilities related projects.

## Financing Assumptions

This more aggressive target of 70% Diversion by the year 2010 requires an acceleration of the projects in the current Capital program, and the addition of projects which have been excluded in the past in order to meet debt affordability guidelines. It is recommended that General Manager responsible for Solid Waste Management Services report back to the Public Works and Infrastructure Committee prior to the start of the 2009 Budget process, on addressing the implementation challenges with the 10 Year Capital Program with respect to timelines, site locations, Environmental Assessments, and readiness to proceed for facilities related projects.

In addition to help reduce debenturing requirements, 50% of the costs of three diversion projects with a 2008 to 2013 cost of \$91.475 million, and a total cost of \$182.95 million, are proposed to be funded through public interest partnerships. The portion of the diversion projects to be funded by the partnerships, and potential timing, is noted below:

Projects Funded by Private Sector	2008	2009	2010	2011	2012	2013	TOTAL 2008-17
<b><u>Waste Diversion Facilities:</u></b>							
1. Additional Single Stream Processing Capacity	0	0	0	2,500	7,500	2,500	12,500
2. Replacement Composting Facility	0	0	0	1,875	2,000	100	3,975
3. Residual Waste Processing Facilities	0	0	30,000	30,000	15,000	0	75,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>30,000</b>	<b>34,375</b>	<b>24,500</b>	<b>2,600</b>	<b>91,475</b>

The first capital project is required in order to provide additional in-house single stream recyclable material processing capacity, to help achieve 70% diversion. The second project will bring in-house the current Leaf and Yard Waste Composting operations, and provide some additional diversion capacity. The third project “Residual Waste Processing Facilities” is required to achieve a diversion rate of 70%.

Discussions this far, indicate that all or part of the capital costs for the above 3 projects could be funded by the

- City of Toronto
- Private Financing, or
- Partnerships between the Public and Private Sector, or other organizations.

The 10-year Capital Program has assumed that 50% of the financing for these 3 facilities would be provided by the private sector.

In any event, the eventual operation of these facilities will incur significant operating costs which includes the repayment of the costs of constructing these new waste diversion facilities.

The 70% Diversion report approved by Council in June 2007 identifies over 20 individual waste diversion initiatives that when combined, will allow the City to achieve its diversion goals. The Recommended 5 Year Capital Plan provides the infrastructure to achieve 70% diversion by 2010 approved by Council in June, 2007.

The Solid Waste Management Services “70% Diversion” report identified the financial impact of increasing the Diversion Rate to 70%. For most diversion processing alternatives, costs rise as more waste is diverted from landfill.

It is recommended that the General Manager of Solid Waste Management Services report to Budget Committee, as part of the 2008 Operating Budget process, on the specific rate structure and timing for the introduction of the user rate based system in 2008.

### **Issues Referred to the Budget Process**

There are no issues referred to the budget process for Solid Waste Management Services.

## **Appendix 1**

### **2008 Recommended Capital Budget; 2009 to 2012 Plan and 2013 to 2017 Estimates**

## **Appendix 2**

### **2008 Recommended Cash Flow and Future Year Commitments**

**Appendix 3**  
**2008 Recommended Capital Projects**  
**with Financing Details**

## Appendix 4

### Reserve / Reserve Fund Review (\$000s)

Reserve / Reserve Fund Name	Project / SubProject Name and Number	Projected Balance as of December 31, 2007	Proposed Withdrawals				
			2008	2009	2010	2011	2012
XR1013 Perpetual Care of Landfill Reserve Fund	Beginning Balance	\$31,180	\$31,180	\$23,800	\$16,055	\$7,786	(\$1,090)
	Perpetual Care of Landfills		(\$7,380)	(\$7,745)	(\$8,269)	(\$8,876)	(\$9,511)
	Total Proposed Withdrawals		(\$7,380)	(\$7,745)	(\$8,269)	(\$8,876)	(\$9,511)
<b>TOTAL RESERVE FUND BALANCE AT YEAR-END</b>		<b>\$31,180</b>	<b>\$23,800</b>	<b>\$16,055</b>	<b>\$7,786</b>	<b>(\$1,090)</b>	<b>(\$10,601)</b>
XR1404 Waste Management Reserve Fund	Beginning Balance	\$17,385	\$17,385	\$10,205	\$10,205	\$10,205	\$10,205
	Residual Waste Containers		(\$7,180)				
	Total Proposed Withdrawals		(\$7,180)	\$0	\$0	\$0	\$0
<b>TOTAL RESERVE FUND BALANCE AT YEAR-END</b>		<b>\$17,385</b>	<b>\$10,205</b>	<b>\$10,205</b>	<b>\$10,205</b>	<b>\$10,205</b>	<b>\$10,205</b>