

Analyst Briefing Notes

Budget Committee

(February 10, 2009)

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PART I: 2009 OPERATING BUDGET**Executive Summary**

- Emergency Medical Services (EMS) is committed to providing excellent emergency and preventative care services in the City of Toronto through activities such as pre-hospital emergency care, community medicine and inter-facility patient transport services. EMS operates from 43 ambulance stations located across the city, with a fleet of 153 ambulances, 22 one-person emergency response vehicles, 16 mountain bicycles and a staff of 851 paramedics and 108 emergency medical dispatchers that provide 24-hour emergency medical response.
- EMS, as the sole provider of emergency medical response for the City of Toronto is faced with a number of challenges in the delivery of 24-hour emergency services, 7 days a week. These challenges include maintaining effective deployment of available resources to meet the 1996 established response time standard of 84% within 9 minutes, continuing to address overtime pressures and loss of productive hours resulting from the hospital offload delays, and managing, with current resources, an increase in both call service time and emergency call volumes due primarily to population growth as well as an aging population with current resources.
- To address its commitment to provide superior ambulance-based health services, EMS's key service objectives over the next 3-year period are as follows:
 - To improve EMS' response time to life threatening calls from the current 66.1% to 70% in 2009 within 8.59 minutes.
 - To reduce in hospital time from 60 minutes to 45 minutes which will result in an increase in the availability of vehicles to respond to medical emergencies and at the same time reduce the pressure on overtime.
 - To assign the correct response determinant in the call screening process and the appropriate EMS resource to each emergency call with 95% accuracy.
- The 2009 Recommended Operating Budget of \$159.546 million is comprised of base funding of \$159.219 million for EMS to continue to maintain its current level of service despite the many service challenges that it currently faces and new funding for two new service priorities in the amount of \$0.327 million to further enhance its strategic priorities.

To reduce hospital offload delays and improve EMS' response time to life threatening calls, the 2009 base funding includes the following service priorities:

- The EMS Nursing Initiative of \$1.945 million (100% Provincially funded program), implemented in 2008 and continuing into 2009, provides funding for extra nursing shifts dedicated to speed up offloading of Toronto EMS patients in emergency rooms at hospitals with the highest offload delays. To date, this initiative has reduced waiting time for paramedics and resulted in an increase in ambulance unit availability by 3 ambulance vehicles 24 hours a day. This project is anticipated to improve EMS response time to life threatening calls and also reduce overtime by approximately \$0.900 million in 2009.

- The Duty Officer Program, a two-year pilot program implemented in 2006, provided funding for 7 Duty Officers to assist in the efficient and effective deployment of paramedic staff. The project was highly successful that EMS received ongoing base funding from the Province at 100% of \$0.795 million. This project contributed to a more effective use of resources which resulted in improved response time and consequently reduced the end of shift overtime.
- The Paramedic Pilot Project with TTC is a recommended new/enhanced service priority funding of \$0.200 million (100% TTC funded) for two paramedics to be stationed at the TTC control room (two shifts) to provide additional coverage in the subway. It is anticipated that TTC paramedics will respond to subway emergency calls in about half the time a regular ambulance would usually take, i.e. from 8 to 12 minutes to approximately 3 to 6 minutes.
- For 2008, EMS is projecting an unfavourable year-end expenditure variance of \$3.204 million (gross) and \$2.408 million (net) representing 2.1% and 3.9% over the 2008 Approved Operating Budget respectively.
 - The unfavourable net variance is largely attributed to higher than budgeted overtime costs of \$3.7 million due to the ongoing hospital offload situation and combined over expenditures in other line items most notably in medical and equipment supplies of \$0.822 million to ensure that supplies and medical equipment met Provincial standards in preparation for the tri-annual Service Audit by the Ministry of Health and Long Term Care (MOHLTC). These over expenditures were partially offset by additional savings in salaries of \$1.3 million and a one-time Provincial grant of \$0.700 million for the Central Ambulance Communication Centre (CACC).

Table 1: 2009 Recommended Budget

(In \$000s)	2008		2009 Recomm'd Operating Budget			Change - 2009 Recommended Operating Budget v. 2008 Appvd. Budget		FY Incremental Outlook	
	2008Appvd. Budget	2008 Projected Actual	2009 Base	2009 New/ Enhanced	2009 Operating Budget	\$	%	2010	2011
	\$	\$	\$	\$	\$			\$	\$
GROSS EXP.	153,893.9	159,147.5	159,219.2	327.2	159,546.4	5,652.5	3.7	1,438.8	1,042.9
REVENUE	91,836.9	94,376.9	95,506.5	327.2	95,833.7	3,996.8	4.4	887.2	653.3
NET EXP.	62,057.0	64,770.6	63,712.7	0.0	63,712.7	1,655.7	2.7	551.6	389.6
Approved Positions	1,215.5	1,212.5	1,211.0	4.0	1,215.0	(0.5)	(0.0)	0.0	0.0
TARGET			60,815.9		60,815.9				
\$ Over / (Under) Program Target			2,896.8		2,896.8				
% Over / (Under) Program Target			4.8%		4.8%				

- The 2009 Recommended Operating Budget of \$159.546 million gross and \$63.713 million net is over the 2009 target by \$2.897 million net or 4.8%.
- The 2009 Recommended Operating Budget of \$159.546 million gross is comprised of base funding of \$159.219 million and \$0.327 million for two New / Enhanced Service Priorities which includes an increase of 4 new positions: 2 for the expansion of the Public Access

Defibrillator (PAD) Program and 2 for the new Paramedic Pilot Project with TTC.

- The net increase of \$0.552 million projected in 2010 and \$0.390 million in 2011 respectively, maintains the 2009 recommended levels of service and includes funding for merit and step increases, the annualized impact of two positions under the PAD Program, and the operating impacts of the 2009 Approved Capital Budget, mainly for service and maintenance costs for three capital projects anticipated to be completed in 2010 and 2011. These capital projects are: the purchase and distribution of 50-100 AEDs to City facilities; the purchase of one new ambulance vehicle; and, the installation of a new electronic card access security system in all EMS stations.
- The 2009 Recommended Base Budget funds the Program's key cost drivers including merit / step increases, inflationary increases on non-labour costs, annualized impact of 2008 COLA, wage harmonization and the EMS Nurses Initiative totalling approximately \$6.699 million. These base pressures are partially offset by the reversal of non-recurring expenditures such as the additional working day in 2008, funding for Family Day in 2008 that will not be provided in 2009, program efficiencies resulting from the Fire/EMS Program Review completed in 2008, and the deletion of a capital funded position that is no longer required in 2009 totalling \$1.373 million.
- The following recommended new/enhanced service priority actions totalling \$0.327 million gross and \$0 net support the Mayor's strategic priorities of "Making a Safe City Safer" and "Better Transit Today".
 - The Cardiac Safe City Program Expansion includes the Public Access Defibrillators (PAD) Program that provides for the distribution of approximately 50-100 automatic external defibrillators (AEDs) to City workplaces and facilities. EMS coordinates the placement of AEDs in strategic locations throughout the City where there is a chance someone could suffer a cardiac arrest.
 - As the PAD program continues to grow with increased public and private partnership, new service priority funding of \$0.127 million is recommended for two permanent positions to address and keep up with the increased requests for Automatic External Defibrillator (AED) training and systems support as well as increased demand for First Aid / Cardiopulmonary resuscitation (CPR) training. Training and system support revenues generated from both internal and external clients will fully fund these positions.
 - The Paramedic Pilot Project with TTC with new service priority funding of \$0.200 million (fully funded by TTC) is recommended for two paramedics (two shifts), to be stationed at the Yonge/Bloor station control room with a TTC supervisor, who can respond immediately in the event of an emergency. It is anticipated that with a paramedic on site, the response time to medical emergencies in the subway will be cut by approximately 50%, from 8 to 12 minutes to 3 to 6 minutes. This new initiative will also reduce the length of subway delays due to medical emergencies.

The following services also support the Mayor's strategic priority of "Making A Safe City Safer":

- Under a new Model of Care, Advanced Life Support (ALS) Units will only be dispatched to "ALS-appropriate" calls based on the Medical Priority Dispatch System (MDPS) software. The main objective of this new model of care is to make the best use of available resources by establishing the right balance of paramedic skill levels to EMS' service demands. This

change improves care as medical skills will be more closely matched to the patient's needs.

- Under the new Cardiac Care Program, Advanced Care Paramedics will begin to use cardiac monitors to diagnose and begin treatment on "STEMI" (ST Elevation Myocardial infarction) heart attacks. Rapid diagnosis and treatment can reduce death rates associated with STEMI conditions by two thirds.
- A key issue for Toronto EMS continues to be the hospital offload delay, as over the past several years, EMS paramedics are required to continue caring for ambulance patients after their initial arrival to the hospital. Paramedics regularly stay past their 12-hour shift which has resulted in over expenditures in overtime. The over expenditures have been partially offset by increased gapping and other non-salary cost containment measures; however, this has further contributed to the degradation of EMS' response time from 84% in 8:59 minutes in 1996 to 66.1% in 2008.
 - Discussions between EMS and Provincial staff to resolve the hospital offload delays have resulted in additional 100% funding of \$1.625 million (\$0.949 million in 2008 and an additional \$0.996 million in 2009) for a new initiative, the EMS Nurses Pilot Project. The Province has also committed to permanently fund 7 Duty Officer positions for \$0.795 million under the Duty Officers Program (a two-year pilot program from 2006-2007 that was a success) that is now included in CACC's base funding which is 100% funded by the Province. These two initiatives are expected to reduce overtime costs associated with hospital offload delays and contribute to an improvement to EMS' response time.
- Toronto EMS is responsible for providing 24-hour emergency and non-emergency pre-hospital medical care and transportation to individuals experiencing injury or illness. The 2009 Recommended Operating Budget will fund:
 - 24-hour emergency medical response for the City of Toronto from 43 ambulance stations located across the City with a fleet of 153 ambulances and staff of 851 paramedics and 108 emergency medical dispatchers.
 - Processing of a projected increase of 5% or 27,300 calls over 545, 000 calls from the public in 2008 and another 300,000 calls for non-emergency/operational requests for a total of 872,300 calls through its Central Ambulance Communication Center (CACC).
 - Distribution and installation of an estimated 50 to 100 Automated External Defibrillators (AED's) to workplaces and facilities throughout the City of Toronto and provide First-Aid/CPR and Public Access Defibrillator training to approximately 70,000 City staff and external clients. EMS currently maintains 272 city owned AED's and provides oversight to over 350 private sector AED's.
 - Provision of an estimated 1,200 hours of continuing medical education courses to Toronto paramedics; and provide ITLS (International Trauma Life Support) training to approximately 500 students.
 - Provision of approximately 2,400 emergency transports under the Critical Care Transport Unit (CCTU) which is composed of specially trained advance care paramedics that transport critically ill patients between health care facilities.

Recommendations

The City Manager and Acting Chief Financial Officer recommend that:

1. Council approve the 2009 Recommended Operating Budget for Emergency Medical Services of \$159.546 million gross and \$63.713 million net, comprised of the following services, be approved:

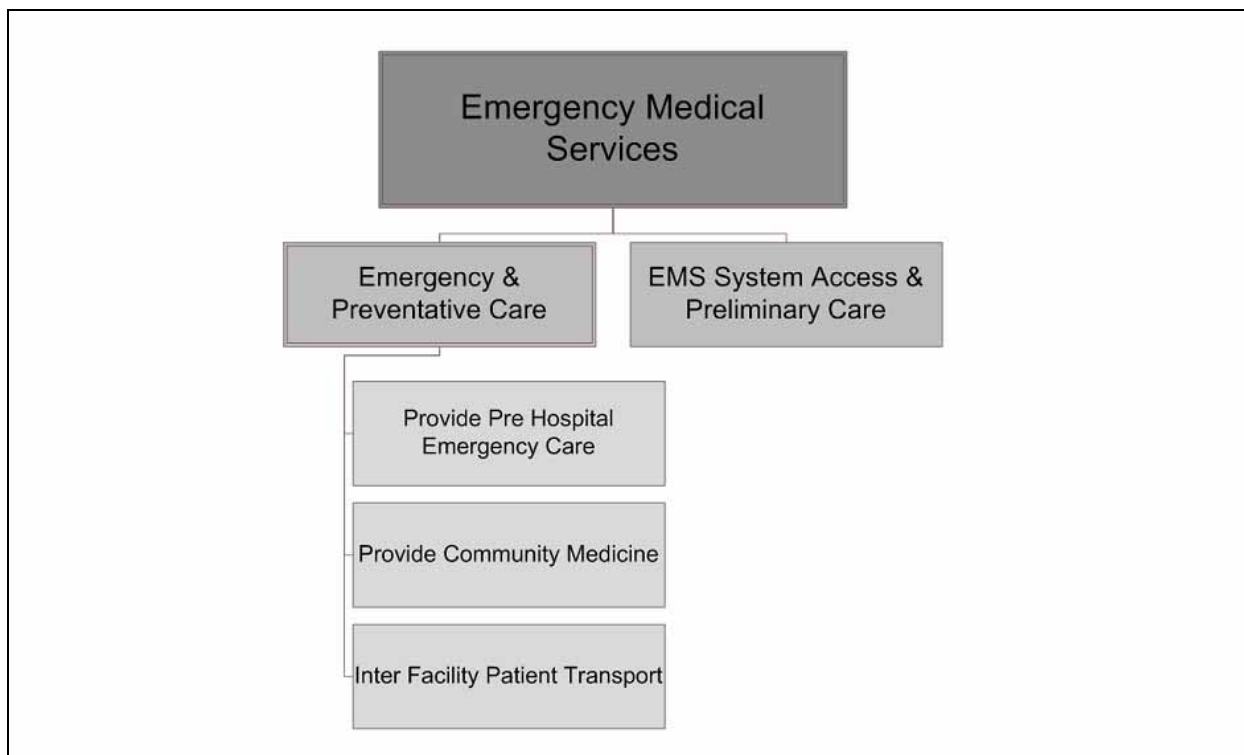
<u>Service:</u>	<u>Gross (\$000s)</u>	<u>Net (\$000s)</u>
Central Ambulance Communication Centre (CACC)	15,703.4	93.4
Corporate Charges	5,914.5	2,957.3
EMS Operations Support Services	22,181.4	8,264.8
EMS Operations	107,427.8	49,110.5
Program Development & Service Quality	8,319.3	3,286.7
Total Program Budget	159,546.4	63,712.7

PART II: 3-YEAR SERVICE OVERVIEW AND PLAN

Emergency Medical Services (EMS) is the sole provider of emergency medical response for the City of Toronto, a service district encompassing 650 square kilometres with a daytime population of 3.5 million. EMS operates from 43 ambulance stations located across the city, with a fleet of 153 ambulances, 22 one-person emergency response vehicles, 16 mountain bicycles and a staff of 851 paramedics and 108 emergency medical dispatchers that provides 24-hour emergency medical response. Toronto EMS the largest municipal paramedic ambulance service in Canada.

EMS provides the following range of services:

- Pre-hospital care which includes the support, instruction, care and treatment provided from the moment the request for emergency care is initiated until the patient's care is transferred to the receiving health care provider.
- Out-of- hospital care which includes all other aspects of care and treatment provided by emergency services personnel including patient transfers, response to and the treatment of citizens involved in mass casualty incidents and community emergencies, and the provision of medical support to other emergency services.
- Ambulance communication services that are seamless, integrated, accountable, accessible and responsive to the emergency requirements of the City of Toronto residents.

Program Map

Service Challenges and Opportunities

EMS is committed in providing the City of Toronto with excellence in pre-hospital and out of hospital care is faced with the following of key service challenges to improve response time and respond to increased service demands.

Legislative Requirements/Changes

- The Ministry of Health requires all EMS service providers in the Province of Ontario to achieve, on a yearly basis, their ambulance response time performance of 1996. In 1996, Toronto EMS arrived at life threatening emergency calls 84% within 8:59 minutes. Provincial standards are increasingly more difficult to meet due to increased call volumes, in-hospital wait times and traffic congestion while staffing levels have remained relatively unchanged. The response time for 2008 is projected to be 66.1%, 3% lower than the 69.1 % achieved in 2007.
- The Ministry of Health and Long-Term Care has reduced funding for the Withdrawal Management (detox) Program in Toronto that will impact the healthcare system and as a result, increase the number of patients with addiction issues.

Service Demands

- Hospital off-load delays continue to be EMS' number one pressure where paramedics continue to care for ambulance patients for extended periods after their initial arrival to the hospital. Longer call service time (primarily impacted by hospital offload delays) has been steadily increasing over the past several years. Average in hospital times in 2000 was 35 minutes versus an average of 52 minutes as of December 2008.
- Assigned emergency call volumes have increased primarily due to population growth as well as an aging population, from an average of 19,700 calls in 2002 to approximately 23,900 calls by 2008, an increase of 21%.
- EMS, with limited resources, faces increased demand for AED training and system support as well as First Aid/CPR training for both internal and external clients due the rapid expansion of the Public Access Defibrillators (PAD).

Human Resources

Staff issues relating to workplace injuries and maintaining staff due to staff turnover have been a continuing challenge to the provision of EMS services, exacerbated by increased service demands. As mentioned earlier, call demands have increased by over 21% since 2002 while the number of paramedics has increased by only 1% over the same period.

Service Objectives

EMS' mission is to provide superior ambulance-based health service, responding in particular to patients with health emergencies and to special needs of vulnerable communities through mobile health care. The following service objectives directly address EMS' strategic direction to provide patient-focused emergency medical services; improve its operational and system performance and efficiencies; and, be a leader in pre-hospital emergency medical care.

- **Emergency and Preventive Care Services:**

Hospital off-load delay has resulted in a significant pressure on EMS' overtime budget and contributes to the loss of staff productive hours. This has inevitably depleted available ambulance resources that have impacted EMS' response to emergency calls in the City.

- 1) To reduce the in-hospital time from 60 minutes to 45 minutes by 2009.
- 2) To improve the response time to life threatening calls from 66.1% within 8:59 minutes in 2008 to 70% in 2009.

Note: The Ministry of Health and Long Term Care (MOHLTC) requires Municipal EMS departments to maintain their 1996 percentage of arriving at life threatening calls within 8:59 minutes, and for Toronto, it was 84%. OMBI (Ontario Municipal Benchmarking Initiative), on the other hand, uses statistics that calculate the "90th percentile response time for life threatening calls" which means that 90 percent of all emergency calls have a response time within an average time period. For Toronto, the average time was 11.58 minutes.

- **EMS System Access and Preliminary Care Services:**

EMS's Central Ambulance Communications Centre (CACC) is the initial access point to City of Toronto's emergency health services system for many victims of illness or injury. CACC dispatchers prioritize the urgency of requests, determine the appropriate destination hospital to meet patient needs and provide callers with pre-arrival first aid instructions.

- 3) To optimize the use of EMS resources providing city wide coverage to respond to Emergency 911 calls, within the designated response time standards, 90% of the time.
- 4) Through the application of the current receiving process, assign the correct response determinant to each emergency call with 95 % accuracy.

Priority Actions

The 2009 Recommended Operating Budget provides base funding of \$159.219 million to maintain EMS' current level of service and new funding of \$0.327 million for two new service priorities that advance the Program's strategic direction as well as advance the Mayor's Mandate and Council's policy agenda.

The following priority actions assist with improving hospital offload delays which is the principal factor in the degradation of EMS response time.

- The Duty Officers Pilot Project, implemented in 2006 for a period of two years, funded 7 Duty Officers to assist in the efficient deployment of paramedic staff. This project has been successful such that MOHLTC provided ongoing base funding of \$0.795 million (Provincially funded at 100%) for this program. This project contributed to a more effective use of resources which resulted in improved response time and consequently reduced end of shift overtime. The overall impact on the response time would be difficult to quantify as there are other factors that impact response times.

- The EMS Nursing Initiative of \$1.945 million funds extra nursing shifts in hospital emergency rooms to speed up offloading of Toronto EMS patients. Implemented in mid-2008, this initiative had contributed to improving the average wait times from 70 minutes in April 2008 to 51.9 minutes by December 2008. This has resulted in an increase in ambulance unit availability to an equivalent of 3 ambulances 24 hours a day. This initiative is also anticipated to reduce end of shift overtime by approximately \$0.900 million in 2009.
- The Central Ambulance Communications Center (CACC)'s new redesigned communication systems is anticipated to be completed in early 2009. The new system and decision support software will enable dispatchers to more accurately anticipate, monitor, deploy, coordinate and direct the movement of all EMS ambulances and emergency response vehicles throughout the City to ensure an integrated healthcare system. This new system focuses on how EMS receives and processes emergency calls and is anticipated to reduce call handling time, improve response time and achieve EMS' objective of assigning the right resource to respond to each emergency call in the appropriate time frame.

The 2009 Recommended Operating Budget also provides a broad range of priority actions for services and activities that advance the Mayor's Mandate and Council's policy agenda. These include:

Making a Safe City Safer:

- The Public Access Defibrillation (PAD) Program combined with First-Aid/CPR training saves lives because treatment can begin sooner. Toronto EMS, with support from the private sector, continues to co-ordinate and expand this community safety program. Toronto EMS maintains over 270 City owned Automatic External Defibrillators (AED's); provides oversight for over 350 private sector AED's; provides First-Aid/CPR and PAD training to over 70,000 students; and provides International Trauma Life Support training to approximately 500 students.
- A new cardiac monitor enables Advanced Care Paramedics to diagnose and begin treatment on "STEMI" (ST Elevation Myocardial Infarction) heart attacks. Rapid diagnosis and treatment can reduce death rates associated by this type of heart condition by two thirds.
- Under the new Model of Care, Advanced Life Support (ALS) units will only be dispatched to "ALS-appropriate" calls based on the Medical Priority Dispatch System (MPDS) software as opposed to the first available unit responding. This change (commenced in 2008) will result in improved care as medical skills will be more closely matched to patient need.

Better Transit Today

- The Paramedics Pilot Project with TTC provides new funding of \$0.200 million (fully funded by TTC) for two paramedics (two shifts), to be stationed at the Yonge/Bloor station control room with a TTC supervisor, who can respond immediately in the event of an emergency. This project not only improves the response time for medical emergencies in the subway by approximately 50% but also reduces the length of subway delays due to medical emergencies.

PART III: 2008 BUDGET VARIANCE ANALYSIS

Table 2: 2008 Budget Variance Review

(In \$000s)	2007 Actuals	2008 Approved Budget	2008 Projected Actuals*	2008 Appvd. Budget vs Projected Actuals Variance	
	\$	\$	\$	\$	%
GROSS EXP.	153,080.7	153,893.9	157,098.1	3,204.2	2.1%
REVENUES	88,559.0	91,836.9	92,633.4	796.5	0.9%
NET EXP.	64,521.7	62,057.0	64,464.7	2,407.7	3.9%
Approved Positions	1,208.0	1,215.5	1,212.5	0.0	0.0%

*As of September 30, 2008

2008 Experience

EMS' projected year-end unfavourable variance is anticipated to be \$2.408 million or 3.9% over the 2008 Approved Operating Budget.

EMS was overspent by \$1.787 million or 4.4% of planned expenditures up to the period September 30, 2008. These variances were largely attributed to higher than planned overtime costs of \$2.085 million due to the ongoing hospital offload delays and an over expenditure in medical and equipment supplies of \$0.822 million to ensure that supplies and medical equipment meet Provincial standards in preparation for the tri-annual Service Audit by the Ministry of Health. These over expenditures are partially offset by savings in regular salaries and benefits of \$1.1 million. As an over-expenditure in overtime is anticipated to continue to the end of 2008, EMS will have a net unfavourable variance of \$2.408 million or 3.9% at year-end.

The projected year-end increase in revenues of \$0.797 million is primarily attributed to additional Provincial one-time grant of \$0.700 million for the Central Ambulance Communication Centre (CACC) that was recently announced by MOHLTC and additional revenues of \$0.097 million generated by the PAD Program.

Impact of 2008 Operating Variance on the 2009 Recommended Budget

The over expenditure in overtime due to the hospital offload impact on overtime is expected to continue through to 2009 but is estimated to decline as a result of the new EMS Nurses Initiative. It is anticipated that the EMS Nurses Initiative will reduce overtime costs to \$5.8 million in 2009, a \$0.900 million reduction from the 2008 projected overtime costs of \$6.7 million. As has been done in the past, EMS plans to offset this over expenditure through additional gapping and other non-salary reductions where possible. Discussions are ongoing between EMS and the Provincial Ministry of Health and Long Term Care on resolving hospital offloading issues.

PART IV: 2009 RECOMMENDED BASE BUDGET

Table 3: 2009 Recommended Base Budget

(In \$000s)	2008 Appvd. Budget	2009 Recommended Base	Change 2009 Recommended Base v. 2008 Appvd. Budget		FY Incremental Outlook	
			\$	%	2010	2011
	\$	\$			\$	\$
GROSS EXP.	153,893.9	159,219.2	5,325.3	3.5	1,359.3	1,042.9
REVENUE	91,836.9	95,506.5	3,669.6	4.0	807.7	653.3
NET EXP.	62,057.0	63,712.7	1,655.7	2.7	551.6	389.6
Approved Positions	1,215.5	1,211.0	(4.5)	(0.4)	0.0	0.0
NET TARGET		60,815.9				
\$ Over / (Under) Program Target		2,896.8				
% Over / (Under) Program Target		4.8%				

2009 Recommended Base Budget

- The 2009 Recommended Operating Budget for EMS is \$159.219 million gross and \$63.713 million net is \$2.897 million net or 4.8% over the 2009 target of \$60.816 million which is 2% less than the 2008 Approved Operating Budget.
- The 2009 Recommended Base budget of \$63.713 million net is \$1.656 million or 2.7% over the 2008 Approved Operating Budget. The increase in net expenditures is required to maintain 2008 service levels that include merit & step increases, the annualized impact of 2008 COLA and the EMS Nursing Initiative that was implemented in mid-2008.
- These pressures are offset by an increase in revenues of \$4.0 million to reflect the increase in Provincial funding for the 100% funded EMS Nurses Initiative and base pressure increases for the Central Ambulance Communication Centre (CACC) Program (Provincially funded at 100%) and the Land Ambulance Program (cost shared by the Province at 50:50).
- The 2009 Recommended Base Budget includes a net staff reduction of 4.5 positions due to the following:
 - The EMS / Fire Program Review completed in mid-2008 recommended program efficiencies that resulted in a reduction of 3.5 positions and savings of \$0.118 million.
 - The completion of the CACC redesign capital project in 2008 resulted in one project manager position (funded from capital) no longer required in 2009.

2009 Key Cost Drivers and Reduction Strategies

Key cost drivers for 2009 include:

- Salary costs includes \$0.938 million for merit and step increases and the annualized impact of the 2008 COLA and wage harmonization of \$4.217 million;
- Inflationary increases for non-labour costs such as medical and respiratory supplies, contracted services (maintenance and service costs of EMS stations, vehicles and medical equipment) totaling \$0.267 million;
- Operating impact of \$0.145 million for the distribution of approximately 70 AEDs in 2008 to City facilities under the Public Access Defibrillation (PAD) capital project ; and,
- Annualized impact of the 100% Provincially funded EMS Nurses Initiative of \$0.996 million.
- These base pressures are offset by the reversal of non-recurring expenditures as follows:
 - Reversal of one day not required in 2009 (2008 was a LEAP year) of \$0.450 million;
 - Annualized impact of savings resulting from the EMS/Fire Program review that was completed in 2008 of \$0.118 million; and,
 - A reduction of project management costs of \$0.200 million that is no longer required in 2009 as the CACC capital project was completed in 2008.

2010 and 2011 Outlook: Net Incremental Impact

The net increase of \$0.552 million in 2010 and \$0.390 million in 2011 are primarily attributed to merit and step increases to maintain the 2009 level of service. Included in these projections are the operating impact of three capital projects (i.e. Public Access Defibrillators (PAD) Program, Security System installation and the purchase of one ambulance) of \$0.196 million and \$0.024 million net for 2010 and 2011, respectively, for ongoing maintenance and services costs.

PART V: RECOMMENDED NEW SERVICE PRIORITY ACTIONS

Table 4
2009 New / Enhanced Service Priority Actions: Summary
(In \$000s)

Description	2009 Recommended		Rec. New Positions	Net Incremental	
	Gross Exp.	Net Exp.		2010	2011
	\$	\$		\$	\$
Enhanced Services:					
(a) Enhanced Services - Council Approved					
 (b) Enhanced Services - Program Initiated Public Access Defibrillator Program Expansion	127.2	0.0	2.0	0.0	-
Sub-Total Enhanced Services	127.2	0.0	2.0	0.0	0.0
New Services:					
(a) New Services - Council Approved					
 (b) New Services - Program Initiated TTC Medics Pilot Project	200.0	0.0	2.0	0.0	0.0
Sub-Total New Services	200.0	0.0	2.0	0.0	0.0
Total New/Enhanced Services	327.2	0.0	4.0	0.0	0.0

2009 Recommended New / Enhanced Service Priority Actions**Enhanced Service Priority Action – Program Initiated**

The 2009 Recommended Operating Budget includes funding for two new/enhanced service priority actions that directly address the Program's strategic direction to improve EMS' response time and is aligned with the Mayor's Mandate of "Making a Safe City Safer".

Public Access Defibrillator (PAD) Program Expansion

The PAD Program, combined with First Aid/CPR training save lives as treatment can be provided immediately and on site. The PAD program provides funding for the distribution of 50-100 Automatic External Defibrillators (AEDs) per year to workplaces and facilities throughout the City of Toronto. The AEDs facilitate the rapid treatment of those who suffer a cardiac arrest, providing treatment on site prior to the arrival of EMS' paramedics. This requires training of City staff as well as members of the public as "First Responders".

This program has expanded significantly as a result of EMS' partnership with private sector organizations such as the Mikey Network and the Heart and Stroke Foundation. Funding has been recommended to add two permanent positions for a total cost of \$0.127 million gross and \$0.0 net in 2009 and an annualized impact of \$0.076 million gross and \$0 net in 2010 (to be funded from PAD training revenues) to address and keep up with the rapidly expanding requests for AED training and EMS First Aid /CPR training under the Safe City Program.

Toronto EMS currently maintains over 270 City owned Automatic External Defibrillators (AED's); provides oversight for over 350 private sector AED's; provides First-Aid/CPR and PAD training to over 70,000 students; and provides International Trauma Life Support training to approximately 500 students.

As of September 2008, EMS projected PAD revenues to exceed the 2008 Budget by \$0.097 million. It is expected that the PAD program will continue to grow with increased public /private partnership.

New Service Priority Action – Program Initiated*Paramedic Pilot Project with Toronto Transit Commission (TTC):*

The Paramedic Pilot Project is a joint project with TTC that will ensure medical emergencies are responded to immediately, reducing the amount of time it takes for a first responder to arrive on the scene. This project also reduces the amount of time that the train is delayed due to a medical emergency.

Funding is recommended for two additional permanent paramedic positions totaling \$0.200 million gross and \$0.0 net (to be fully funded by TTC) to provide emergency response coverage, stationed at the Yonge/Bloor subway station. A paramedic will be stationed in a control room and when an emergency call is received in the subway system, medical assistance will be immediate. With a paramedic on site, the response time to medical emergencies in the subway is projected to improve by 50%, from 8 to 12 minutes to 3 to 6 minutes.

PART VI: ISSUES FOR DISCUSSION**2009 Budget Issues****2009 Recommended Operating Budget vs. Guideline**

The 2009 Recommended Operating Budget of \$63.713 million net is over the 2009 target by \$2.897 million or 4.8%. The increase is primarily driven by merit / step increases, annualized impact of the 2008 COLA, as well as inflationary increases in non-labour costs. EMS is a 24/7 operation with salary and benefit costs comprising 82% of the operating budget. Further reductions to achieve the 2009 target will result in significant service impacts.

EMS' 2009 Recommended Operating Budget incorporates full Provincial cost sharing for Land Ambulance Services at 50% and CACC (Central Ambulance Communication Centre) at 100%. Overall, the Program relies on a City of Toronto net contribution of approximately 40% of \$159.546 million.

Increased User Fees

Emergency Medical Services has historically increased its fees for Cardio Pulmonary Resuscitation, Targeted AED Site Responder and First Aid Courses by the rate of inflation. Included in the 2009 Recommended Operating Budget is an average of 2% which will result in additional revenues of \$0.016 million.

Other Issues**Hospital Offload Delays:**

A hospital offload delay occurs when paramedics bring a patient to the hospital or emergency room and cannot transfer care to the emergency room within a reasonable amount of time. As set out in the standards and guidelines under the Ambulance Act, paramedics are obligated to remain with ambulance patients until the responsibility for the patient has been transferred to hospital staff.

Over the past several years, Toronto EMS paramedics continue to care for ambulance patients for extended periods after their initial arrival at the hospital. It is routine for paramedics to stay on site as much as two hours past the end of their 12-hour shift which not only puts pressure on EMS' over time budget but also contributes to the loss of staff productive hours as well.

Offload delays have grown consistently in volume and duration over the past six years and this trend, along with call volume increases, has negatively affected EMS performance and response times. The hospital offload delay has not only been a principal factor in the degradation of EMS' response time from nearly 84% within 8:59 minutes in 1996 to only 66.1% within 8:59 minutes in 2008 but has also impacted EMS's ability to maintain sufficient ambulances on the street to meet emergency demand.

See table below for overtime costs since 2003

	2003	2004	2005	2006	2007	2008	2009
Budget	1,481.1	1,706.3	2,424.3	2,595.5	3,060.4	2,578.2	2,655.8
Actual	4,335.0	6,242.5	6,820.0	6,502.2	7,277.7	6,700.0	TBD
Variance (over)	(2,853.9)	(4,536.2)	(4,395.7)	(3,906.7)	(4,217.3)	(4,121.8)	

2008 actual expenditures estimated as at September 2008.

EMS has made every effort to offset the over expenditure in overtime through increased gapping and other non-salary cost containment measures.

MOHLTC initiated the following Provincially funded 100% programs to relieve the overtime pressure as a result of hospital offloading delays:

- The Duty Officers Pilot Project, implemented in 2006 for a period of two years, funded 7 Duty Officers to assist in the efficient deployment of paramedic staff. This project partially addressed response time and end of shift overtime issues. As a result of the success of the program, MOHLTC has increased base funding for this program (fully funded at 100%) beginning in 2008.
- The EMS Nurses Initiative, implemented in August 2008, provided funds to purchase nursing hours at hospitals to assist EMS paramedics offload patients at seven hospitals with the highest offload delays in the City of Toronto. This program is now in place at all but one of the adult emergency departments in Toronto. Thus far, this initiative has reduced waiting time for paramedics (from an average of 70 minutes in April 2008 to 51.9 minutes by December 2008) which resulted in an increase in ambulance unit availability by 3 ambulances 24 hours a day. In 2009, this initiative is also anticipated to reduce end of shift overtime by approximately \$0.900 million.

EMS will continue to monitor the impacts of the EMS Nursing Initiative and other initiatives that are intended to help mitigate the overtime pressure resulting from hospital offload delays. EMS staff continue to meet regularly with senior staff of all Toronto area hospitals and as a result, many hospitals have already taken action to address this issue.

EMS Response Time to Life Threatening Calls

The Ministry of Health requires all EMS service providers in the Province of Ontario to achieve, on a yearly basis, the ambulance response time performance achieved in 1996. In 1996, Toronto EMS arrived at life threatening emergency calls in 8:59 minutes 84% of the time.

The current response time for 2008 is projected to be 66.1%, lower than the 69.1 % achieved in 2007. EMS' challenge to meet this standard is largely influenced by the following key factors:

- Assigned emergency call volumes have increased from a monthly average of 19,700 in 2002 to 23,900 in 2008, an increase of 21% over a six-year period. This is primarily due to population growth as well as an aging population.
- The time required to service a call has increased. Call service time (primarily impacted by hospital offload delays) has been steadily increasing over the past several years. The average in-hospital wait time in 2000 was 35 minutes versus an averaging 70 minutes as of April 2008. With the new Nurses Program in place, the average in-hospital wait time has improved to 54 minutes by the 4th quarter 2008.
- Increased traffic congestion en route to calls.

The continued funding for the seven Duty Officers and the one-time funding for the EMS Nurses Initiative are expected to improve EMS response time in 2009. EMS' response time objective (within 8.59 minutes) is 70% in 2009, 82% in 2010, and eventually 90% by 2012.

EMS/Fire Program Review

The joint program review of EMS/Fire was completed in mid-2008 and program efficiencies were implemented in the 3rd quarter of 2008. The review resulted in sharing of financial services, accounting, and administration functions between Fire and EMS. These program efficiencies resulted in a reduction of 3.5 positions with annualized savings of \$0.218 million.

Appendix A

2009 Recommended Base Budget Changes vs. 2008 Approved Budget

(In \$000s)	Summary of 2009 Base Budget Adjustments				Net Incremental Outlook	
	Approved Positions	Gross Expenditures	Revenues	Net	2010	2011
		\$	\$	\$	\$	\$
2008 Council Approved Operating Budget	1,207.0	151,968.5	90,093.4	61,875.1	0.0	0.0
In-year approvals and technical adjustments	8.5	1,443.5	1,743.5	(300.0)		
Corporate adjustments		481.9		481.9		
2008 Approved Operating Budget	1,215.5	153,893.9	91,836.9	62,057.0	0.0	0.0
Prior year impacts	(1.0)	4,103.1	3,090.3	1,012.8	196.7	24.0
Zero base items						
Economic factors		1,796.5	1,094.2	702.3	354.9	365.6
Adjusted Base Budget	1,214.5	159,793.5	96,021.4	63,772.1	551.6	389.6
Other base changes		(406.6)	(401.3)	(5.3)		
Base revenue changes						
Recommended Service Level Adjustments:						
Base changes		(50.0)		(50.0)		
Service efficiencies	(3.5)	(117.7)	(113.6)	(4.1)		
Revenue adjustments						
Minor service impact						
Major service impact						
Total Recommended Base Adjustments	(3.5)	(574.3)	(514.9)	(59.4)	0.0	0.0
2009 Recommended Base Budget	1,211.0	159,219.2	95,506.5	63,712.7	551.6	389.6
2009 Program Operating Target				60,815.9		
% Over (Under) Program Target				4.8%		
% Over (Under) 2008 Appvd. Budget				2.7%		

Appendix B

Summary of Service Level Adjustments

Appendix C

**Summary of 2009 Recommended New/Enhanced
Service Priority Actions**

Appendix D

Program Summary by Expenditure Category

CLUSTER: "A" PROGRAM: Emergency Medical Services							
	2008 Approved Budget	2008 Projected Actuals	2009 Recommended Budget	Change from 2008 Approved Budget		2010 Outlook	2011 Outlook
	\$	\$	\$	\$	%	\$	\$
Salaries and Benefits	125,687.9	130,303.6	131,448.8	5,760.9	4.6%	132,639.6	133,634.5
Materials and Supplies	4,585.3	5,378.3	4,899.7	314.4	6.9%	4,947.7	4,995.7
Equipment	1,290.1	1,290.1	1,340.9	50.8	3.9%	1,340.9	1,340.9
Services & Rents	5,119.1	5,119.1	6,575.9	1,456.8	28.5%	6,775.9	6,775.9
Contributions to Capital	0.0	0.0	0.0	0.0	n/a	0.0	0.0
Contributions to Reserve/Res Funds	5,768.2	5,768.2	5,768.2	0.0	0.0%	5,768.2	5,768.2
Other Expenditures	11.9	11.9	11.9	0.0	0.0%	11.9	11.9
Interdivisional Charges	9,382.0	9,382.0	9,501.0	119.0	1.3%	9,501.0	9,501.0
TOTAL GROSS EXPENDITURES	151,844.5	157,253.2	159,546.4	7,701.9	5.1%	160,985.2	162,028.1
Interdivisional Recoveries	1,282.0	1,272.0	1,240.8	(41.2)	(3.2%)	1,240.8	1,240.8
Provincial Subsidies	87,136.1	89,306.1	92,917.7	5,781.6	6.6%	93,652.7	94,306.0
Federal Subsidies	0.0	0.0	0.0	0.0	n/a	0.0	0.0
Other Subsidies	0.0	0.0	0.0	0.0	n/a	0.0	0.0
User Fees & Donations	639.6	709.6	639.6	0.0	0.0%	639.6	639.6
Transfers from Capital Fund	340.0	340.0	140.0	(200.0)	(58.8%)	140.0	140.0
Contribution from Reserve Funds	0.0	0.0	0.0	0.0	n/a	0.0	0.0
Contribution from Reserve	0.0	0.0	0.0	0.0	n/a	0.0	0.0
Sundry Revenues	695.7	695.7	895.6	199.9	28.7%	1,047.8	1,047.8
TOTAL REVENUE	90,093.4	92,323.4	95,833.7	5,740.3	6.4%	96,720.9	97,374.2
TOTAL NET EXPENDITURES (EXCLUDING CAPITAL FINANCING)	61,751.1	64,929.8	63,712.7	7,701.9	#VALUE!	64,264.3	64,653.9
APPROVED POSITIONS	1,215.5	1,215.5	1,215.0	(0.5)	(0.0%)	1,215.0	1,215.0

Appendix E

Inflows / Outflows to / from Reserves & Reserve Funds

Reserve / Reserve Fund Name (In \$000s)	Reserve / Reserve Fund Number	Balance as of December 2008	Proposed Withdrawals (-) / Contributions (+)		
			2009	2010	2011
		\$	\$	\$	\$
Equipment Reserve	XQ1019	853.7	720.7	1,145.7	1,570.7
Vehicle Reserve	XQ1018	1,571.9	1,571.9	1,571.9	1,571.9
Sick Pay Reserve	XR1010	59,378.4	280.0		
Insurance Reserve Fund	XR1007	23,669.8	1,148.2		
Total Reserve / Reserve Fund Draws / Contributions			3,720.8	2,717.6	3,142.6