

Executive Summary

As a result of recent events a review was undertaken by the emergency services to report on the realistic emergency response capabilities in Toronto that has been achieved with the current level of resources.

Toronto is Canada's most populous and diverse city and is the 5th largest municipality in North America. Toronto is home to 25% of the 10 million people who reside in Ontario and forms the hub of a GTA area that is home to 1 in 12 Canadians. As such, our urban centre has a wide variety of risks that pose a threat to the safety of emergency responders and the public.

It's the heart of Canadian Big Business. Executive offices, manufacturing facilities and major pieces of government infrastructure are all based here. Not to mention that 2.5 million people have made this city home. We also host 16 million visitors each year who choose Toronto in part because of its record of cleanliness, safety and points of interest.

New York City is the economic engine for the US economy, but the country's vast infrastructure allowed the US economy to continue. Toronto is the economic engine of Canada. However our infrastructure is not as well protected and our limited ability to recover from such an attack would have a devastating effect on the economy of the entire country.

Prior to September 11, 2001, the emergency services in the City of Toronto were involved in emergency preparedness and response activities. A level of preparedness has already been attained based on the resources available. Since September 11 our review has highlighted ways in which we can enhance our preparedness to a level that is more realistic and operational.

Following a presentation and discussion on October 1, 2001, Chief of Police Julian Fantino, Fire Chief Al Speed and Chief of EMS Ron Kelusky requested the identification of the needs of emergency services in order to bring the City up to a level of appropriate emergency preparedness and response.

The numbers included in this package represent a best estimate. They include startup costs and partial annual operating costs.

The enhancements have been broken down into the following projects.

Project Summary

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| 1. Intelligence support | (see Appendix A) |
| 2. Enhanced Emergency Management | (see Appendix B) |
| 3. Heavy Urban Search and Rescue (HUSAR) | (see Appendix C) |
| 4. Weapons of Mass Destruction (WMD) | (see Appendix D) |
| 5. Helicopter | (see Appendix E) |
| 6. Additional 55 firefighters | (see Appendix F) |
| 7. Harmonizing TEMS Radio System | (see Appendix G) |
| 8. 12 Additional Tactical Paramedic | (see Appendix G) |

Three Year Phase In

A phased approach will be necessary. The priority project is the enhancement of the emergency management function. This is the basis for all-hazard planning and will facilitate the special projects listed below (e.g., HUSAR, WMD).

Three-year expenditures, Enhanced Emergency Management Programs

Item	2002*	2003*	2004*
Intelligence Support	5.9	3.8	3.8
Emergency Management	6	3.5	3.5
HUSAR	1	0.7	0.7
WMD	3.2	1.1	1.1
Helicopter	3.15	2.85	2.85
Fire Fighters	3	3.285	3.689
Radio Harmonization	2.2	1	1
Tactical Paramedics	0.8	0.8	0.8
Total \$ millions	25.25	17.035	17.439

* all prices in millions CDN \$

Enhanced Emergency Management

The majority of risks that face Toronto are dealt with through a generic planning approach following accepted models and planning processes including mitigation, preparedness, response and recovery.

A public education program is a required element of the overall enhancement strategy being proposed here. While there is an expectation on the part of the public that the emergency services are prepared, there is a reciprocal expectation that the public are informed and have taken responsibility for their own personal preparedness. This initiative was started during Y2K planning and can be resurrected to be effective.

Nuclear emergency planning is currently the only planning mandated by legislation. There are great demands on the resources of the City of Toronto made by Emergency Measures Ontario. Nuclear emergency planning requires dedicated staff to meet the demands made by the province. Serious concerns have been expressed by the City's emergency services about the operational viability of the plan as it exists today.

National Fire Protection Association (NFPA) Standard 1600, *A Standard on Disaster/Emergency Management and Business Continuity Planning* will be used as the best practice standard for City of Toronto emergency management.

Staff development and training of City staff are required elements of the overall enhancement strategy being proposed here.

HUSAR

Heavy Urban Search and Rescue (HUSAR) is defined as: The location of trapped persons in collapsed structures using dogs and sophisticated search equipment; the use of heavy equipment such as cranes to remove debris; the work to breach, shore, remove and lift structural components; the removal and treatment of victims; and the securing of partially or completely collapsed structures. Units are expected to be self sufficient for 72 hours.

Toronto HUSAR, will be a multi-service, multi skilled, and multi-functional task force developed within the framework of existing response agencies. Our unit will have the capability to deal with almost any type of incident either man made or natural. The Unit may be used in part by the local emergency services or as a whole depending on the requirement. Toronto HUSAR will be fully deployable on a 24/7 basis with a muster time of 6 hours.

WMD

The use of chemical, biological or radiological agents as weapons of mass destruction (WMD) by terrorists is a relatively new risk on the emergency management-planning horizon. On September 11, 2001 the use of commercial airliners as weapons has created a return to 'civil defence' mode of emergency management activity.

The safety of responders is paramount. Without emergency responders public safety is a moot consideration. Awareness training and response team equipping are the priority items for this project to move forward.

The full extent of the terrorist campaign against the western world is not yet fully understood, but it is important not to let our guard down or become complacent. Toronto is not immune from the effects of terrorism; rather, Toronto has not yet been selected as the location of a demonstration of the terrorist capabilities.

Public Health and other city Divisions are key stakeholders in emergency preparedness. Recognition must be made of these roles and ongoing support and funding allocated to ensure this occurs.

Funding

Funding sources will be explored at the provincial and federal levels.

Not included in this interim report:

It should be recognized that there are elements of this project that are not considered in this report. These include the need for a strategic risk analysis for the City, and an examination of the strategic viability of the current municipal Emergency Operation Centre.

Security vulnerabilities of Emergency Communications must also be reviewed.

APPENDIX A

Intelligence Support

We cannot overlook the threat of domestic terrorism. In light of the recent events in the US, there is no reason to believe that domestic terrorists will not try to capitalize on the disruption to further their causes. We need to increase staffing and funding in Intelligence Support to make us ready to deal with this insidious threat. Any logical attack on terrorism whether it is international and domestic cannot be commenced without the groundwork of intelligence. There are many individuals and groups of individuals that should be monitored and investigated. Intelligence gathering is a lengthy, painstaking endeavor that when successful, produces no measurable results as usually good intelligence work prevents these catastrophic events from occurring. It is difficult to quantify the effect of good intelligence. However, it is devastating to measure the lack of intelligence.

Intelligence Support Program-Toronto Police

Salaries	\$3,070,915.00
Equipment	\$1,950,400.00
Training	\$ 32,500.00
Support/Upgrades	\$ 624,000.00
Vehicles [Leased]	\$ 63,000.00
Vehicles [purch.]	\$ 175,000.00
Annual	\$3,790,415.00
Startup [one time]	\$2,225,400.00

APPENDIX B
Project No. 1 – Enhanced Emergency Management

<u>Salaries</u>	
Salary	2,230,000
Overtime	111,500
Sub-Total	2,341,500
Benefits	538,545
<u>MATERIALS & SUPPLIES</u>	
Stationery	12,500
Books & Magazine	0
Photocopying Supplies	25,000
Data Processing Materials	0
Photographic Supplies	2,500
Other Office Supplies	7,500
Utilities – Building	30,000
Supplies - Rec. & Education	0
Supplies - Comp Software & Acc.	10,000
Supplies – Uniforms	0
Supplies – Bedding	0
Supplies - General Hardw.	1,000
Supplies – Medical	0
Supplies – Miscellaneous	1,000
Sub-Total	89,500
<u>EQUIPMENT</u>	
Mach. & Equip – Communications	107,400
Mach. & Equip – Janitorial	0
Mach. & Equip – Office	148,000
Mach. & Equip-Rec. & Educational	2,000
Furniture & Furnishings	30,000
Sub-Total	287,400
<u>SERVICES & RENTS</u>	
Business Travel	45,000
Training & Development – Internal	0
Contr. Service - Mach. & Equipment	9,000
Contr. Service-Lic. Mobile Equipment	0
Contr. Service - Office Equipment	4,600
Contr. Service – Building	0
Contr. Service-Advertising & Promo.	0
Contr. Service – Laundry	0
Contr. Service - Rent of Office Equip.	0
Contr. Service - Rent of Mach. & Equip.	0
Contr. Service - Rental of Property	0
Contr. Service – Insurance	0
Postage	500
Telephone	94,500
Cellular Phone	43,200
Business Meeting Expense	7,500
Sub-Total	204,300

FACILITY+VEHICLES

Building	2,000,000
Utilities	12,000
Classroom Furniture	37,500
Light Trucks [4]	300,000
Sedans	100,000
5-Ton and 4x4	70,000
Sub-Total	2,519,500

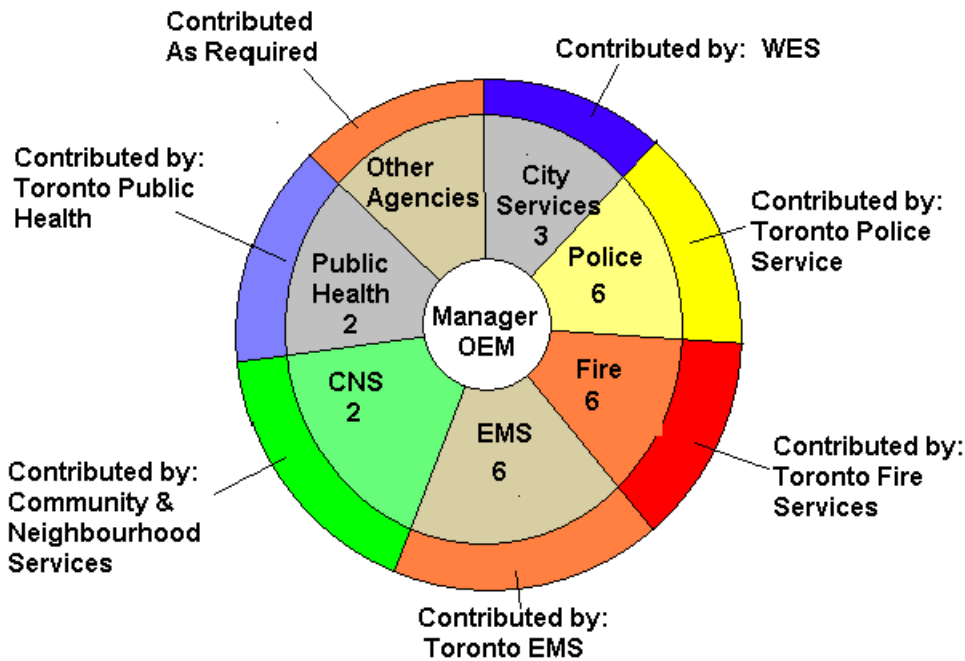
RESERVES

Outside Training (Parking Lot)	25,000
Sub-Total	25,000

TOTAL **6,005,745**

The existing combined complement of emergency management staff in Toronto is 14 personnel. The table proposed below will bring the staffing level to 26 personnel.

***Office of Emergency Management
Emergency Management Framework***



APPENDIX C**Project No 2. – Heavy Urban Search & Rescue (HUSAR)**

UNIT	INITIAL START-UP COSTS	VALUE OF EQUIPMENT CACHE	ANNUAL OPERATION & MAINTENANCE	TOTAL
TORONTO HUSAR	YEAR 1 - \$26,000.00 (2000)	\$26,000.00	0	\$26,000.00
	YEAR 2 - \$175,000.00 (2001)	\$200,000.00	0	\$175,000.00
	YEAR 3 – \$800,000.00 (2002)	\$400,000.00	\$200,000.00	\$1,000,000.00
	YEAR 4 - \$500,000.00 (2003)	\$700,000.00	\$200,000.00	\$700,000.00
	YEAR 5 - \$500,000.00 (2004)	\$900,000.00	\$200,000.00	\$700,000.00
SUBTOTAL	\$2,000,000.00	\$900,000.00	\$600,000.00	\$2,600,000.00
*Note: Shaded areas indicate funding received to date.				

The percentage breakdown of personnel on the 130 person HUSAR team is as follows:

- Fire Service 57%
- Police Service 14 %
- EMS 14%
- Other 13%

APPENDIX D

**Project No. 3 – Weapons of Mass Destruction
Nuclear, Biological and Chemical Response**

Response Team Training	Length of course	Number of staff	Cost of Training	Personal Protective Equipment	Monitoring Equipment	Team Equipment
EMS	120 hours	100	\$871 920.00	\$179 680.00	\$68 865.00	\$229 570.00
TFS	120 hours	100	\$96 600.00	\$179 680.00	\$68 865.00	\$379 570.00
TPS	120 hours	250	\$1 308 600.00	\$539 040.00	\$206 590.00	\$519 570.00
SUBTOTAL			\$2 277 120.00	\$898 400.00	\$344 320.00	\$1 128 710.00
PROGRAM TOTAL						\$4 648 550.00

APPENDIX E
Helicopter

For a 2 year contract on a Bell 412 ‘Gryphon’ rescue helicopter: \$130k/month plus \$945/hr flight time plus fuel [\$400. /hr approx.]. Price includes 24/7/365 work capability, all maintenance and flight crew. Helicopter comes equipped with a ‘nightsun’ search light and rescue winch. Seats 15. An optional Infrared scanner for search and rescue is a one time expense: \$350k.

Aerial Search and Rescue is a proven technology that has a valuable place in an urban environment. Large urban centres around the world use helicopters in diverse ways to follow criminal suspects, search for missing persons, and perform marine search and rescue and to monitor incidents like fires, traffic issues, protests and parades.

This proposal differs from some previous ones in that this one encompasses the needs of all emergency services. The unit described in this report is capable of moving 14 personnel, or 6 litters with injured or 2 litters with advanced life support. With lighting and infrared technology, it is capable of performing search and surveillance operations. It is also capable of lifting over two tons from the lift ring on the bottom of the aircraft. Bell 412’s of this type are also used for fire fighting operations and can perform water bombing when properly equipped.

This proposal addresses the leasing of a helicopter for use. All maintenance and hangaring and provision of trained pilots are the responsibility of Canadian Helicopters. The City would be responsible to provide trained staff to work the back of the aircraft. TFS has personnel qualified to provide this training in house, for the most part.

This proposal provides for a helicopter to be available for multi-agency use at all times. A replacement unit would be provided when the primary unit is down for service or other purposes.

This proposed program provides a service that encompasses the needs of all emergency services. The combined abilities of a unit such as the one profiled in this report far outflank those previously explored.

Search , Rescue and Surveillance Helicopter Proposal

Lease per month	\$130,000	= \$130,000
Hourly flight	\$945 @ 80hours	= \$75,600
Fuel	\$400 @ 80 hours	= \$32,000
	Monthly	= \$237,600
	Yearly	= \$2,851,200

APPENDIX F

Additional Firefighters

In the aftermath of the New York disaster, there has been a demand throughout America to hire an additional 75,000 firefighter positions in the next year to help meet the growing demand for specialized services from the fire and rescue responders around the nation. The recent terrorist attacks on New York City and the Pentagon have highlighted the changing role of fire departments, and focussed significant attention on the resources which are allocated to support them in their mission. Fire Chief John Buckman, President of the International Association of Fire Chiefs, [IAFC] said, "Our firefighter are truly America's 'first responders' and they perform the duties of true 'domestic defenders' because they must deal with incidents that occur on our own soil." If we are preparing for a war overseas, Buckman concludes, "We must not fail to prepare for war here." And that means, "We must staff our nation's Fire Service because that mission will be carried out by America's fire and rescue personnel more than anyone else." As stewards of public safety, the additional 55 firefighters would not only allow us to increase the number of fire apparatus we currently put into service, but allow us to be better equipped to face emergencies now and in the future.

In presentations to the U.S Senate Subcommittee On Investigations, Oakland California's Fire Chief Lamont Ewell recommended that America's 120 largest cities prepare for the inevitable eventuality of a terrorist chemical or biological attack by training and equipping a least 50 emergency response personnel in each city. Hiring 55 firefighters would assist us wit the human resources to back fill stations and continue our Heavy Urban Search and Rescue [HUSAR] training that is only partially completed due to lack of resources.

Appendix G

Upgrading of TEMS radio system

At the present time TEMS uses a Radio communications system that cannot be linked to the other Emergency Services. This causes difficulty in coordinating activities of the three emergency services during multi-agency response. One of the major lessons learned during the recent events in New York City demonstrated this problem dramatically. The cost to upgrade the TEMS radio system will be \$4.2 million dollars. These costs are expected to be borne over three years.

The addition of 12 Tactical Paramedics

The additional Tactical Paramedics will allow TEMS to properly staff for the additional WMD Response Team. The costs for these additional staff will be \$800,000.00.