
2006 BUDGET BRIEFING NOTE

Public Access Defibrillation (PAD) Program Roll-out

Issue / Background:

The Economic Development and Parks Committee has requested a Briefing Note to BAC specifying where and how Toronto EMS plans to place Automatic External Defibrillators (AEDs) if proposed budget changes are accepted.

According to the American Heart Association, Public Access Defibrillation (PAD) holds promise to be the single greatest advance in the treatment of cardiac arrest since the development of cardiopulmonary resuscitation (CPR). The time between cardiac arrest and defibrillation is the major determinate for the success of a rescue attempt. For resuscitation to be effective, and achieve the highest survival rates, the shock must be delivered within four minutes from the time of collapse. While CPR can support ventilation and circulation in a victim of cardiac arrest for a short time, it cannot directly save the life of a patient suffering ventricular fibrillation, which can only be corrected by a shock from a defibrillator. It is estimated that for every minute that elapses before defibrillation, 7 to 10 percent of the patients that might have been saved are lost.

Studies indicate that where a PAD program is present survival rates from sudden cardiac arrest climb to over 50%. In the first five years of Windsor Ontario's PAD program they saw 23 sudden cardiac arrest patients in a public place, with 15 of these patients surviving to discharge - a 65% survival rate from sudden cardiac arrest. Toronto emergency crews encounter, on average, one sudden cardiac arrest in a public place every day and it can be estimated that with a widespread, coordinated Toronto PAD program over 150 lives could be saved annually.

A large percent of victims of sudden cardiac arrest are young people with no previously diagnosed cardiac problems. These are otherwise healthy people who, without the availability of an AED on site, would lose their lives. An AED can mean that these people may go on to live full and productive lives

In early 2001, Toronto EMS and Sunnybrook & Women's College Base Hospital developed a site survey to determine priority for city-owned potential PAD sites. This was the first survey of its kind and involved consultation with several cities in North America. Our survey is now being used as a model for the implementation of PAD programs in several Canadian cities.

The survey was distributed to all City sites, but completion was voluntary. It assessed several criteria for placement of AEDS for each location:

Administrative

Site preparedness

Estimated number of PAD providers/equipment required

Population hours on-site

Percent of population over 50 years of age

Number of EMS responses to the site in the year 2000.

In response to the survey, Toronto EMS has placed 55 units in 43 sites. Even though some sites responded to the survey and ranked high on the list, they have not yet had an AED installed.

Expansion of the PAD Program has stalled because a number of potential user divisions were unable to commit the operating funding necessary to support the program. As a result, Toronto EMS presently holds 166 AEDS in stock, and cannot issue them. This has resulted in their depreciation, and has affected part of the Toronto EMS Capital Program. Of greater concern, however, is that a number of potentially life-saving City-owned resource assets are not being used.

The staff report entitled "Public Access Defibrillation Program Operating Costs" submitted to the Budget Advisory Committee on January 24, 2006, estimates an incremental cost of \$0.131 million to the 2006 Proposed Operating budget should EMS manage the Public Access Defibrillation (PAD) program on behalf of the City. Should the Budget Advisory Committee determine that Toronto EMS administer the management of the PAD Program, Toronto EMS will assume the budget required to implement placement of defibrillators in prioritized city sites and provide the required training, medical oversight and defibrillator maintenance program. Toronto EMS will also undertake a comprehensive review of all City sites, and will develop a new list that reflects current priorities. There are a number of sites that have already committed to installing AEDs based on the funding model in place in 2005. Since arrangements are in place, Toronto EMS will fulfill these installation and training requests. Following this, the intent is to implement rollout of the AEDs using the original survey list (Attachment A), until a new city survey is conducted and sites re-prioritized. The estimated costs outlined in the report will allow deployment of about 70 defibrillators a year on an ongoing basis.

The original survey did not include some sites, including arenas managed by community boards. These sites will be part of the new priority list.

The PAD Program has proven itself to offer life-saving intervention to citizens who experience sudden and unexpected cardiac arrest in public locations. This plan will ensure that Automatic External Defibrillators will be strategically placed in a timely fashion, and chances for survival for residents and employees of the city will be maximized.

Key Points:

- AEDs save lives

The estimated costs outlined in this report will allow:

- Toronto EMS to assume responsibility for distribution of AEDs
- Toronto EMS to conduct a comprehensive assessment of all City sites to determine optimum AED location
- Toronto EMS to deploy 70 defibrillators per year

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Attachment A

<u>Ranking</u>	<u>Site Name</u>
-	<u>Commitments to Date</u>
	North Toronto Treatment Plant
	Humber Treatment Plant
	Island Filtration Plant
	RL Clark Filtration Plant
	High Level Pumping Station
	Richview Reservoir (Underground)
	Scarborough Pumping Station
	Lawrence Pumping Station
1	Seaton House
2	Women's Residence
3	Birkdale Residence
4	Birchmount Residence and Long Term
*8	Birkdale Community Center
9	Bridlewood Neighbourhood Branch
16	Colliseum Building
19	Old City Hall
21	Albion Pool and Health Club
22	Family Residence
25	Historic Fort York
26	Robertson House
30	Frankland Community Center
31	Donald D. Summerville Outdoor Pool
32	Withrow Park Clubhouse
35	Milliken Parks Community Recreation Center
37	Riverdale Park Outdoor Pool
39	Hummingbird Centre
42	Agincourt District Library
43	277 Victoria Street/Public Health
44	North York East Social Services
45	Maryvale Neighbourhood Branch
46	St. Lawrence Community Centre
47	Scadding Court Community Center/C.R. Sanderson Branch Library
48	Northline Works Yard
49	Harrison Pool
50	Stan Wadlow Clubhouse
51	Steeles Neighbourhood Branch
52	Finch Yard
54	Downsview Dells
55	Hilltop Community School
56	New Toronto Library; West Region
57	Mary V. McCormack Community Recreation Centre
59	Masaryk-Cowan Community Centre
61	Alex Duff Outdoor Pool
62	R C Harris Water Filtration Plant
63	Norseman Community School and Pool
65	Bering Yard

66	Black Creek Pioneer Village
67	King Street Yard
68	Ashbridges Bay Treatment Plant
69	Domenico DiLuca Community Centre
70	North York West Social Services
71	Swansea Community Recreation Centre
72	Humber Sheppard Community Center
73	North Kipling Community Centre
74	Elmbank Community Centre
75	High Park Pool
76	Old Weston Road Yard
77	Commissioners Street Transfer Station
78	Holy Family Community Centre
79	Keele Community Recreation Centre
81	Glen Rouge Campground
84	System Service
86	Birchmount Leisure Pool
89	Amesbury Community Centre
90	Habitant Arena
91	Morningside Library
94	Riverdale Branch
95	Amesbury Sports Complex
96	Northwood Community Centre
97	Central Services
98	Driftwood Community Center
99	Toronto Public Library-Ellesmere
100	Jane Dundas Branch Library
101	West Rouge Community Centre
102	The Elms Community Pool
103	John Innes Community Centre
105	Bob Abate Community, Recreation Centre
106	Fairmount Community Centre
107	Richmond Street Yard
108	Downsview Library
109	Disco Yard
110	Hillcrest Community Centre
111	Humber Community Pool
112	Corporate Printing, Niagara Street
113	Central Toronto Social Services
114	Maurice Cody Community Recreation Centre
115	Beaches Recreation Centre
116	Dyas Road Record Centre
117	Earl Beatty Recreation Community Centre
118	Adam Beck Community Centre
119	McGregor Park Community Center
120	S.H. Armstrong Recreation Community Centre
122	590 Jarvis
123	Ellesmere Yard
124	Brown Community Centre
125	Weston Library
126	Nashdene Yard
127	Danforth Coxwell Branch
128	Pape Danforth District Library
129	Highland Creek Treatment Plant
130	Gerrard Ashdale Branch
131	Palmerston Library

133	Local 416
134	The Assembly Hall
135	Spadina Historic House and Gardens
136	Rockcliffe Yard
137	Downsview Arena
139	L'Amoreaux Tennis Center
140	Kew Gardens A.I.R.
141	Balmy Beach Community Centre
142	Malvern Community Recreation Centre/ Malvern District Branch
143	Facilities and Real Estate South District Yard
144	Locke Library
145	Forest Hill Library
146	Wychwood Library
147	Deer Park Library
148	Oakwood Village Library and Arts Centre
149	Bibliographic Services/Facilities
150	St. Lawrence Branch
151	Alness Yard
152	Black Creek Library
153	Annette Recreation Centre
154	Park Lawn Community School
155	George Harvey Collegiate Institute Pool
156	1530 Markham Road
157	Cedarbrae District Library
158	Parkdale Library
159	Beaches Branch
161	Main Street
162	Parliament Street Branch
163	Don Mills District Branch
164	Bendale Library
165	Centennial Park Ski Chalet
166	East Point Park (Ken Morrish Sports Field)
167	Gibson House
168	Bedford Park Community Centre
169	Riverdale Farm
170	City of Toronto Elections Office
171	Woodside Square Neighbourhood Branch
172	18 Dyas Road
173	Northern District Library
174	Albert Campbell District Library
175	Runnymede Library
176	Bloor/Gladstone Library
177	Eglinton Square Neighbourhood Branch
178	Goldhawk Park Neighbourhood Branch
179	Burrows Hall Community Centre/ Burrows Hall Neighbourhood Branch
180	Highland Creek Neighbourhood Branch
181	York Woods District Library
182	High Park Library
183	Eastern Avenue Yard
184	Dufferin/St.Clair Library
185	Annette Library
186	Lillian H. Smith Branch
187	McGregor Park Neighbourhood Branch
188	Mount Pleasant Library

189	Davenport Library
191	Islington Community School
192	Mackenzie House
193	Runnymede Pool
194	Weston Pool
195	Rose Ave Community Recreation Centre
196	Vaughan Rd. Academy Pool
197	St. Lawrence Market and Hall
198	Toronto Reference Library
199	Guildwood Library

ARENA BOARDS

Forest Hill Memorial Arena
 George Bell Arena
 Lakeshore Lions Arena
 Leaside Gardens Arena
 McCormick Playground Arena
 Moss Park Arena
 North Toronto Memorial Arena
 Ted Reeve Arena
 Weston Lions Recreational Arena
 William H. Bolton Arena

***Site numbers are not continuous. Missing numbers indicate that the facility has an AED installed.**