HealthAnalytics Feasibility Study Project

Facilities Recommendations - Presentation to EPSC

June 7, 2007

Region of Peel
Working for you

Purpose of Presentation

1. Provide a summary of *HealthAnalytics (HA)* recommendations on EMS Facilities

2. Present options for an EMS Facilities "model" for the Region

3. Summarize the input received from identified Stakeholders and front line paramedics with respect to EMS facilities

4. Recommend a Facilities model and provide general estimates of the capital costs to implement the model over a ten year timeframe

5. Identify sites that require immediate direction from Council

Summary of HealthAnalytics Recommendations - Facilities

- *HA* identified 29 priority locations for EMS facilities based on call demand and system response time
- These locations are a combination of existing Police, Fire and EMS stations
- *HA* recommended that, where feasible, EMS facilities be co-located with Police or Fire Stations. Co-location means either that:
  - An EMS station is developed as a separate building on the same site as a Police or Fire Station; or
  - EMS shares a building with Police or Fire, provided that each service has a separate and self-contained space within the building, as well as separate indoor vehicle bays

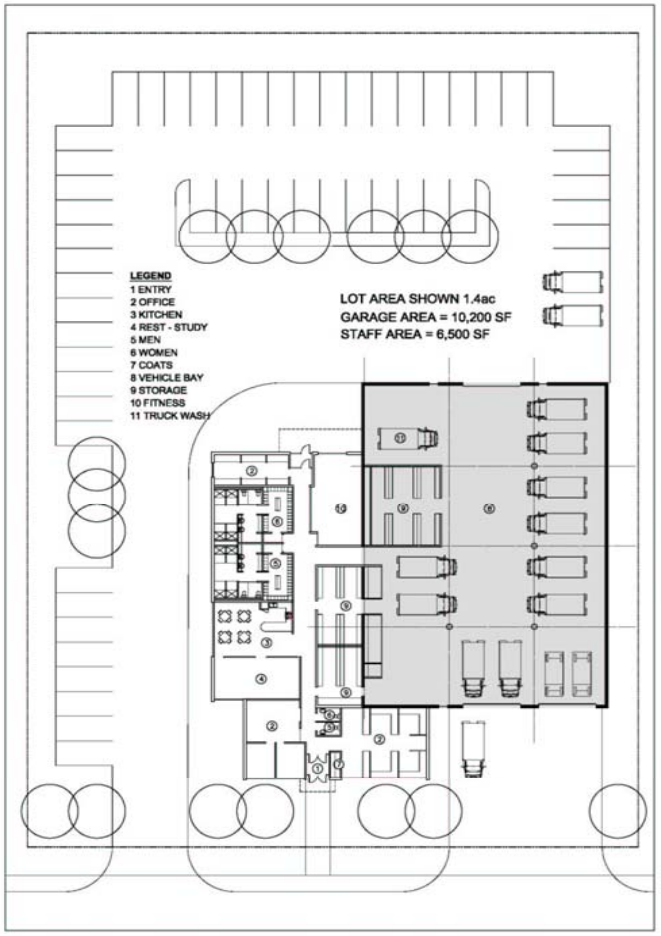
Summary of HealthAnalytics Recommendations – Facilities

- *HA* recommends that where co-location with an existing or planned Fire or Police facility is not feasible, an alternate site for an EMS station be found within 1 kilometre of the *HA*-identified site.
- Locating EMS Stations in the HealthAnalytics priority locations can be achieved through the following models:
  - **Divisional Model**
    - Is comprised of several large **Reporting Stations** where staff report to work and pick up their vehicle and then are deployed to a number of **Satellite Stations** (e.g. Police Model)
  - **Station-Based Model**
    - Is comprised of multiple **Stand-Alone Stations** where staff report to work, which are essentially smaller versions of Reporting Stations. PRPS currently uses a Station-Based model (e.g. Fire Model)

Divisional Model: Reporting Station - Overview

- One of a small number of larger stations where staff report to work and pick up their ambulance vehicle.
- All Reporting Stations include:
  - Ambulance re-stocking, cleaning and decontamination areas
  - Equipment storage
  - Staff lockers, M/F washrooms and showers
  - Kitchen facilities
  - Administrative offices
  - Other potential uses such as training facilities, fitness facilities, etc.
  - Large number of staff parking spaces and multiple ambulance bays

Divisional Model: Reporting Station – Concept Plan



CONCEPT PLAN
Reporting Station

JUNE 2007

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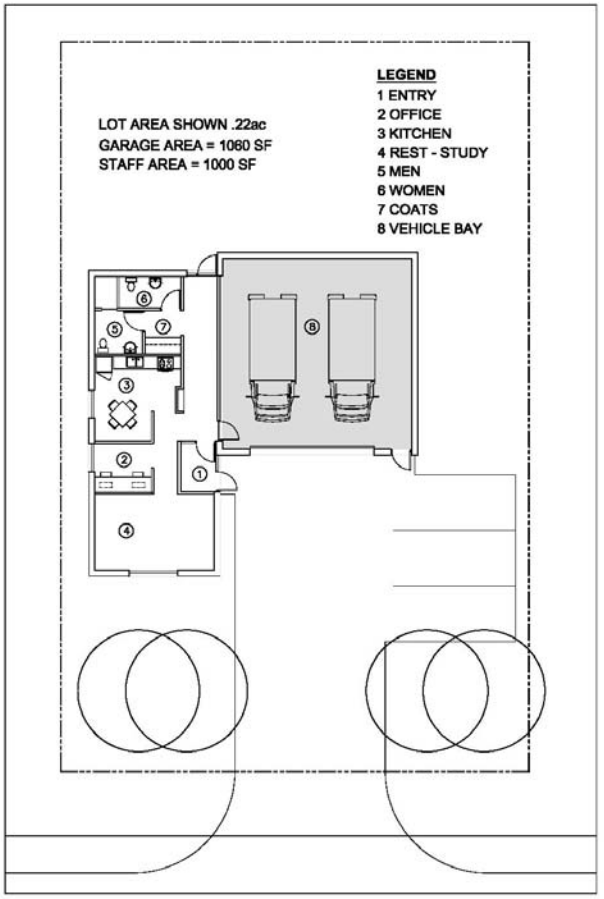
Divisional Model: Satellite Station - Overview

- Paramedics will be deployed to one or more Satellite stations to await their next call assignment.
- During their shifts, Satellite stations will be available for paramedics to complete reports, have a meal, park ambulances in a covered garage, etc.
- All Satellite Stations are located within *HA* priority locations
- All Satellite Stations would include:
  - Indoor ambulance bays
  - Kitchenette
  - M/F washrooms
  - Work stations/computers
  - Lounge space

Divisional Model: Satellite Station – Concept Plan



CONCEPT PLAN
Satellite Station

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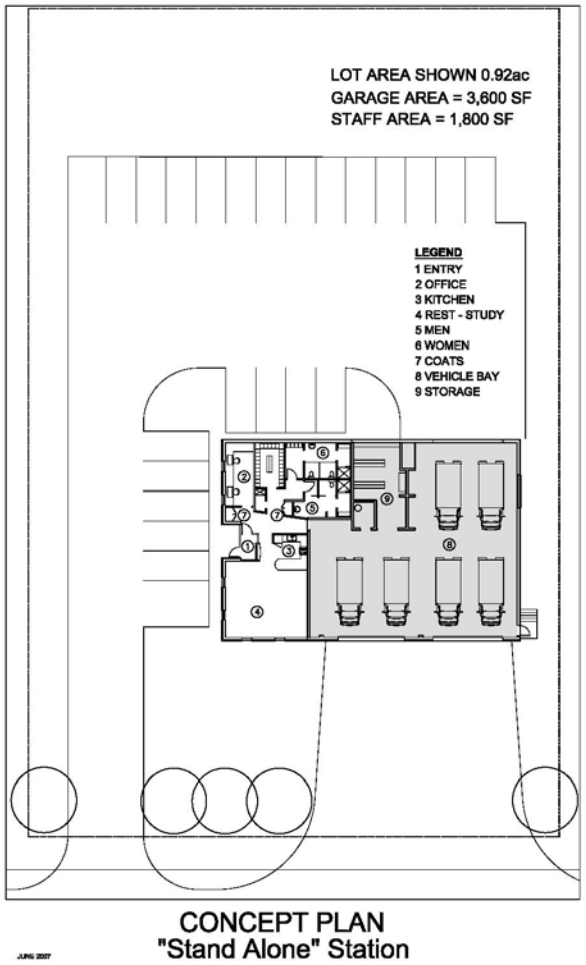
Station-based Model: Stand Alone Station - Overview

- Under a Station-Based Model, Stand-Alone Stations would be located in every one of the 29 *HA* priority locations and would combine many of the functions of both Divisional and Satellite Stations
- Staff would report to work (book-on / book-off) at one of the Stand-Alone Stations
- All Stand-Alone Stations include:
  - Equipment storage
  - Ambulance re-stocking, cleaning and decontamination
  - Staff lockers, M/F washrooms and showers
  - Administrative spaces
  - Indoor ambulance bays
  - Kitchenette
  - M/F washrooms
  - Work stations/computers
  - Lounge space
  - Multiple staff parking spaces

Station-Based Model: Stand-Alone Station – Concept Plan



CONCEPT PLAN
"Stand Alone" Station

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Stakeholder Input

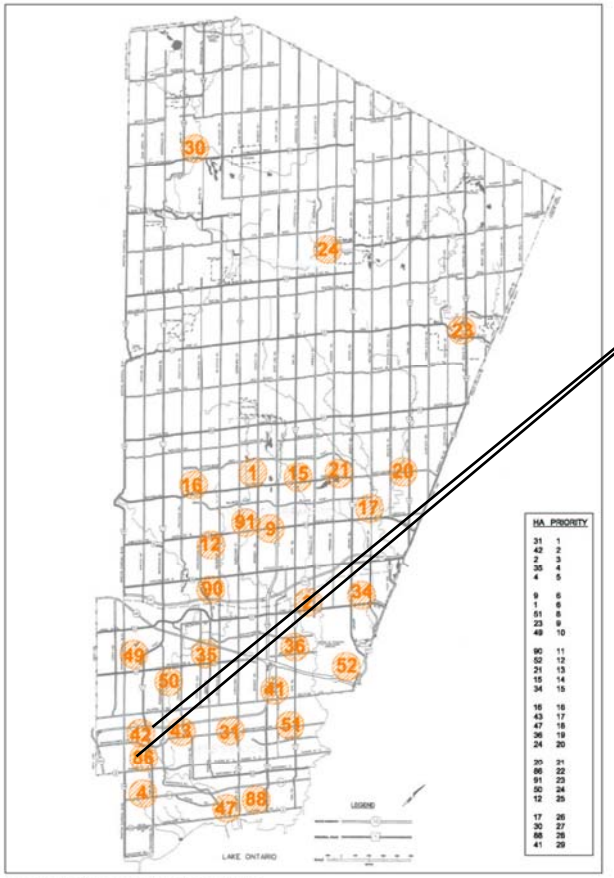
- Stakeholders, including Peel Paramedic Union, Fire Chiefs, Fire Fighters Association approve of co-location provided that each service has a separate building or discreet spaces within a single building
- Paramedics stressed the importance of having well-identified EMS stations, especially if co-located with Police or Fire
- Overall, the Stakeholders tended to favour the Divisional Model. Reasons most often stated include:
  - More opportunities for medics and supervisors to meet (pre-shift briefings) and to respond to “orphaned” crews
  - Efficiencies of storing supplies and stocking vehicles from Reporting Stations (as opposed to 29 Stand-Alone locations)
  - Paramedics would have their vehicles cleaned and stocked by dedicated staff which would get them on the road faster
  - Possibility of having dedicated spaces for training, fitness, daycare, etc. at the Reporting Stations
  - Satellite stations are easier to locate and less expensive to lease/purchase compared with Stand-Alone stations

Stakeholder Input

- Paramedics stressed that the following factors should be considered in locating either Satellite or Stand-Alone stations:
  - All stations need to be located with access to arterial roads/major arteries
  - Do not locate EMS stations in industrial parks – safety and access issues
  - Stations should be more visible in the community – better signage, and in more high visibility locations

How many stations are required under the Divisional vs. Station-Based Model?

HealthAnalytics Priority Locations



PEEL REGIONAL PARAMEDIC SERVICE
MAP 1 - HEALTH ANALYTICS STUDY
PREFERRED COVERAGE LOCATIONS
PRIORITIES 1-29

Under a Station-Based Model, there would be 28 Stand-Alone Stations

(*HA* locations 42 and 88 could be served by one Station)

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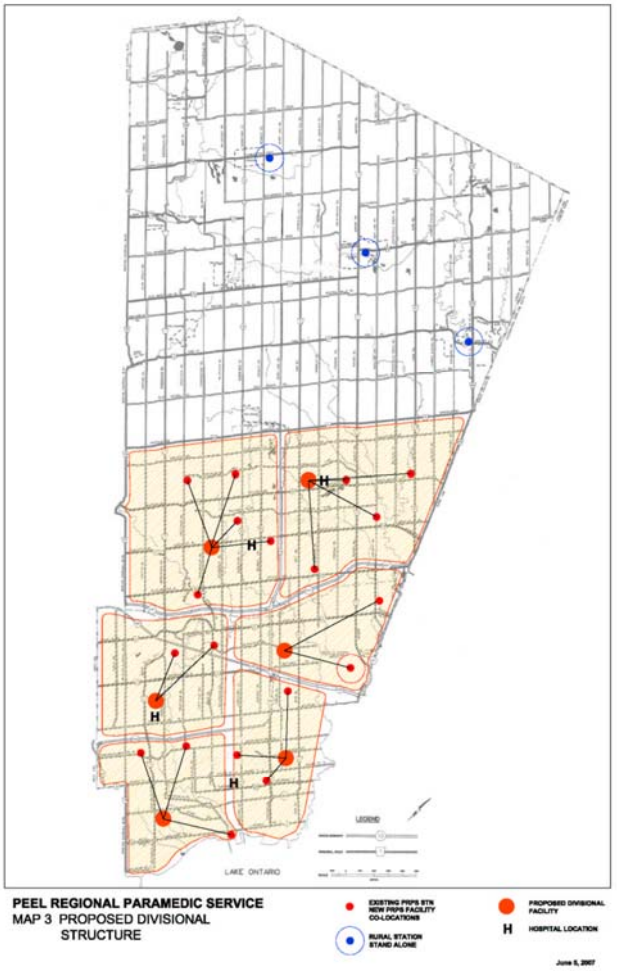
DIVISIONAL STRUCTURE



Mississauga would be divided into four Divisions and Brampton would be divided into two Divisions

Each Division would have a Reporting Station and a number of Satellite Stations co-responding to the *HA* priority locations

Caledon would continue to operate under a Station-Based Model

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Table 1: Number of Facilities – Divisional vs. Station-Based Models

	Divisional Model	**Station-Based Model**
Reporting Stations	6	0
Satellite Stations	19	0
Stand-Alone Stations	3	28
Total	**28**	**28**

Cost Comparison: Divisional vs. Stand Alone Model

Divisional Model:

- Reporting Station
- Satellite Station

Station-Based Model:

- Stand-Alone Station

Development Assumptions For All Stations

- Land cost is assumed at an average of $700,000/acre
- Construction costs are assumed at an average of $120 per square foot
- Soft costs include consultants, permit fees, site servicing and are assumed at 25% of the construction costs
- Design and construction contingencies including equipment costs (not vehicles) and Peel Regional Management costs is assumed at 30% of the project costs.

Divisional Model: Reporting Station – Costing Example

Reporting Station (estimated average costs)

• Land (1.4 acres x $700,000/acre)	$ 980,000
• Construction ($120 per sq. ft x 16,700 sq. ft.)	$2,040,000
• Soft Costs, Site Servicing	$ 480,000
• Contingency, Equipment, Management @ 30%	$1,050,000
• Total	$4,550,000

Divisional Model: Satellite Station – Costing Example

Satellite Station (estimated average costs)

• Land (0.22 acres x $700,0000/acre)	$ 154,000
• Construction ($120 per sq. ft x 2060 sq.ft.)	$ 247,000
• Soft Costs, Site Servicing	$ 100,000
• Contingency, Equipment, Management @ 30%	$ 150,000
• Total	$ 651,000

Stand-Alone Station Costing Example

Stand-Alone Station (estimated average costs)

• Land (0.92 acres x $700,000/acre)	$ 644,000
• Construction $120 per sq. ft x 5400 sq.ft.	$ 648,000
• Soft Costs, Site Servicing	$ 323,000
• Contingency , Equipment, Management @ 30%	$ 484,000
• Total	$2,099,000

Table 2: Stand Alone Model - Estimated Development Costs (2008-2017)

	# of Facilities	Estimated Average Cost[1]	Estimated Total Cost
Existing Stand-Alone Stations	3	$0	$0
New Stand-Alone Stations	25	$2,099,000	$52,475,000
Total	**28**		**$52,475,000[2]**

[1]Includes land, building, soft costs and contingency

[2]Includes any unallocated funds in the 2007 budget (to be brought forward to 2008)

Table 3: Divisional Model - Estimated Development Costs (2008-2017)

	# of Facilities	Estimated Average Cost[1]	Estimated Total Cost
Reporting Stations	6	$4,550,000	$27,300,000
Existing Satellite Stations[2]	3		
Satellite Stations[2]	19	$ 651,000	$12,369,000
Total	**28**		**$39,669,000**[3]

[1] Includes land, building, soft costs and contingencies stated in 2007 dollars

[2] Assumes all but 3 existing Satellite Stations are new developments (including co-locations)

[3] Includes any unallocated capital funds in the 2007 budget (i.e. to be brought forward to 2008)

Table 4: Cost Comparison: Stand-Alone vs. Divisional Model (2008-2017)

	Estimated Total Cost
Station-Based Model	$52,475,000
Divisional Model	$39,669,000
Difference	**$12,806,000 (32%)**

Advantages of a Divisional Model

- Capital costs are estimated to be $12,806,000 (32%) less than a Station-Based Model
- Offers greater flexibility than a Station-Based Model – easier and less expensive to develop additional Satellite Stations to respond to future demand
- Offers advantages to paramedics and supervisors:
  - More opportunities for medics and supervisors to meet (pre-shift briefings) and to respond to “orphaned” crews
  - Efficiencies of storing supplies and stocking vehicles from Reporting Stations (as opposed to 29 Stand-Alone locations)
  - Paramedics would have their vehicles cleaned and stocked by dedicated staff which would get them on the road faster
  - Possibility of having dedicated spaces for training, fitness, daycare, etc. at the Reporting Stations

Table 5: Sites Requiring Immediate Direction

Location or Area	Description
Bloor St. and Havenwood Dr. Mississauga- Reporting Station	Proposed co-development property with MFD
Vicinity of 1579 Finfar Ct. Mississauga- Reporting Station	Work with Municipalities to replace leased premises
Vicinity of Derry Road and Tomken Road- Reporting Station	Proposed co-development property with MFD
Erin Mills and Thomas St. Mississauga- Reporting Station	Develop on lands currently owned by Peel Regional Police
110 Fernforest Dr. Brampton- Reporting Station	Develop on lands currently owned by Peel Regional Police
657 Queen St. West or Vicinity Brampton- Reporting Station	Potential co-location with BFD
8 Rutherford Rd. (or new site in vicinity)- Satellite Station	Potential co-location with BFD
52 Bramalea Rd Satellite Station	Current EMS Station that City of Brampton has listed for sale –redevelop existing station

Recommendations

1. That Regional Council adopt a Divisional Model as the basis for development of EMS facilities in Mississauga and Brampton (2008-2017)

2. Maintain the current Station-Based Model in Caledon

3. That staff work with Finance to develop a ten year capital plan for EMS facilities

4. That Staff continue to investigate, with the appropriate municipal Fire Service or Peel Regional Police, EMS developments in the 8 locations identified in Table 5.