

Departmental Space Projections

Needs Assessment

Do current municipal facilities for the Town of Peterborough support the efficient and proper delivery of town services? Can existing structures be renovated and/or expanded to meet current and anticipated near-term needs? Are there alternatives for combining space and program needs of the various town departments? The purpose of any Needs Assessment is to lay a foundation for decision-making. It is important that those managing the assets of the Town of Peterborough strategically consider the best use of the community assets, alternative sites and their historical significance to the community, and long term planning through 2025.

This study established a *Proposed Facility Program* for the five major municipal facilities (Fire, Police, Public Works, Waster Water Treatment and Recreation), which should be considered as a working program document. This program will become one tool as part of a feasibility study to enable the Town of Peterborough to guide planning and evaluate options.

Data Collection

Through a process of questionnaires and conversation with Department heads, we have tried to establish current information about each Town Department's mission, staffing, work flow and interactions, adjacency preferences to other departments, support space, equipment and storage needs. We have also identified in general terms what works, and what doesn't work well in each department as to assist the process of forecasting future space needs.

Each Town Department head completed a survey form, which is one of the tools applied to identify and define what would be needed in terms of major rooms or function for the department's needs and efficient operation. See the Appendix for copies of completed Departmental Questionnaires.

Floor plans of current facilities used by Fire and Rescue, Police, Public Works, Waste Water Treatment, and Recreation were used to determine Existing Space Allocation totals for each department. See the Appendix for copies of completed Existing Space Allocation sheets.

Summary of Facility Space Programs

A two-step process was employed for arriving at a Proposed Facility Program for each Town Department.

First, we determined a breakdown of existing space for each municipal facility by major function [staff areas, support spaces, copy and record storage, conference rooms, etc.] This data was analyzed and tabulated through a process of preparing reference plans and computing square footages of each existing facility.

The Total Existing Space Allocation for the five Peterborough Municipal departments is about 33,000 square feet, as indicated in Table 1.

Table 1- Summary of Existing Space Allocation

SUMMARY of Existing Space Allocation PETERBOROUGH MUNICIPAL FACILITIES

Department	SPACE USE CODE							SubTotal	% of total
	PS	SWS	SS	SSO	C	S	BS		
Police	585	1,293	1,116	1,157	846	1,472	380	6,849 SF GFA	21%
Fire & Rescue	50	5,844	352	110	-	1,243	290	7,889 SF GFA	24%
Public Works	-	9,270	393	-	-	245	533	10,441 SF GFA	32%
Waste Water Treatment	-	240	65	80	260	1,360	850	2,855 SF GFA	9%
Recreation	180	1,030	90	2,740	-	762	135	4,937 SF GFA	15%
Total Gross Floor Area	815	17,677	2,016	4,087	1,106	5,082	2,188	32,971 SF GFA	100%
	2%	54%	6%	12%	3%	15%	7%	100%	

- PS** Public Common Space
- SWS** Staff Work Spaces
- SS** Staff Support Spaces
- SSO** Work Spaces for Others
- C** Circulation/Core Factor
- S** Storage
- BS** Building Services

Secondly, from the collected survey instruments, we identified specific departmental and staff needs including required work areas for staffing, conference space, and staff support areas, equipment and record storage, and providing for the special needs of each department.

This information was placed into a Facility Space Program format for projecting a total square footage space requirement for each department. In developing these facility programs and space requirements we applied acceptable industry space standards for facilities for fire and rescue, police, public works, waste water treatment and recreation.

Slightly less than 70,000 square feet of space is recommended for the five departments. This represents a doubling of space overall. The total Proposed Facility Space Program for each Town Department is shown in Table 2.

Table 2 - Proposed Municipal Facility Needs

**SUMMARY of Proposed Facility Space Programs by Department
PETERBOROUGH MUNICIPAL FACILITIES**

Department	Recommended Facility Size	% of total area	Exist Facility Size
Fire & Rescue	15,863 SF	23%	6,849 SF
Police	11,748 SF	17%	7,889 SF
Public Works	24,726 SF	36%	10,441 SF
Water & Sewer	10,347 SF	15%	2,855 SF
Recreation	6,686 SF	10%	4,937 SF
Total Gross Floor Area	69,371 SF	100%	32,971 SF

Departmental Options

Primary options to meet facility needs for each Department are either to construct new facilities or renovate existing facilities in place. Not all facilities/sites lend themselves to major renovations and expansions; however, as a preliminary identification of options, it was assumed that each existing site could accommodate the necessary redesign/expansion of the building.

A “Projected Facility Program and Project Budget” was prepared for both options for each of the following Town Departments:

- Fire and Rescue
- Police
- Public Works
- Waste Water Treatment Facilities
- Recreation Facilities

Building construction budgets were arrived at by computing current 2005 project costs for similar facilities through Means Cost Estimator, reviewing project costs from recently completed municipal facilities, and reviewing Cost Summary of New Hampshire data for projects being or recently completing the bidding process.

Please note that our project cost research does not include accurate figures for TOTAL CONSTRUCTION COSTS. Cost estimates for fixed equipment and site work can vary significantly depending upon the nature of the facility and the proposed project site. Our analysis



uses a percentage of the Total Building Costs to assist in establishing reasonable and likely costs for these additional cost areas.

In all cases we have provided both a Total Construction Costs and Total Project Costs to assist in financial planning and allocation of resources.

FIRE and RESCUE – OPTION 1 (new facility)

Option One assumes a new facility with a program area of 15,863 square feet is constructed on a suitable building site. The facility program (Refer to Table 3) is based on an analysis of the existing facility, information provided by Chief Lenox and applying planning standards from comparable municipal facilities.

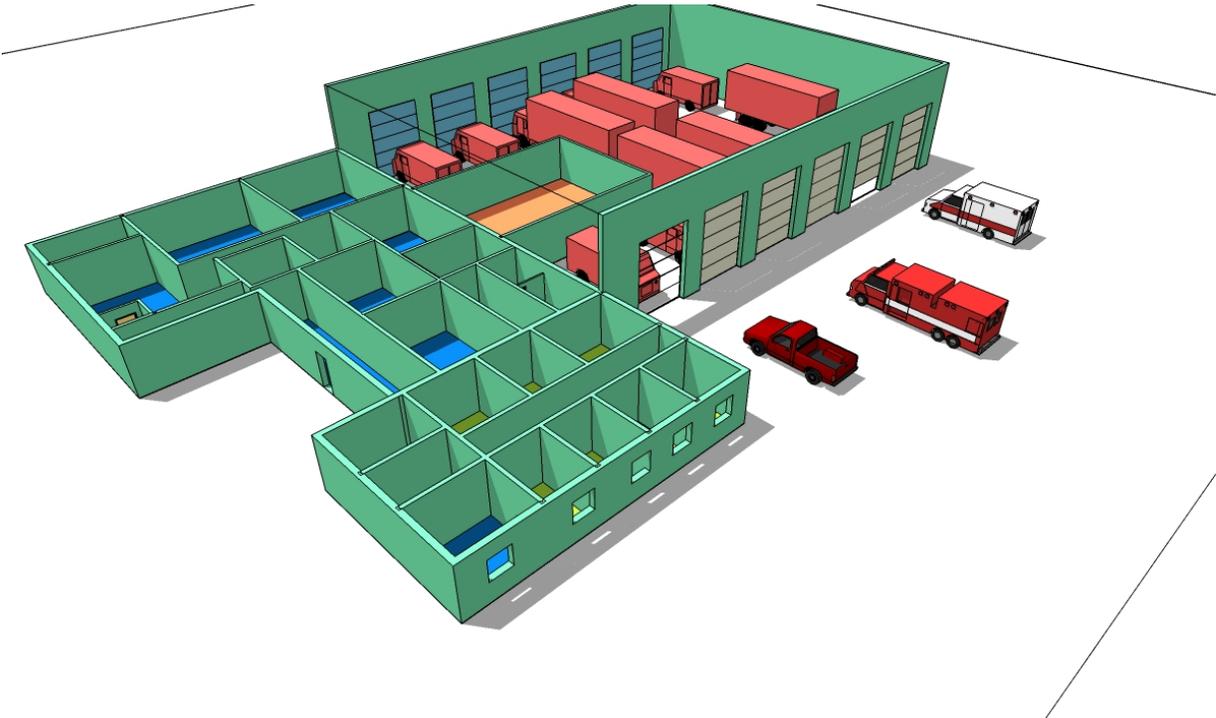


Figure 39 - New Fire Station Option 1

PROJECTED FACILITY PROGRAM & PROJECT BUDGET

FACILITY **FIRE and RESCUE - New Facility**
 CLIENT **Peterborough, NH**
 PROJECT **Municipal Facility Study**

FACILITY PROGRAM

Major Functional Areas	Description	Notes	Proposed Area
Fire Apparatus Garage	vehicle storage		6,920
Fire Fighter	support spaces for fire fighters		1,770
Fire Equipment Storage	equipment storage		1,801
Administrative	offices and storage		940
Training	meeting space		840
Building Services	mechanical & electrical		420
Total Program Area (Net Square Foot)			12,691
	Wall and Chase Factor	10%	1,269
	Circulation Factor	5%	635
	Schematic Design SF Factor	10%	1,269
Subtotal of Adjustment Factors			25%
			3,173
Gross Floor Area			15,863

Project Budget Summary

Construction Description	Cost/SF	Proposed Costs
Building Shell and Finishes	\$80	\$1,269,050
Masonry	\$25	\$396,578
Equipment	7612 \$10	\$158,631
Plumbing	\$10	\$158,631
HVAC	\$15	\$237,947
Electrical	\$20	\$317,263
Means Cost Index (Median Construction)	\$160	per SF

Project Summary of ALL Costs

A	Building Costs		\$2,538,100
B	Fixed Equipment (% of A)	8%	\$203,048
C	Site Development Costs (% of A)	12%	\$304,572
D	TOTAL CONSTRUCTION COSTS		\$3,045,720
E	Moveable Furniture & Equipment (% of A)	5%	\$152,286
F	Professional Fees (% of D)	12%	\$365,486
G	Contingencies/Inflation (% of D)	10%	\$304,572
TOTAL PROJECT COSTS			\$3,868,064

Table 3 - Project Budget for New Fire and Rescue Facility



FIRE and RESCUE – OPTION 2 (renovated facility)

Option Two assumes the existing fire and rescue facility could be expanded at its current location by construction a new Apparatus Garage and renovating the remainder of the building in order to comply with the same program as required for a new facility (Refer to Table 4). This Option was calculated to establish building renovation costs – the site of the existing Fire Station does not support such an expansion, and so expanding the current facility is not recommended.

PROJECTED FACILITY PROGRAM & PROJECT BUDGET

FACILITY **FIRE and RESCUE - Renovated Facility**
 CLIENT **Peterborough, NH**
 PROJECT **Municipal Facility Study**

FACILITY PROGRAM			
Major Functional Areas	Description	Notes	Proposed Area
Fire Apparatus Garage	vehicle storage		6,920
Fire Fighter	support spaces for fire fighters		1,770
Fire Equipment Storage	equipment storage		1,801
Administrative	offices and storage		940
Training	meeting space		840
Building Services	mechanical & electrical		420
Total Program Area (Net Square Foot)			12,691
	Wall and Chase Factor	10%	1,269
	Circulation Factor	5%	635
	Schematic Design SF Factor	10%	1,269
Subtotal of Adjustment Factors			25%
			3,173
Gross Floor Area			15,863

Project Budget Summary				
	Construction Description		Cost/SF	Proposed Costs
	Renovate Existing Building	7900	\$45	\$713,841
	New Apparatus Garage (Shell & Finishes)	7612	\$110	\$837,320
	Equipment		\$5	\$38,060
	Pllumbing		\$6	\$45,672
	HVAC		\$12	\$91,344
	Electrical		\$18	\$137,016
	Means Cost Index (Median Construction)		\$151	per SF average

Project Summary of ALL Costs

A	Building Costs (New Construction + Addition)			\$1,863,253
B	Fixed Equipment (% of A)		5%	\$93,163
C	Site Development Costs (% of A)		10%	\$186,325
D	TOTAL CONSTRUCTION COSTS			\$2,142,741
E	Moveable Furniture & Equipment (% of A)		5%	\$107,137
F	Professional Fees (% of D)		12%	\$257,129
G	Contingencies/Inflation (% of D)		10%	\$214,274
	TOTAL PROJECT COSTS			\$2,721,280

Table 4 - Project Budget for Renovated Fire and Rescue Facility

