

ITEM	1
MANAGER'S REPORT NO.	46
COUNCIL MEETING	1980 07 07

RE: FIRE PREVENTION CONTROL STUDY AND MASTER PLAN
 (ITEM 8, REPORT NO. 8, 1978 NOVEMBER 14)
 (ITEM 3, REPORT NO. 64, 1979 SEPTEMBER 24)
 (ITEM 8, REPORT NO. 17, 1980 MARCH 03)

Following is a report from the Chairman of the Fire Study Technical Working Committee regarding the Fire Prevention Control Study and Master Plan.

A copy of the report that was considered by Council on 1980 March 03 has been loosely inserted in the envelopes with this agenda for convenient reference.

RECOMMENDATION:

1. THAT the recommendation as contained in the following report be adopted.

* * * * *

TO: MUNICIPAL MANAGER 1980 June 19
 FROM: FIRE STUDY TECHNICAL COMMITTEE
 RE: FIRE PREVENTION CONTROL STUDY AND MASTER PLAN

RECOMMENDATION

1. THAT Council approve the Goals and Objectives listed hereunder. (This is step 6 indicated on the flow chart attached hereto.)

REPORT

BACKGROUND

Council, at its meeting of 1980 March 03 received a report from the Fire Study Technical Committee dated 1980 February 25 entitled, "Fire Prevention Control Study and Master Plan". That report provided a definition of the fire situation and a list of "Goals and Objectives".

Council approved the recommendation that an Advisory Committee be set up and that the Advisory Committee review the definition of the fire situation and the "Goals and Objectives" in the 1980 February 25 report, and make recommendations thereon.

The Fire Study Advisory Committee met on 1980 April 29 and 1980 May 21 and reviewed the definition of the fire service, and the goals and objectives. The following list of goals and objectives, submitted for Council's approval, has received the approval of the Fire Study Advisory Committee.

When reading this report, reference should be made to the 1980 February 25 report, since the basic reasons for formulating the various goals and objectives, and the maps illustrating the standards, etc. are not repeated here.

GOALS

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1. (a) IMPROVE THE LEVEL OF FIRE SERVICE CONSISTENT WITH THE MUNICIPALITY'S FINANCIAL CAPABILITIES.

(b) PROVIDE FOR NEW DEVELOPMENT THE SAME STANDARD OF SERVICE AS WILL BE PROVIDED FOR CURRENT DEVELOPMENT, CONSISTENT WITH THE MUNICIPALITY'S FINANCIAL CAPABILITIES.
2. OPTIMIZE THE RATIO OF THE COST OF THE FIRE SERVICE TO THE VALUE OF PROPERTY PROTECTED.
3. PERSUADE THE PROVINCE TO ENACT LEGISLATION WHICH WILL ENABLE THE MUNICIPALITY TO OFFSET SOME OF THE FIRE PROTECTION COSTS MADE NECESSARY BY THE CONSTRUCTION AND OCCUPANCY OF HIGH RISK STRUCTURES. (See objectives 6 and 7.)
4. MAINTAIN AN ONGOING REVIEW OF MUNICIPAL FIRE DEPARTMENT COSTS TO ATTAIN AN OPTIMUM BALANCE BETWEEN THE RESPONSIBILITIES OF THE MUNICIPALITY AND THE PROVINCE WITH REGARD TO THE PROVISION OF EMERGENCY HEALTH SERVICES.
5. REDUCE PROPERTY LOSS PER FIRE.
6. REDUCE INCIDENCE OF FIRES PER CAPITA.
7. REDUCE NUMBER OF CALLS PER CAPITA.
8. REDUCE INCIDENCE OF ARSON.
9. REDUCE CITIZEN INJURIES AND FATALITIES.
10. REDUCE FIREFIGHTER INJURIES AND FATALITIES.

OBJECTIVES

1. PROVIDE SITES FOR PUMPER FACILITIES WITHIN ONE MILE TRAVELLING DISTANCE AND 3 MINUTE RESPONSE TIME OF STRONGEST AND SECOND LEVEL DEMAND AREAS BY 1982, UNLESS SOME MODIFICATION OF THIS STANDARD CAN BE JUSTIFIED BY INCREASED USE OF EARLY WARNING DETECTION SYSTEMS, AUTOMATIC SUPPRESSION SYSTEMS OR CONTROL OF TRAFFIC LIGHTS BY FIRE DEPARTMENT VEHICLES.

Comments:

- (a) "Levels of Demand" are described on page 3, section (2) of your 1980 February 25 report. The third level of demand properties could be subject to a longer distance and response time but in any event, due to the wide dispersion of the third level areas, they would be adequately served if the standard is applied to the first and second level demand areas.

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(b) Though our objective is as stated above, before any decisions are made on the allocation of any specific fire hall sites arising from application of this response time standard, Council will be given the opportunity to compare an alternative, based on a lower standard, a lower cost, and a higher level of risk.

2. PROVIDE SITES FOR AERIAL LADDER FACILITIES WITHIN 1½ MILES TRAVELLING DISTANCE AND A 4 MINUTE RESPONSE TIME OF STRONGEST LEVEL AND SECOND LEVEL DEMAND AREAS BY 1982, UNLESS SOME MODIFICATION OF THIS STANDARD CAN BE JUSTIFIED BY INCREASED USE OF EARLY WARNING DETECTION SYSTEM, AUTOMATIC SUPPRESSION SYSTEMS, OR CONTROL OF TRAFFIC LIGHTS BY FIRE DEPARTMENT VEHICLES.

Comments:

The same comments on standards and alternatives as indicated for Objective No. 1 apply here to Objective No. 2.

3. CONSTRUCT AND/OR RELOCATE FIRE STATIONS ON SELECTED SITES TO MEET STANDARDS BY 1986 OR WHEN WARRANTED BY DEVELOPMENT.
4. HAVE SIMON FRASER UNIVERSITY ASSUME RESPONSIBILITY FOR PROVIDING FIRE PROTECTION SERVICE WITHIN ALL UNIVERSITY OWNED LANDS FOR FIRST ALARM CALLS BY 1982, WITH MUNICIPAL SUPPORT FOR MAJOR FIRES BY AGREEMENT.
5. SUPPLY FIRE FLOW (WATER) REQUIRED FOR BUILDINGS WITH HIGHEST FIRE FLOW (WATER) DEMAND IN EACH FIRE MANAGEMENT AREA BY 1984.
6. MAKE SPRINKLER SYSTEMS AND SMOKE ALARMS PRECONNECTED TO A CENTRAL ALARM STATION MANDATORY IN ALL BUILDINGS OVER THREE STORIES AND EXCEEDING 6,000 SQ. FT. BY 1985.

Comments:

This will be undertaken by making proposals for amendments to the Provincial Building and Fire Codes via the Provincial Codes Associate Committee. (The request will be directed to the Provincial Department of Municipal Affairs.)

7. EVALUATION OF CONCEPT OF REQUIRING EARLY WARNING SYSTEMS IN ALL RESIDENCES, UPON COMPLETION OF A FORTHCOMING REVIEW BY THE COMMITTEE OF B.C. FIRE CHIEFS UNDER THE CURRENT CHAIRMAN, THE DIRECTOR - FIRE SERVICES, BURNABY.

Comments:

Originally our objective was "Smoke detectors to be installed and connected to a central alarm station in all residences by 1986." (Smoke detectors are already mandatory for new construction.) Some members of the Fire Study Advisory Committee questioned the reliability of smoke detectors and so the original objective has been withheld until an evaluation has taken place.

It is worth noting at this point, that the City of Vancouver have recently enacted regulations requiring smoke detectors within all rooms, corridors and landings, etc. in hotels and rooming houses, etc. Smoke detectors are also mandatory as a condition of any Vancouver RRAP grant approval for rehabilitation of buildings for habitation.

8. REDUCE THE INCIDENCE OF ARSON TO BELOW PROVINCIAL LEVELS ON AN ANNUAL BASIS, BY MAINTAINING A HIGH STANDARD OF ARSON INVESTIGATION AND BY INCREASING THE NUMBER OF SUCCESSFUL PROSECUTIONS.

Comments:

Successful prosecutions and publicity of them act as a considerable deterrent.

9. ELIMINATE "UNKNOWN" CAUSES OF FIRES THROUGH BETTER INVESTIGATION.

Comments:

This would be part of a training program and will involve both suppression and prevention staff.

10. MAINTAIN A HIGH LEVEL OF TRAINING FOR FIREFIGHTERS (AND FIRE PREVENTION OFFICERS), INCLUDING THE FOLLOWING OF PHYSICAL FITNESS PROGRAMS TO MAINTAIN A HIGH QUALITY OF SERVICE.
11. REDUCE FIREFIGHTER CASUALTY RATE TO EQUAL OR BELOW ANNUAL NATIONAL RATES, AND MAINTENANCE OF IT AT THAT LEVEL.
12. REDUCE CITIZEN CASUALTY RATE TO EQUAL OR BELOW ANNUAL NATIONAL RATES, AND MAINTENANCE OF IT AT THAT LEVEL.
13. REDUCE THE INCIDENCE OF FIRES CAUSED BY CARELESS SMOKING.
14. SET UP A SPECIAL INSPECTION AND EDUCATION SYSTEM IN CASES WHERE EXCESSIVE NUMBERS OF CALLS ARE MADE TO THE FIRE DEPARTMENT FROM SPECIFIC PROPERTIES.
15. REDUCE RATES OF "FALSE ALARM" CALLS BY 50% BY 1986.
16. HAVE THE PROVINCE ASSUME THE COSTS OF PARAMEDICAL CALLS BY 1982.

Comments:

These are ambulance calls for heart attack victims, etc., not rescue calls for extrication of vehicle accident victims, etc., which will continue to require the municipal rescue service equipment.

The City of Vancouver is now conducting a survey with the other Fire Departments to determine the effect which responding to emergency health service calls has on their operational activities.

While there is a moral obligation for the Fire Department to provide the paramedical service, the provision of this service is depriving the citizens of some fire protection.

Because of the widespread location of the fire halls, the fire units are generally able to provide a quicker response than Emergency Health Service Vehicles, and also it is recognized

that responding firemen are adequately trained for medical emergencies. However, if the Municipal Fire Service is to continue with this operation, the costs should be borne by the Province. (In 1979 about 3,000 out of 5,000 calls were Rescue and Safety Calls.)

17. DEVELOP A MORE ECONOMICAL MEANS OF DEALING WITH OPEN SPACE FIRES BY 1984.

Comments:

A four wheel drive vehicle is currently on order for reaching fires in grasslands or bush, etc.

18. ESTABLISH A PHASED PROGRAM OF TRAFFIC LIGHT PRE-EMPTION BY THE FIRE DEPARTMENT, COMMENCING IN 1982.

Comments:

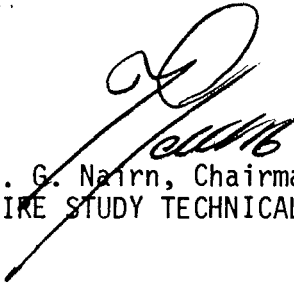
This is a means by which firemen, while travelling toward a fire, can control traffic lights at intersections.

A survey of the municipalities which have put this system into effect has shown that the system has some significant advantages; one is that it reduces fire vehicle response times, and a second is that it reduces the danger of collisions. (Mr. Motoch, a representative from the 3M Company, made a presentation of the "Opticom" method to members of the Fire Study Technical Committee and the Fire Study Advisory Committee on 1980 June 12.)

STEPS WHICH WILL BE TAKEN FOLLOWING APPROVAL OF GOALS AND OBJECTIVES

Following approval of the "Goals and Objectives", the next steps taken will be along the lines described in the 1980 February 25 report on page 9, under "Discussion on Alternative Approaches".

On the assumption that a study of alternative fire hall sites will be one of the approaches used, work is currently being undertaken on preparing and coding a basic street network which will be used to measure travel distances and response times from fire hall sites, existing and proposed, to areas of varying intensity of demand for fire protection.


T. G. Nairn, Chairman
FIRE STUDY TECHNICAL COMMITTEE

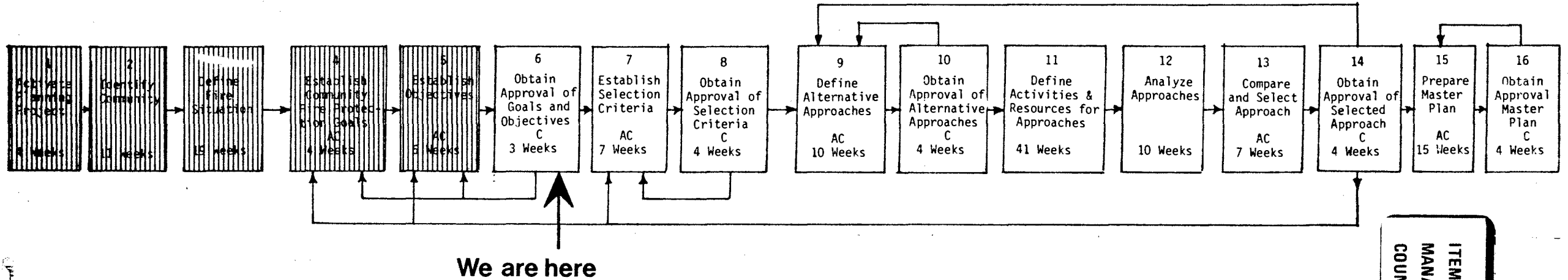
CRL/hf

Attach.

c.c. - Municipal Manager
Municipal Treasurer
Municipal Engineer
Director of Planning
Chief Building Inspector
Director - Fire Services
Planner II (CRL)

FIRE PREVENTION CONTROL STUDY AND MASTER PLAN - FLOWCHART

- (1) Where "AC" appears in one of the boxes below this means that the advice of the Advisory Committee will be sought at that stage.
- (2) Where "C" appears this means that Council approval will be sought at that stage.



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