



Nanoose
Volunteer Fire Department
Review

Dave Mitchell and Associates Ltd.

April 2016

General Introduction

The review of the Nanoose Volunteer Fire Department (“NVFD” or the “Department”) was conducted on 11 December 2015. Fire Chief Doug Penny, Deputy Chief John Newall and Training Officer Denis Holme were present during the review.

The NVFD’s fire hall is situated approximately 15 kilometres north of Nanaimo and the Department provides service to a portion of Electoral Areas E and G of the Regional District of Nanaimo (the “RDN”). The NVFD has a complement of 23 members, one of whom functions in a support role.

In addition to fire suppression duties, the Department provides First Medical Responder (“FMR”) services – FR-III, attends motor vehicle incidents providing auto extrication, low angle rope rescue and wildland-urban interface suppression. Given its geographic location, the Department is well supported through the District 69 master mutual aid agreement. The NVFD also provides services to the Department of National Defence testing station located on Nanoose Bay.

References below to the “main report” are to the main summary report on the RDN’s fire services, delivered concurrently with the audit reports on individual departments.

Fire Department Organizational Structure

The Department has been established and is directly operated by a society called the “Nanoose Fire Protection Society” (the “Society”), which was incorporated under the *Society Act* (B.C.) on 23 November 1972. The operation of the Department is subject to oversight from Society’s Board.

The Department is organized as follows:

- Fire Chief
- Deputy Fire Chief
- Training Officer/Deputy Chief
- Captains (3)
- Lieutenants (4)

The Fire Chief, Deputy Fire Chief and Training Officer/Deputy Chief are considered the Department’s chief officers. The Fire Chief, while not officially a career officer, is budgeted for up to 1,800 hours paid time per year to operate the Department. Both the Deputy Chief and Training Chief/Deputy Chief are also allotted a specified number of hours each year to conduct Department business, albeit considerably less than the Fire Chief’s time.

The Fire Chief is primarily responsible for budgeting, forward planning and overall command and control of the Department. The Training Officer is primarily responsible for overall Department training. Chief Penny has been with the Department for 43 years, a good portion of which have been spent as an officer within the Department.

Promotion to the positions of Fire Chief, Deputy Fire Chief and Training Officer/Deputy Chief within the NVFD are on the basis an election by the membership. While there are written qualifications for these positions we would recommend the Department participate with the RDN and other departments in developing standard educational pre-requisites for these positions. A recommendation dealing with this matter can be found in the main report. Elections for each of the three positions is staggered, thereby ensuring only one position becomes vacant in any given year. The term of office is five years.

Promotion to the positions of Captain or Lieutenant is decided jointly by the three Chief Officers noted above, based on an applicant's qualifications and past experience. An officer's job description was provided and indicates that completion of NFPA 1001, NFPA 1021 Fire Officer 1, Fire Service Instructor 1 and a willingness to participate in further training as the preferred qualifications. Tenure in the captain and lieutenant position is at the pleasure of the three chief officers¹. The matter of election of officers is discussed in greater detail in the main report.

Upon completion of their probationary period as a firefighter, each member must be voted into the Department by the general membership at a regularly scheduled association meeting.

The Department's officer structure appears strong and experienced. The average years of service in the department for officers (excluding the three Chief Officers who average almost 30 years), is 10 years. According to the Fire Chief, there is very little turnover in the officer ranks and therefore not many vacancies, although more junior members in the Department are still afforded the opportunity to take officer training if they so desire.

Fire Department Training

General Comment (included in all Department reviews)

There are many commonalities in training issues facing the RDN's volunteer fire departments. The main report has a section that discusses the general issues that need to be addressed in relation to RDN's fire department training, and that section should be consulted in addition to the Department-specific comments set out below.

Department-Specific Comments

As noted, the Training Officer/Deputy Chief is primarily responsible for the Department's training and records, although the Captains and other individual members also contribute by training members on subjects with which they have some expertise. An annual training schedule is routinely posted to advise all members on upcoming training.

The Consultants did not witness actual operational training of Department members and therefore have relied on training records as an indicator of the level of operational readiness of the Department to carry out its mandated emergency response activities. The Department

¹ Article 2, Section 5 of the "Regulations for the Officers and Other Members of Nanoose Volunteer Fire Department" outlines the process for promotion of officers.

provided training records and formal qualifications for inspection. The Department uses a combination of electronic records and hardcopy and, for the most part, the records are structured in a way that would permit an easy determination of each firefighter's or officer's individual level of training. The Consultants reviewed a sampling of the records available. Accordingly, the following comments are based on the records reviewed and discussions with the chief officers during the interview session.

According to the Fire Chief, the Department currently trains toward operating as an Interior Operations Service Level department and expects to be declared as an Interior Operations Service Level, or possibly a Full Service Operations Level department in the future. A breakdown of the Playbook² training competency requirements to achieve and maintain a declaration of Interior Operations Service Level can be found in the main report. It needs to be emphasized, however, that the Playbook sets minimum qualification requirements for only a limited range of positions and functions within a fire department, based on the service level selected for that department. The Playbook is not a complete system:³ there is a range of positions, duties and functions, essential to fire suppression and emergency service delivery, which are not covered in the current iteration of these standards. As such, the Playbook is only the starting position for determining the necessary qualifications, training and proficiency requirements needed to deliver fire and emergency response services safely and effectively. Each Authority Having Jurisdiction and fire department must establish training and other requirements for the positions, duties and functions not covered by the Playbook. This issue is considered further in the main report.

Upon a review of the Department's current training levels, and discussion with the Fire Chief, some 12 of the 23 active members meet the minimum criteria required by the Playbook for interior level operations, with eight of the remaining members only requiring completion of Live Fire 1 and/or 2 to meet these requirements. Three of the remaining members are currently in the process of completing the BC Basic Fire Fighter program, and one member (a captain) appears to have no formal qualifications, although according to the Fire Chief, has been with the Department for 31 years and is very experienced. Given this, we would recommend that the Department consider having a formal assessment conducted for this member to ascertain his level of training is consistent with the requirements of the Playbook.

The Playbook also identifies the minimum training competencies required for the role of a Team Leader which is defined in the Playbook as being the individual responsible for a specific crew's functions/activities in both exterior and interior operations. The current training records indicate that nine of the active members (all the officers with the exception of one captain) meet these requirements.

² Office of the Fire Commissioner, *British Columbia Fire Service Minimum Training Standards: Structure Firefighters Competency and Training Playbook* (2nd ed., May 2015) (the "Playbook").

³ The Playbook expressly recognizes this issue: see p. 13/20, where it notes that the Playbook is not an "all encompassing" program.

Under the Playbook, the competencies/qualifications for Company Fire Officer are the requirements of NFPA 1021 Fire Officer 1, and those for the role of Team Leader are primarily drawn from the “Emergency Service Delivery” section of NFPA 1021 Fire Officer 1.⁴ Based on the documentation provided, at this time the Department has nine members that meet these requirements and as such should be able to comply with the Team Leader and Company Fire Officer requirements for either Exterior or Interior Service Level Operations.

However, three of these nine officers have yet to receive their NFPA 1021 FO-1 certifications as they have not completed the prerequisite NFPA 1001 qualifications.⁵ Upon completion of their NFPA 1001 qualifications they will then receive their NFPA 1021 FO-1 certification. Until such time as this takes place, the Department will not have the required documentation to confirm the training level of these members for the role of Team Leader or Company Fire Officer.⁶

The fire hall property is large enough to conduct multi-unit drills; in addition, the Department has several on-site training props including dumpsters, wet and dry hydrants, an auto extrication area and a burn pan for extinguisher training. The fire hall and tower also provide the opportunity for rope and ladder work, and the use of simulated fire attacks with artificial smoke. Formal live-fire exercises are conducted in either the Comox or Nanaimo training facilities with the use of third party trainers. Members are afforded the opportunity to undertake live fire training during their formal NFPA 1001 training, in addition to annual maintenance update training.

The Department’s operational guidelines appear in order for the most part and cover many of the operational aspects of emergency responses. We do, however, note the absence of an operational guideline dealing with all of the necessary aspects of conducting interior operations (an issue addressed in the main report). Absent such guidelines, the Fire Chief must rely on an officer or firefighters’ judgment for determining whether or not to enter a fire-involved structure. Appropriate written operational guidelines, however, are a WorkSafeBC requirement and a best practice for the fire service. We would recommend that the Department, in consultation with the RDN and other area departments, embark on a program to update their operational guidelines as soon as possible.

The Fire Chief reports weekly training sessions are well attended with approximately 80% of members present each week. Attendance is recorded with a minimum attendance requirement of 75% of all scheduled weekly training nights. An additional honorarium is paid to all members attending 80% or more of scheduled training. The Department’s training programs are primarily based on the requirements of the NFPA 1001 and 1021 standards; the theory portions are

⁴ National Fire Protection Association, *NFPA 1021: Standard for Fire Officer Professional Qualifications* (2014 ed.).

⁵ National Fire Protection Association, *NFPA 1001: Standard for Fire Fighter Professional Qualifications* (2013 ed.).

⁶ It should be noted that the Playbook uses “qualifications” rather than “certifications”: the qualifications of these individuals may indeed meet Playbook requirements. The benefit of having their training certified is that it makes proving the relevant qualifications easier, if that is ever required.

primarily conducted through the Justice Institute of BC's on-line learning programs. The Department's training program complies with the Playbook's requirements.

Aggressive interior operations, such as fire attacks and primary searches, require firefighters to enter the hazardous environment, dramatically increasing the potential for adverse fire events such as flashover, smoke explosion or backdraft, along with exposure to a variety of other hazards, thereby posing the most significant risk to firefighters in fire ground operations. A line of duty death or serious injury is a risk that all fire departments must seek to mitigate. In general, the Department is well prepared for conducting interior operations. However, the lack of detailed operational guidelines pertaining to interior operations increases the potential for liability in the event of a line of duty death or injury.

The nature of modern construction techniques has amplified the risks faced by firefighters. Lightweight construction components and contents made of composites, synthetics and other unusual fuels, cause fires to burn hotter, faster and with less predictability, creating a much more volatile fire environment than that of the past. Although firefighters are now better equipped, the fires today pose a greater risk than those faced in the 1970s and 1980s. Having recognized this, the fire service in general is now placing a much greater emphasis on firefighter safety, with particular focus on interior operations, and seeking to manage the degree of risk to which firefighters are exposed. Unless the situation presents firefighters with an immediate life safety issue (a saveable life), in general firefighters should not be subjected to the high degree of risk involved in aggressive interior operations to save a structure and its contents. With a good understanding of the appropriate strategies and tactics that should be implemented, and with the correct levels of training to achieve these, structure fires can be effectively suppressed using a safer, exterior, defensive mode of operations that materially reduces risks to firefighters.

As noted above, the Department is to be commended for the level of qualification of its firefighters with all but three members currently at, or about to achieve, the NFPA 1001 FF-II level, thus meeting the Playbook requirements for interior operations.

Recommendation: The Department, in consultation with the RDN and other area departments, embark on a program to update their operational guidelines, to include all aspects fire ground operations, as soon as possible.

Fire Department Records

In the main report, the section on "Records" provides a general overview of what records must be maintained to be compliant with WorkSafeBC, and what records should be maintained for good business practices.

The Department's training records are maintained in combination of electronic and hardcopy format. The Department uses a software program called "Firehouse" to record and store its training records. Hard copy records (outside certifications, drivers' abstracts, etc.) along with a personal folder for each member, are also maintained by the Department. A sample review of

both the electronic and hardcopy records of several members verified that the Department is currently maintaining appropriate training records and is meeting its mandated requirements.

The Department should be commended for its commitment to utilizing its existing RMS software and for maintaining good training records.

Fire Hall Facilities

The NVFD fire hall was built within the past three years and is approximately 12,000 sq. ft. The building has all the convenience, size and standard equipment of a modern day fire hall. According to the Fire Chief, other than the normal new building issues of any recently constructed building, they are very pleased with the hall. The fire hall is not used for any other community purpose.

Minor fire hall maintenance is conducted in-house, with major repairs contracted out. Regular cleaning is provided by a senior member (no longer an active member) of the Department, who is paid for his work.

According to the Fire Chief, the fire hall is centrally located within the fire protection district and enables the Department to provide good responses throughout the coverage area. At the present time, the building is centrally located in relation to the firefighters responding from their home to the hall.

Fire Apparatus and Equipment

The chart below outlines the fire apparatus currently in use by the Department:

Type	Manufacturer	Date of Manufacture	Pumping Capacity gpm	Tank Capacity (gals)	NFPA/CSA Compliant	ULC Compliant
Pumper	Anderson/International	1990	840	800	Not current	4900
Pumper	Superior	1999	1050	800	Yes	89C
Mini Pumper/Rescue	Hub/International	2011	415	400	Yes	n/a
Tender	Profire/International	2001	415	1700	No	n/a
Tender	Profire/Freightliner	1993	415	1300	No	n/a

The Department currently has adequate fire apparatus to meet the FUS requirements and to provide its mandated services. Apparatus maintenance is primarily done in-house by a member who is a certified mechanic. Major issues are contracted to Berks Inter Truck and annual pump testing is contracted out to ProFire. The general condition of the apparatus appeared good and maintenance records, including recent pump tests, were available for inspection. The 1990 Anderson will no longer be accredited by the Fire Underwriters towards the Department's pumping capacity, but according to the Fire Chief, is still serviceable.

The 10-year capital plan anticipates the 1990 Pumper being replaced in 2016, with the 1999 Pumper being replaced in 2019 and the 1993 Tender being replaced in 2022. The Department has a sound plan for maintaining a modern fire apparatus fleet.

Annual ladder testing is contracted out to Inter Mountain; records were available for inspection and were up to date. It should be noted that s. 31.37 of the *Occupational Health and Safety Regulation* requires that ground ladders be “used, tested and maintained” in accordance with NFPA 1932.⁷ NFPA 1932 requires at least annual testing of ground ladders; it also establishes a regime for ladder inspections which needs to be followed.⁸

SCBA testing is undertaken in-house (to a “field level” qualification) with major issues and flow testing contracted out to Guillevin Int. Records were available for inspection and were up to date.

According to the Fire Chief, once the 1990 Pumper is replaced in 2016, the Department will have adequate and appropriate apparatus and equipment to provide its mandated services and be in compliance with Fire Underwriter requirements – we concur with this view.

(Please see Appendix 2 in the main report for detailed recommendations on equipment testing and records keeping)

Fire Department Responses

Over the four-year period from 2012 to 2015, the NVFD responded to a total of 560⁹ emergency calls, or an average of 140 calls per year. The NVFD is the busiest of the six departments we reviewed. In addition to fire suppression duties, the Department provides low angle rope rescue, wildland-urban interface suppression, FMR, and attends motor vehicle incidents including providing auto extrication services.

The Nanoose fire protection area consists of primarily rural and urban residential structures. In addition, their fire protection includes two gas stations, condos, a strip mall, a golf club and recreational hall, two marinas and accompanying facilities (including fuel docks), and the DND Torpedo Test Facility on Nanoose Bay. A large new housing development is also currently planned within the district.

On average, a daytime (8:00 a.m. to 6:00 p.m.) emergency incident is attended by 8 to 14 volunteers. In comparison, a similar night time incident (6:00 p.m. to 8:00 a.m.) will be attended by 20 volunteers. The high level of daytime attendance is uncommon and would be envied by

⁷ National Fire Protection Association, *Standard on Use, Maintenance, and Service Testing of In-Service Fire Department Ground Ladders* (2015 ed.). The regulation actually refers to the 1989 edition of the standard, as WorkSafe BC has failed to update its references in Part 31 for decades. The common approach is to use the most recent edition of the relevant NFPA standard.

⁸ See NFPA 1932, Chapter 6 and Chapter 7.

⁹ Note that the response data is that which has been supplied by the North Island 911 Corporation and may not include all responses.

many volunteer and composite departments throughout the province. The NVFD's evening attendance during incidents is good and provides adequate staffing to appropriately deal with most incidents that the Department will encounter.

The NVFD is part of the District 69 mutual aid agreement with four other RDN departments, Parksville, Qualicum Beach, Lantzville and Deep Bay. The Department also has an unwritten agreement with the Department of National Defence testing facility for mutual aid provided they are available. The Fire Chief reports that, when called upon, its mutual aid partners can provide adequate additional resources. The Department is confident it has adequate apparatus, staffing and training to safely respond to most common emergency incidents that might occur within its fire protection area. The only exception to this would be a major wildland-urban interface fire within the fire protection district, which would likely be beyond the Department's capability and require considerable mutual aid support and the assistance from the BC Wildfire Service.

The Department had a pre-fire planning program in place and had completed several pre-plans but have recently abandoned the program and are starting a new program which they hope will be more successful. According to the Fire Chief, they do conduct regular familiarization tours and have identified approximately 25 buildings for which they need to develop pre-fire plans as required by the Playbook for Interior Operations Service Level departments.

It should be noted that the Department had a Fire Underwriters' review conducted in 2013. It generally did quite well. The Fire Underwriters break the rating into two categories:

- residential rating (DPG); and
- commercial / multi-family rating (PFPC).

The DPG rating is on a five-point scale (with one being the best rating), while the PFPC rating is on a 10-point scale (again, with one being the best rating). The ratings achieved in the 2013 review were as follows:¹⁰

¹⁰ Fire Underwriters, *Nanoose Volunteer Fire Department: Fire Protection Study* (2013), at pp. 104 and 106.

DPG Rating:

Table 11.2-2 Summary of Dwelling Protection Grades (DPG) – Nanoose Bay Fire Protection Area

Sub-districts	Previous DPG	2013 DPG	Comments
Nanoose Fire Station – Nanoose Peninsula Water System	3A	3A	Hydrant Protected – Personal Lines insured properties within 300m of a hydrant on the Nanoose Peninsula water system and within 8 road km of Nanoose Fire Station
Nanoose Fire Station – Englishman River Water System	3A	3A	Hydrant Protected – Personal Lines insured properties within specified distances of a hydrant on the Englishman River water system and within 8 road km of Nanoose Fire Station
Nanoose Fire Station	3B	3B	Fire Hall Protected – Personal Lines insured properties not within specified distances of a hydrant on the either water system but within 8 road km of Nanoose Fire Station
Areas beyond 8km road response distance	5	5	Unprotected – Personal Lines insured properties not within 8 road km of Nanoose Fire Station

PFPC Rating:

Table 11.1-8 Summary of Public Fire Protection Classification (PFPC) – Nanoose Bay Fire Protection Area

Sub-districts	Previous PFPC	2013 PFPC	Comments
Nanoose Fire Station – Nanoose Peninsula Water System	8	5	Hydrant Protected – Commercial Lines insured properties within specified distances of a hydrant on the Nanoose Peninsula water system and within 5 road km of Nanoose Fire Station
Nanoose Fire Station Englishman River Water System	Not previously graded	5	Hydrant Protected – Commercial Lines insured properties within specified distances of a hydrant on the Englishman River water system and within 5 road km of Nanoose Fire Station
Nanoose Fire Station	9	9	Fire Hall Protected – Commercial Lines insured properties not within specified distances of a hydrant on either water system but within 5 road km of Nanoose Fire Station
Areas beyond 5km road response distance	10	10	Unprotected – Commercial Lines insured properties not within 5 road km of Nanoose Fire Station

For residents living in areas protected by fire hydrants, the DPG 3A rating means that they will be saving as much as 60% on their fire insurance, while those in non-hydrant protected areas, but within 8 km. of the fire hall, will be saving in the range of 40 – 50 %. For a home with a replacement cost of \$250,000,¹¹ the average savings will range from ~\$1,800 (DPG 3B) - \$2,400 annually (DPG 3A).

¹¹ Insurance replacement costs are very different from assessed values for tax purposes. The replacement cost is based on the square footage, multiplied by the cost/sq. foot to rebuild (typically between \$175 - \$200/sq. ft.). A 1,500 sq. ft. house would have a replacement cost of about \$250,000.

The PFPC 5 commercial rating for hydrant-protected commercial/multi-family properties is very strong for a paid-on-call department. Commercial and multi-family properties in the hydrant-protected areas and within 5 kilometres of the fire hall will save about 40% on their insurance costs.

Recommendation: That the Department should develop comprehensive pre-fire plans for each of potential significant fire hazard situations to better prepare it to manage the situation with limited resources until such time as additional resources (mutual aid) can arrive at the incident.

Volunteer Recruitment and Retention

The average age of members within the Department is estimated to be mid- to late-thirties. The average time of service for the officer group is 10 years and amongst the firefighters, about 11 years. However, the median (50th percentile) is three years for firefighters. The average annual turnover of volunteers is estimated at two to three members per year. Given these numbers, the NVFD is considered a low turnover department and while having a mature officer group has a more junior or inexperienced firefighter group. With an overall membership of 23 members (22 of whom are active and responding), the Department has generally been successful with its recruitment practices. We would suggest however that the Department consider increasing its membership by three to four members to ensure more continuity and guard against unexpected or unanticipated above average number departures or retirements.

According to Fire Chief, the Department's annual recruitment drive consists of signboards, occasional newspaper ads and letters home to parents through the school children. In addition, the Department does accept junior fire fighters which, if successful, will assist in providing a continuous supply of new members in the future. The Fire Chief, his officers and all members of the Department are to be congratulated for their ongoing commitment to providing fire service to the community of Nanoose.

The section on volunteer recruitment and retention, found in the main report, provides additional thoughts and ideas on the subject and may provide some insight into some useful tools to assist in dealing with this matter.

Budgets and Financing

The Fire Chief and Board Treasurer, in consultation with the other Chief Officers and with input from all members, develop the Department's draft operational budget. Once formulated, the Fire Chief and the Treasurer present the draft budget to the Fire Protection Society Board Members for approval and finally to a Fire Protection Society public meeting. According to the Fire Chief, the public meeting primarily consists of fire department members and spouses although they generally do get 10 to 15 members of the general public who attend. RDN staff

bring forward and include any capital requirements into the final budget. Final approval of the budget rests with the RDN Board of Directors.

The 2015 approved budget was \$788,733 of which \$11,000 was a federal grant in lieu, \$65,000 was drawn from the equipment reserve fund and \$107,883 was surplus from previous years. The actual tax requisition for 2015 was \$604,850. Of this amount, \$85,000 was slated for transfer back into the equipment reserve fund. The Department reports it generally expends its annual budget and that any small surplus is typically used to purchase needed equipment at year end.

Nanoose is a suitably funded Department, with a large tax base. It has developed training incentives for its members which include increasing the level of individual training pay as its members progress through each higher level of the required certifications. Firefighter rates can increase from the base level of \$8.00 per hour to a fully qualified member receiving \$20.00 per hour. This incremental progression system has assisted in encouraging members to accept training assignments and has resulted in the Department's overall training level being quite high in comparison the most other departments in the area. In addition, members receive an annual training bonus for having an 80% or better training night attendance record.

Discussion on the 10-year capital plan and future apparatus replacement can be found in the "Apparatus and Equipment" section of this report.

Legal Structure and Bylaw Review

The legal structure for the Department is fairly standard given the manner in which the fire service is operated in the RDN:

- (a) There is a local service area conversion bylaw, under which the RDN is authorized to provide fire suppression and other emergency response services, and operate, or contract for, a fire department: *Nanoose Fire Protection Service Establishment and Boundary Amendment Bylaw No. 991, 1995* (the "Service Bylaw");
- (b) There is an operational bylaw which grants the Department the authority to respond to and manage incidents, and which addresses certain administrative matters: *Regional District of Nanaimo (Nanoose) Fire Services Regulatory Bylaw No. 1003, 1996* (the "Operational Bylaw"), which was amended in 1997 and 2007;
- (c) There is a service agreement (the "Service Agreement"), dated as of 24 January 2006, between the RDN and the Society relating to the provision of fire and emergency response services by the Department; and
- (d) There are the separate constitutional documents under which the Society itself is incorporated and operates. The constitutional documents of the Society have not been reviewed in detail.

The main report contains some suggestions and recommendations which, if adopted, would result to changes in the Operational Bylaw. It also contains some recommendations, particularly in relation to the Playbook, which will impact the operational bylaws of all departments, as well as the Service Agreement. Those comments are not repeated here.

In reviewing the bylaws and agreements, nothing in this report should be construed as legal advice. The RDN and Society should review any issues identified in this report with legal counsel.

Individual Bylaws

Service Bylaw

The Service Bylaw converted the specified area to a local service area in 1995, in accordance with the provisions of *Municipal Act* (B.C.). The service authorization language in section 2 permits the RDN to provide a broad-based service, covering fire protection and “emergency responses to other classes of emergency.” The RDN may provide the service directly or by “otherwise obtaining” it.

The Service Bylaw established the boundaries for the local service area within which the Department operates, while excluding certain properties previously within the NVFD’s coverage area.¹² The participating areas for service are portions of Electoral Areas “E”, “F” and “G” and the maximum amount of property taxes which may be collected in connection with the service is the greater of \$274,000 or a property tax rate of \$0.444/\$1,000 of net taxable value of land and improvements.¹³ The 2016 tax rate for residential properties in the service area is expected to be \$0.324/\$1,000 of assessed value, which is the lowest rate amongst the RDN-contracted departments.

Operational Bylaw

The Operational Bylaw is one of the fundamental constitutional documents which underpins the Department’s operational powers, mandate and administrative processes. As a starting point, it needs to be recognized that, for local governments, fire departments are an optional service.¹⁴ Unlike police and ambulance, which are established under and/or operate pursuant to provincial statutes and have a uniform range of powers across the province, a fire department only has the power and authority granted to it under the local bylaw which creates and defines its operations. Outside of its operating jurisdiction – which, in the case of a service established by a regional district, is the boundaries of the local service area¹⁵ – a fire department has no specific authority

¹² Bylaw No. 991, s. 2, 3, 4 and 5 and Schedules ‘A’ through ‘C’.

¹³ Bylaw No. 991, ss. 5 and 6.

¹⁴ The only exception to this is the City of Vancouver, which is required to maintain a fire department pursuant to the terms of the *Vancouver Charter* (B.C.).

¹⁵ For a fire service established by a municipality, the boundaries typically align with the municipal boundaries. The local service area for the NVFD was established under the Service Bylaw.

to act at or to respond to an incident. Care must be taken, therefore, to ensure that the Department has the full range of powers needed to respond effectively to incidents within its jurisdiction; where it is responding outside of its ordinary jurisdiction, express consideration should be given to the source of the Department's powers to respond to and operate at an incident – whether in a mutual or automatic aid agreement, under a fire service contract or in support of another emergency response agency, such as the BC Wildfire Service.

Similarly, there is no standard range of services defined for a fire department. A department is authorized to provide only those services which are stipulated in its bylaw. Given that fire departments are the only “all hazards” response agency available to local government, we recommend that both the grant of powers and authorization to respond to incidents be very broadly cast, but that their exercise be made subject to training and the availability of necessary personnel and equipment.¹⁶

There are slight variations in the Operational Bylaw of the Department when compared with the comparable bylaws of other RDN departments – a result of these bylaws being passed individually at different points in time. Of the six departments reviewed, the NVFD's Operational Bylaw is one of the oldest. There are a number of areas, such as the grant of operational powers, where this bylaw is less sophisticated or comprehensive, than that of some neighbouring jurisdictions (e.g., Dashwood). Various of the statutory references obviously are also out of date (e.g., the *Municipal Act* had been succeeded by the *Local Government Act*): these issues are not expressly enumerated below.

In the main report, we are recommending that the RDN utilize the approach prevalent in other jurisdictions, and adopt a single, uniform operational bylaw empowering the various RDN departments to operate at incidents, and providing for uniform administrative processes and definitions of mandate (including the process for establishing the Service Level, as required by the Playbook). Specific recommendations are made in the main report regarding the matters to be covered in such a “master” operational bylaw.

The Department's Operational Bylaw also includes some “fire prevention matters” (specifically, a section dealing with “Maintenance of Premises”). This issue would need to be reconstituted in a separate fire prevention bylaw covering the Nanoose fire service area, if a single “operational powers” bylaw is adopted by the RDN.

In relation to the Department's Operational Bylaw, we would note as follows:

- The definition of the term “Incident,” which is a trigger for the activation of the Department's emergency powers, is generally good (and essentially stands as a listing of “services” provided as well¹⁷ – though see below). The categories could be expanded

¹⁶ There may also be a need for additional authorizations to provide some services – for example, providing “emergency health services”, as contemplated by the *Emergency Health Services Act* (B.C.), requires appropriate training and certification and an agreement with the Emergency Health Services Commission.

¹⁷ The list was amended in 1997 to include first medical responder services: *Regional District of Nanaimo (Nanoose) Fire Services Regulatory Amendment Bylaw No. 1003.01, 1997*.

to include the provision of mutual or automatic aid and consideration should be given to possibly expanding the definition to include any other situation to which the Department has responded, whether alone or in conjunction with other emergency response services (e.g., with police and ambulance).

- There should be a separate operative section expressly enumerating the services that the Department is expected or authorized to provide (subject to the availability of personnel, apparatus, equipment and training). The definition of “Incident” could be revised accordingly and limited to describing the types of responses which trigger the Department’s powers.
- The obligations and powers of the Fire Chief are set out in section 3, which was revised in 2007.¹⁸ The section contains a list of various matters which the Fire Chief is authorized to, may or must do. The language in the section is permissive: in each case the Fire Chief is “authorized to” undertake the particular action. Some of the powers listed in section 3 are better found in the section dealing with “Conduct at an Incident” (s. 4), since they deal with suppression and mitigation activities.
- The Fire Chief (or the Department) should be required to establish a set of operational guidelines covering all of the principal operational responses likely to be provided by the Department.
- The grant of powers to the Department for dealing with an incident are less comprehensive than those found in a number of other RDN bylaws (e.g., compare with the powers granted to the department in Dashwood under Bylaw No. 1390). These types of bylaws usually include:
 - a power for the Department to access any land or premises in connection with an incident;
 - a power to cross over or station on properties to gain access to an Incident; and
 - the power to commandeer equipment, etc.
- With respect to incident command (s. 4(1)) it usually is more useful to require the Department to develop an appropriate set of operational guidelines which deal with incident command and then empower the “Incident Commander” (as opposed to just the Fire Chief) to exercise various powers under the bylaw and in relation to an Incident.¹⁹
- Subsection 4(6), under “Conduct at an Incident” contains a general prohibition on parking within 7.6 metres of a fire hydrant. The section does not expressly stipulate that

¹⁸ *Nanose Bay Fire Protection Service Regulatory Amendment Bylaw No. 1003.02, 2007.*

¹⁹ Seniority of rank is not the only determinant of who is or should be the incident commander.

it only applies during an “Incident”, and the *Motor Vehicle Act* (B.C.) sets the minimum distance at 5 metres.²⁰

- The Society and the Department should be required to develop and operate an occupational health and safety program and joint committee in accordance with the requirements of the *Workers Compensation Act* (B.C.).
- The Operational Bylaw includes a fire prevention provision dealing with the “Maintenance of Premises” (s. 5), which will need to be reconstituted in a separate fire prevention bylaw if the RDN moves to a single operational bylaw for all of its departments.
- In relation to enforcement (s. 6), consideration should be given to tying the bylaw to a ticketing bylaw, which would simplify the Department’s enforcement activities.
- There is no provision dealing with the Department’s jurisdictional limits. It is usual to stipulate the Department’s jurisdictional limits and identify any exceptions that are permitted, including:
 - Under the terms of a written service contract or mutual or automatic aid agreement;
 - Through some form of authorization process (e.g., with the RDN’s approval);
 - In support of the BC Wildfire Service (which may request assistance from local fire departments under and in accordance with its operational guideline 1.06.01);
 - Under a task authorization number from the Provincial Emergency Program; and
 - In relation to an incident on or near the boundary of the service area which, if left untended, may pose a threat to the service area. In the latter case, provided that such area is under the RDN’s jurisdiction, the RDN may authorize the Department to operate at the scene of such an incident. Before entering any other jurisdiction (e.g., the boundaries of a municipality or another regional district), there needs to be an agreement in place permitting such a response to occur.

If individual operational bylaws are to be retained, each will also need to be updated to address Playbook issues, including the authority to enter premises to conduct pre-planning for interior attack operations. We also recommend that language be included in these types of bylaws specifically noting that the service is provided by volunteers or paid-on-call firefighters, and that any particular incident response may be adversely affected by a poor or low turnout. The Department also should expressly be given the power to limit its emergency response activities in relation to any given incident, based on the crews, apparatus and equipment which have responded.

²⁰ *Motor Vehicle Act* (B.C.), s. 189(1)(d).

Service Agreement

The Service Agreement is substantively the same as the form of agreement used with other RDN fire services. This form of agreement requires updating to address a number of issues, including Playbook matters. A discussion regarding this form of agreement and recommendations regarding its content are found in the main report.

Mutual Aid Agreements

The Department is covered by a mutual aid agreement, dated 1 August 2010, which includes four other RDN Departments, as well as departments from Parksville, Qualicum Beach, Lantzville and Deep Bay. As this agreement covers five of the six RDN-contracted departments, it has been reviewed in the main report. The one item that the Department probably should note, is that the Society likely should be a separate party to this mutual aid agreement.

In relation to responses provided (or assistance received from) the DND, the Regional District and society should formalize the mutual aid arrangements, which currently are not documented.