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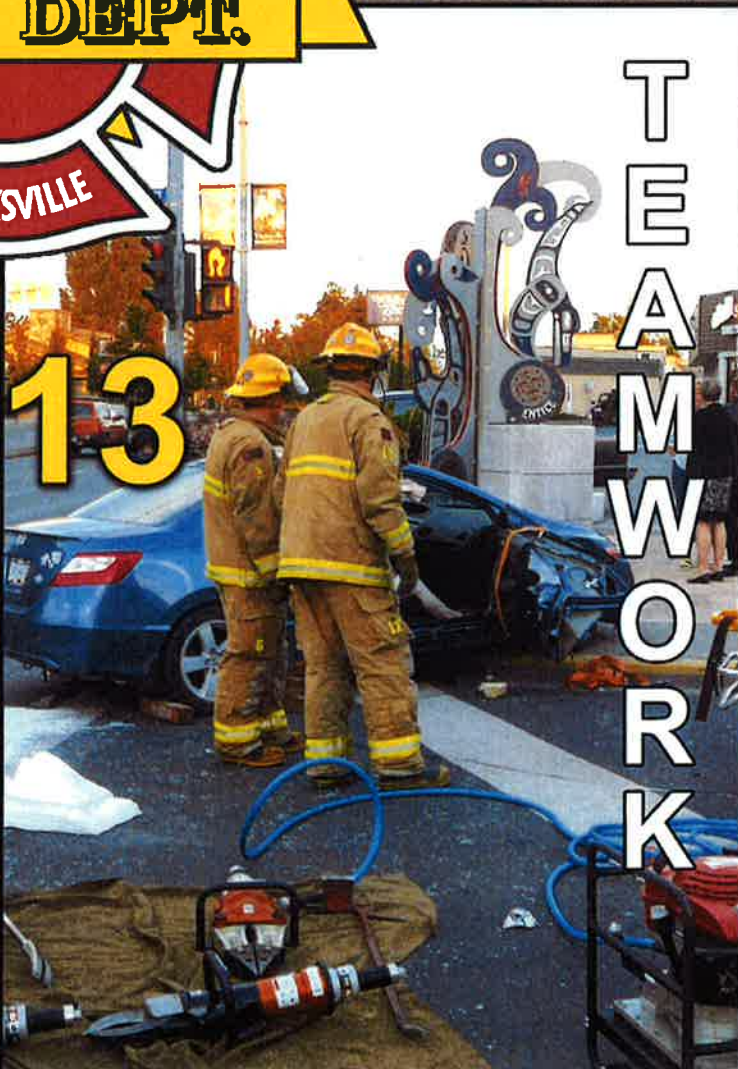
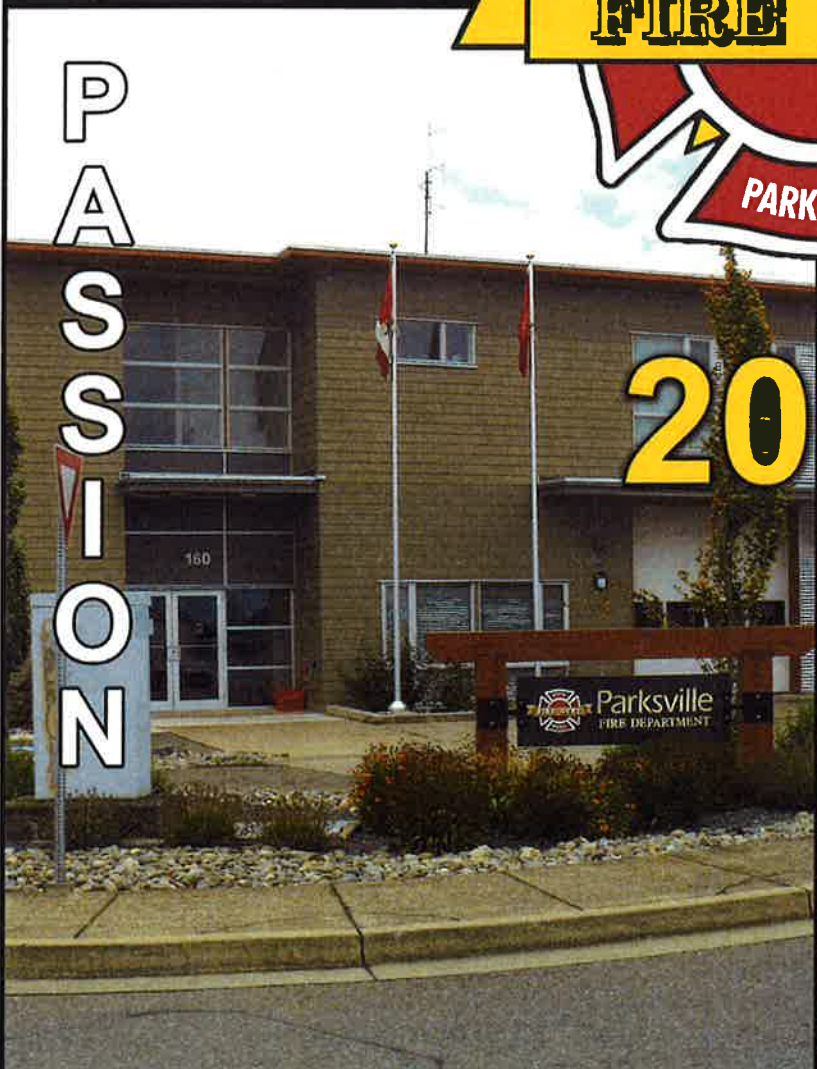
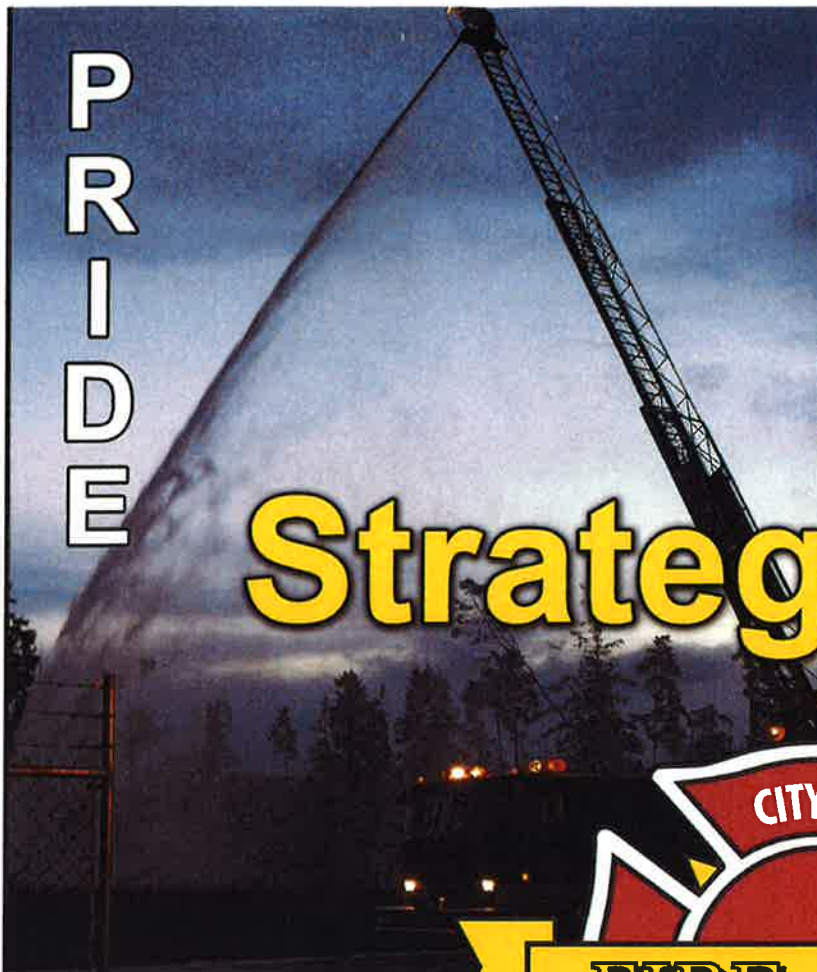
Strategic Plan



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2013



STRATEGIC PLANNING COMMITTEE EXECUTIVE SUMMARY

STAFFING:

Staffing includes reviewing administration, fire prevention, pre-planning, operations, hall/equipment maintenance, and training. Also includes section on succession planning for key fire department positions at both the staff and volunteer levels. The following recommendations are a result of committee discussions:

1. Develop retention strategy and related policies to promote the benefits for members to remain as members of the department.
2. Continue to provide training opportunities for officers and senior firefighters to gain skills necessary to move up in the organization and fill more senior roles in both the volunteer and career ranks.
3. Review system of compensation with input from department members on a bi-annual basis as a component of the overall department retention strategy.
4. Establish a system of casual employees to utilize for special projects and provide funding to sustain such a program.
5. Funding for previously identified fourth position is re-established in the 2014 operating budget.
6. Review the position of the Emergency Planning Coordinator and increase additional time from a .4 FTE and establish plans to find a deputy EPC upon retirement of the fire chief.

FIRE HALL FACILITIES:

Facilities include the existing fire hall and training ground as well as identifying any future needs for the efficient delivery of fire service. The following recommendations are a result of committee discussions:

1. Conduct needs assessment for space requirements to determine future expansion of the fire hall facility on a five-year cycle starting in 2018. This would include the need for a second fire hall location and building.

2. Install lighting in parking lot area to improve safety for responding firefighters. (2014)
3. Consider redesign of front visitor parking area to improve vehicle movements on front apron of the fire hall.
4. Continue with plans for improvements to fire department training grounds. (2013-2014)
5. Begin discussions with other local fire departments regarding funding and use of training grounds.

FIRE APPARATUS/EQUIPMENT:

Apparatus/Equipment – Review current state of apparatus and equipment and make recommendations for future purchase required to maintain current and future needs of the City of Parksville. The following recommendations are a result of committee discussions:

1. Formalize an Apparatus Replacement Policy (draft attached) to ensure that all major pieces of apparatus are accounted for in the City of Parksville financial plan. Recommend a twenty-year replacement plan.
2. Review apparatus need on a regular basis (five-year cycle) and provide resources for additional equipment through the budgetary process.
3. Continue with plans for the replacement of SCBA in 2018.
4. Continue program of replacing communication equipment on a regular basis to ensure all equipment is reliable and able to communicate effectively with mutual aid partners.
5. Review equipment needs for technical rescue operations and work with public works department on trench rescue capabilities.
6. Continue to work with mutual aid partners to standardize equipment that will improve interoperability between departments during larger scale incidents.
7. Complete installation of on-board computers in all apparatus.
8. A method of fire hose testing be implemented to ensure that all fire department fire hoses are ready for use at emergency scenes.

DELIVERY OF SERVICES:

Delivery of Services – Review current services. Determine if the current level of service is adequate or should be adjusted to reflect the needs of the community. The review will look at the following issues but is not limited to these items:

- Fire service agreements
- Alarm response
- Motor vehicle incidents
- Fire suppression
- Technical rescue
- Medical aid calls
- HazMat response
- Fire prevention inspections/public education
- Training

The following recommendations are a result of committee discussions:

1. Maintain current level of fire service to outside areas.
2. Maintain current level of medical response. Do not expand without policy direction from Council.
3. Evaluate technical rescue program for sustainability.
4. Addition or reallocation of resources to meet frequency of inspection or change frequency of inspection policy. Link to staffing plan.
5. Establish priorities and/or goals for public education programs as well as identify additional resources that may be needed to sustain programs.
6. Allocate resources to accomplish pre-fire plan goals and objectives. Link to staffing plan.
7. Allocate additional staff resources to supplement current training resources. Link to staffing plan.

HEALTH and SAFETY PLAN

Health and Safety Program – Review current state of program and identify any future needs for the efficient delivery of health and safety related issues for department members. This would include but not limited to the following:

- Firefighter fitness programs
- Safety committee
- Firefighter health programs
- Hearing programs
- Respirator fit testing
- Firefighter medicals

The following recommendations are a result of committee discussions:

1. The occupational health and safety program for the department be reviewed on an annual basis by the occupational health and safety committee and recommendations be brought forward for review.
2. The delivery of an annual review of WHMIS be instituted and a regular review of the department's WHMIS program be established.
3. Funding be established to provide for ongoing medical exams for fire department members.
4. Training for safety committee members be provided on a consistent basis.
5. The department continues to promote physical fitness programs for members and makes space and funding available to help increase fitness levels of firefighters.

EMERGENCY PREPAREDNESS PROGRAM

Emergency Preparedness Program – Review current state of program and identify any future needs for the efficient delivery of emergency program related activities. Although the Parksville emergency plan is well developed, there is considerable work to be completed before Parksville can call itself "prepared". The following are

recommendations which if approved, would move the emergency program towards completion.

1. The fire chief is currently both supervisor and deputy to the EPC. The fire chief does not have the time available in his position to support the EPC as a deputy. As a .4 position, the EPC currently does not have the time available to complete projects necessary to sustain the emergency program. The EPC currently spends a majority of the .4 position acting as a volunteer coordinator for the OESS and ECT. In order to address struggles with volunteer management and the need to make time available for other aspects of the emergency program supporting the EPC, a deputy EPC/volunteer coordinator position is required. This proposed position could be partly funded by the Regional District of Nanaimo and the Town of Qualicum Beach, as the volunteer coordinator portion looks after the needs of District 69, not just the City of Parksville.
2. Develop and implement a recruitment and retention strategy for both the OESS and ECT to ensure an adequate pool of trained volunteers are available for emergency response in the event of any large scale disaster.
3. Develop a training program to support the emergency program by reviewing the current program and future needs. Ensure that the new program is adequately funded in order to provide a successful program.
4. Develop a strategy for increasing the profile of emergency preparedness in the community.
5. Continue to develop the relationship with regional partners creating a consistent approach to emergency management within District 69.
6. Work with regional partners to create a regional recovery program for District 69.

**PARKSVILLE VOLUNTEER FIRE DEPARTMENT
STRATEGIC PLANNING PROCESS
COMMITTEE MEMBER LIST**

	Name	Position
Chairman	Doug Banks	Fire Chief
Members	Marc Norris	Deputy Chief
	Tyrone Heigh	Assistant Chief
	Aaron Callaway	Lieutenant
	Mike Davidson	Captain
	Wade Hoard	Firefighter
	Steven Liedl	Firefighter
	Mike Matzanke	Firefighter
	Eric Miller	Captain
	Liz Olson	Firefighter
	Paul Roy	Firefighter
	Larry Schug	Senior Firefighter
	Marty Wickman	Firefighter

TERMS OF REFERENCE

The purpose of this Strategic Master Plan is to provide the Mayor, Council, and Parksville Volunteer Fire Department with a strategic guide or roadmap for the future of the department. Additionally, this document will provide Council with the basic understanding of the Parksville Volunteer Fire Department as it exists today, including physical resources, staffing, training, service levels, and customer service.

A committee representing members of the Parksville Volunteer Fire Department was established to assist with the preparation of a workable strategic master plan for 2013 to 2018.

The report will look at the following area:

1. **Staffing** – Staffing would include reviewing administration, future casual positions, future needs, volunteer paid on-call system, recruitment and retention. Also includes section on succession planning for key fire department positions at both the staff and volunteer levels.
2. **Facilities** – Facilities would include the existing fire hall, training ground, as well as identifying any future needs for the efficient delivery of fire service.
3. **Apparatus/Equipment** – Review current state of apparatus and equipment and make recommendations for future purchases required to maintain current and future needs of the City of Parksville. The committee will provide comments on the current state of maintenance of both apparatus and equipment and make recommendations to improve or remain the status quo.
4. **Delivery of Services** – Review current services. Determine if the current level of service is adequate or should be adjusted to reflect the needs of the community. The review will look at the following issues but not limited to the following
 - Fire service agreements
 - Alarm response
 - Motor vehicle incidents
 - Fire suppression
 - Technical rescue
 - Medical aid calls
 - HazMat response
 - Fire prevention/inspections/public education/pre-fire planning

- Training

5. **Health and Safety Program** – Review current state of program and identify any future needs for the efficient delivery of health and safety related issues for department members. This would include but not limited to the following:

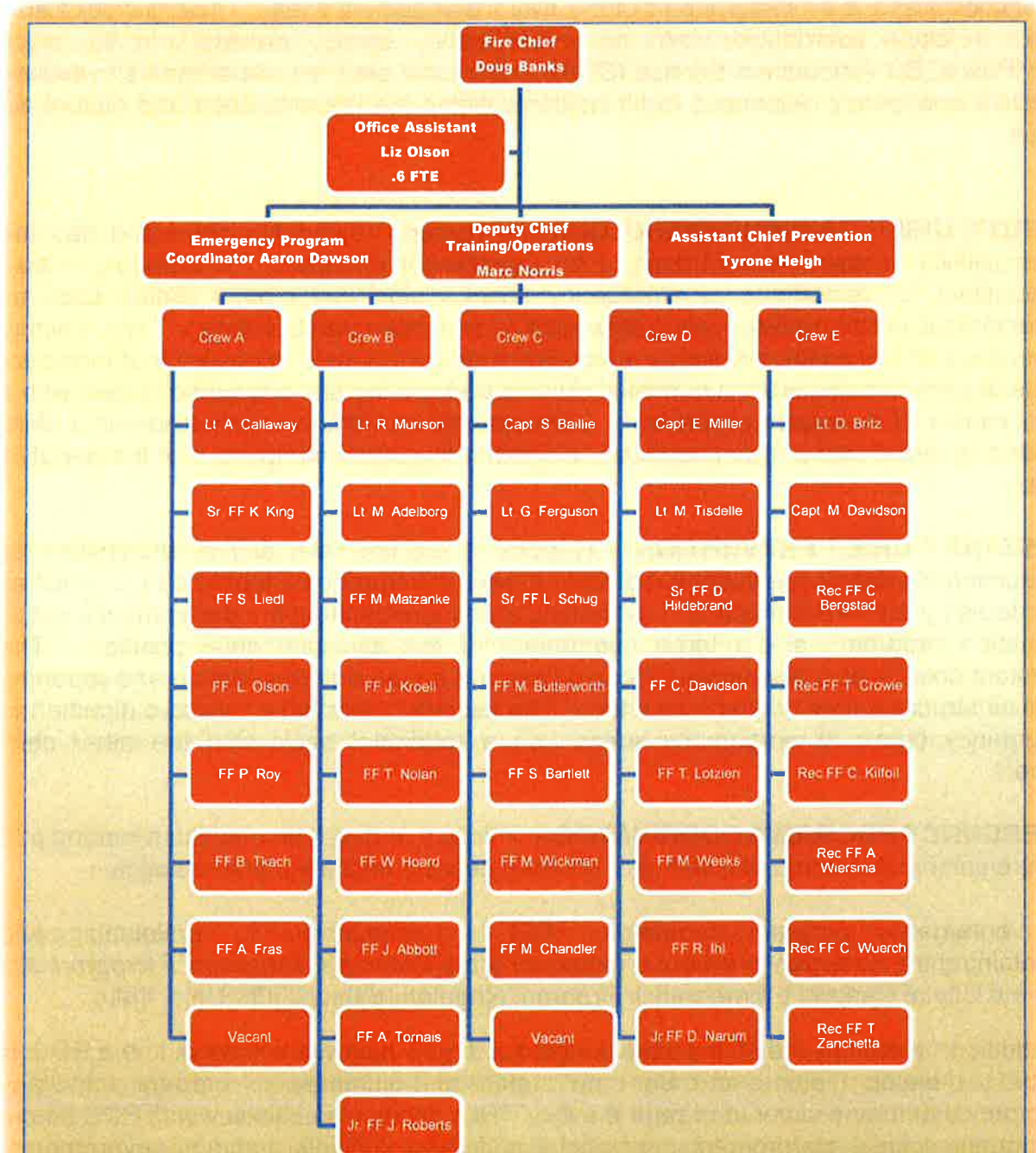
- Firefighter fitness programs
- Safety committee
- Firefighter health programs
- Hearing programs
- Respirator fit testing
- Firefighter medicals

6. **Emergency Preparedness Program** – Review current state of program and identify any future needs for the efficient delivery of emergency program related activities. The committee will assess the current status, provide a report on the current conditions within the fire department compared to the industry standard as well as currently established policies and procedures and where appropriate, make recommendations to Council on any changes.

The committee will present a report to Council. The report will be the basis for preparing and implementing a strategic plan for the Parksville Volunteer Fire Department in meeting its legislated requirements and the expectations of the community.

STAFFING

The following organizational chart will outline the reporting structure of the department.



FIRE CHIEF – Reports to the chief administrative officer and is responsible for the overall operation of the fire department and the City of Parksville emergency preparedness program. The fire chief liaises with other department heads in the organization and is an integral part of the City's management team. The fire chief also works in close coordination with other emergency service providers in the area; RCMP Police, BC Ambulance Service (BCAS), and local area fire departments to ensure effective emergency responses to all incidents within the fire protection and mutual aid areas.

DEPUTY CHIEF TRAINING/OPERATIONS – Reports to the fire chief and has the responsibility to coordinate all training for department members. The deputy is also responsible for operations at emergency scenes along with other duties such as development permit reviews, civic addressing, and other related duties. The training component of this position requires a significant amount of time to ensure that members of the department acquire the essential skills to perform the tasks required to deal with a wide variety of emergency situations. Development of officers with leadership skills needed to direct crews at emergencies is another important component of the deputy's duties.

ASSISTANT CHIEF PREVENTION – Reports to the fire chief and is responsible for conducting life safety inspections required to meet the frequency adopted by Council as mandated by the Fire Service Act. Conducting and coordinating the department's public education programs are a large component of the assistant chief position. The assistant chief is also responsible for conducting fire cause determination and reporting after all structure fires or dollar loss fires. The assistant chief also provides direction to emergency crews at emergency scenes on a rotational basis with the other chief officers.

EMERGENCY PROGRAM COORDINATOR – This is a .4 part time position reporting to the fire chief that is combined with the .6 senior bylaw compliance officer position.

The emergency program coordinator (EPC) is responsible for developing and maintaining the emergency program directed by the Provincial Emergency Program Act and the City of Parksville Emergency Program Regulatory Bylaw 2006, No. 1414.

In addition to ensuring that the above noted act and bylaw are followed, the EPC is tasked to develop plans and train both staff and volunteers to prepare for any emergency that may occur in or near the City. This position also liaises with EPC's from neighbouring local governments, provincial and federal officials and non-government agencies to develop a regional approach to mitigating, responding and recovering from the potential of a large scale emergency.

Parksville is the home of the volunteer based Emergency Support Services (ESS) and Emergency Communications Teams (ECT) for the Oceanside (District 69) areas that

are shared by the City, Town of Qualicum Beach and the Regional District of Nanaimo. Although these teams are funded equally by the three local governments, the Parksville EPC is responsible for supervision and coordination of these two teams on behalf of the neighbouring governments.

OFFICE ASSISTANT – Reports to the fire chief and provides assistance to all staff members of the department and conducts routine office procedures. Duties include data entry, filing, reception services, etc.

OFFICER POSITIONS – The department currently has nine officer positions which are made up of three captains and six lieutenants. These are typically the department's most senior and experienced members. The officers are responsible for the delivery of all the department's routine training as well as being the company officer in charge of crews responding to emergency incidents. The officers will also act as duty officer for the department on weekends and holidays as noted below.

DUTY OFFICER SYSTEM – A duty officer system has been in place since the early 1990's to provide 24/7/365 coverage by a member of the fire department. This is an effective program for the department as the skill levels of the officers are maintained at a higher level due to the increased level of responsibility when providing coverage on weekends. The duty officer position is rotated through the officer core which is currently made up of three captain and six lieutenant positions.

VOLUNTEER/PAID CALL POSITIONS – The department currently has 40 volunteer/paid/call positions. The target number for the department is 40. The members are divided into five crews for the purposes of scheduling training. This gives the department evenly balanced crews of eight members per crew with the exception of the recruit firefighter crew. A maximum of eight members per crew is the optimum crew strength for training purposes as it ensures each member has the opportunity during regular training to get the "hands on" experience needed to maintain an acceptable skill level.

The turnover in the volunteer ranks seems to have slowed in the past two years; however, it is always difficult to determine how long members will serve the department. In the past, many members have left the department to find employment opportunities not readily available in the area. In other cases, members have left the department as they have found difficulty in achieving a balance between work, family and fire department commitments.

FUTURE NEEDS/SHORT TERM - The current staffing level of volunteer firefighters is considered adequate for the foreseeable future in regards to emergency response. While call volumes have seen a slight downward trend since 2009, it is anticipated that requests for service will continue to increase over the longer term. At this time the membership level is sufficient to ensure an adequate response to all emergency calls. Should call volume levels increase, there will be an impact on the volunteer members of the department and their ability to provide adequate coverage. Of particular concern are daytime responses during regular working hours. Many of the volunteer members

are not able to respond during regular working hours or may only be able to respond to a limited number of calls. This does not provide the department with a consistent, reliable turnout during daytime hours.

One area of increasing concern for the department is the routine maintenance of many of the small tools and equipment used by the department. At this time the department relies on a combination of contracting some of the maintenance to authorized service companies, mechanical services provided by City of Parksville public works staff, and volunteer department members. Using contract services and Public Works covers off the larger items which need to be addressed to ensure the major pieces of equipment are in operational condition. Much of the small equipment such as SCBA, radios, gas monitors, etc. are maintained by the members of the department. There are some items such as regular testing of fire hose not completed by members due to time restraints. The other area of concern is the record keeping aspect of all equipment maintenance which should be completed on a more consistent basis.

FUTURE/CASUAL POSITIONS - A budget was allocated for the hiring of a fourth position for the fire department which would have covered the additional maintenance requirements for the department as well as providing some flexibility to fill in for fire safety inspections during holiday relief. During budget deliberations for the 2011 budget year, Council adopted a City wide "freeze" on the hiring of additional staff. The funds allocated in the budget were removed from all future budgets. The criteria used to determine the need for this future position is still valid today and the need continues to grow as the availability of volunteers to conduct much of this work is at a premium.

The establishment of a system where current members of the department could be utilized to perform certain tasks such as hall maintenance, equipment maintenance and testing, and improving daytime response capabilities was discussed in the department's 2007 staffing plan. In addition to these issues, the number of required inspections continues to increase each year to the point where it has become difficult to meet our mandated frequency of inspections, adopted by Council, with the current resource levels. The ability to bring someone in on a casual basis as a start would assist the department to address some of the maintenance issues which continue to be a concern. A casual position would also help with required life safety inspection to meet our adopted frequency of inspections as well as important public education events, pre-fire planning, and provide holiday relief during vacation periods. Note: Some buildings require two people to inspect all systems properly.

VOLUNTEER/PAID ON CALL SYSTEM - The current clothing allowance system, in place for several years, is used to compensate members for attendance at emergency calls and training. It is in need of review. At this time, the department budgets a specific amount which gets divided among members depending on the number of emergency calls and regular training sessions each member attends. There are inequities in the system when calls extend over a long period of time. Members are "paid" the same rate no matter their experience or responsibilities at the incident.

The current clothing allowance system should be reviewed on a regular basis in order to ensure it is meeting the needs of the membership and department. Alternate systems that provide different options for remuneration of longer duration incidents may be explored based on discussions with the membership.

Members are provided an honorarium for taking additional training over and above regular Monday night training events. This is a small measure to cover any lost wages and/or holidays that members take to attend these important training sessions. In most cases, the compensation provided does not come close to matching wages members may be losing to attend required training events.

A paid/call system for compensating members that respond to emergency calls and training events was discussed previously at which time members declined and wished to maintain the system that has been in place for years.

Going to a paid/call system would have the potential affect for the membership of the department to be considered more like employees than volunteers. While this may have a positive impact in the retention of some members, it is important that the department maintain the "volunteer attitude" as long as possible.

SUCCESSION PLANNING - The following is taken from the City of Parkville succession plan adopted by Council.

Fire Chief

Risk Level – Low

- The incumbent is within three years of retirement.
- The incumbent has 40 plus years experience and City of Parkville corporate knowledge.
- The current annual salary level is + \$10,000 below the 2011 market average.
- The incumbent is very capable, has significant corporate knowledge of the organization and also brings to the City an extraordinary level of knowledge, judgment, and experience in their field. These qualities have allowed the incumbent to consistently perform at a high level. Upon retirement, this level of performance will likely not be sustainable by the deputy until further experience is gained.
- Risk is considered low as the deputy fire chief has demonstrated their potential for promotion.

Succession Plan

- Take required steps to encourage the incumbent to remain with the City as long as possible.
- Continue to provide training and mentoring to the Deputy Fire Chief.

Deputy Fire Chief

Risk Level – Medium

- The incumbent is many years from retirement and the salary is + \$17,000 below the 2011 market average but appropriate for the position given the fire chief salary.
- Workloads dictate that this is a required position which provides considerable support to the fire chief and other department staff.
- The incumbent has 20 years' experience and corporate knowledge in the fire department, ten years of which are in the current position of career deputy chief.
- The incumbent has the required knowledge and experience for promotion and at this point is the likely successor for the fire chief upon retirement.
- Risk is considered medium as there is no apparent internal candidate with required qualification and the incumbent is currently identified as the successor apparent for the fire chief position.

Succession Plan

- Take required steps to identify potential candidates from the volunteer members, identify deficiencies and provide necessary opportunities for qualification upgrades.
- Include the potential for promotion to fire chief as part of the selection criteria for recruitment and/or ongoing retention of the deputy fire chief.

Fire Department Summary

Fire Chief ← Deputy Fire Chief

Deputy Fire Chief ← Assistant Fire Chief and other volunteer firefighter officers.

In addition to the above noted succession plan for the positions of fire chief and deputy chief, the department must consider planning for eventual replacement of officers within the volunteer ranks as their careers come to an end. The current slate of officers has the following years of service and some may be within five years of leaving the department for one reason or another.

	Years' Service	Age	Anticipated Retirement (60)
Capt. Scott Baillie	20	36	24 years
Lt. Rob Murison	18	56	4 years
Asst. Chief Tyrone Heigh	14	41	20 years
Lt. Daryl Britz	14	45	15 years
Capt. Eric Miller	12 PVFD – 20 total FS	54	6 years
Lt. Mark Adelborg	12	33	27 years
Lt. Mike Tisdelle	12	42	18 years (planning to re-evaluate at age 50)
Capt. Mike Davidson	10	53	7 years
Lt. Gerald Ferguson	8	51	9 years
Lt. Aaron Callaway	9	26	34 years

The current compliment of officers is well experienced and knowledgeable and able to provide quality direction to crew members during both emergency and training events. While the department can estimate when these officers may decide to step down or leave the department, there is no certainty as we cannot anticipate changes to the members' work or personal situations which would affect their ability to remain an active member.

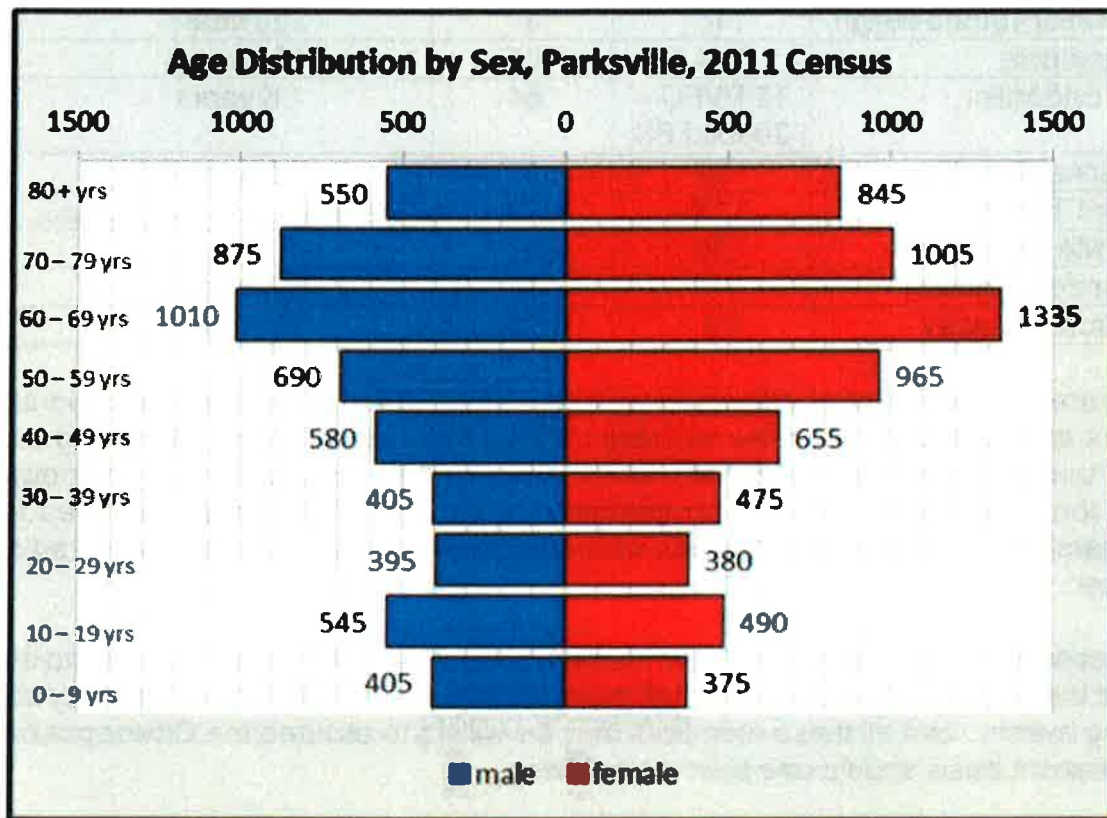
The department has designated four members as senior firefighters qualified to step in and fill the position of an officer should there not be one available for emergency calls or training events. Not all these members may be willing to assume the Officer position on a permanent basis should one become available.

At this time, the department has identified an additional three or four members with the potential to assume the position of an officer given the opportunity to take additional training and ability to gain "hands-on" experience.

RECRUITMENT AND RETENTION - Over the years, the department has developed a consistent and effective recruitment program. The program has been successful in recruiting quality members for the department. As an example, the department was successful in recruiting eleven and retaining eight new members in 2011. This was after eleven members left the department in 2010. Again in 2012, the department was able to recruit five new members to the department after openings became available with the departure of five members in 2011. The advertising campaign used to promote the vacancies in the fire department is very effective. This, along with "word of mouth" from active members in the department is effective.

The demographics of the community have the biggest impact on the recruitment of new volunteers for the department. Because Parksville has one of the oldest populations, there is less available population from which to draw potential volunteers. The ideal recruit from the fire department's perspective is between 25 and 40 years of age, well established in the community, with stable employment and plans to stay in the

community for many years. The following chart shows the breakdown of population by age and gender.



Retention of members is an ongoing issue for the department throughout the department's 70 years existence. It is not uncommon for the department to lose four to five members each year. While the department has not tracked in any great detail why members leave the department, it is typically related to one of the following issues:

1. **Lack of availability** – In this category, members find they are unable to strike a balance between work, family and fire department. Members find their work and family life consumes so much of their time they have little left to give to the department. In some cases, members have been able to return to the department after situations change and are able to free up additional time for the fire department and related commitments.
2. **Leave community for work or school** – This category covers those active members who left the community to advance their education by attending post-secondary educational institutions outside the community or have left for employment reasons. This could be due to the lack of well-paying jobs in the region, transfer by their employer, or other career opportunities in industries not available in the Parksville area.

3. **Dismissed/resigned from department** – The department has in some cases asked members to resign from the department after they have not been able to demonstrate an acceptable level of commitment to meet the needs of the department. In other cases, members find that the fire service is not what they expected and choose to resign.
4. **Retired** – This category covers members who have served the department for several years, have reached the point where the desire to “volunteer” has diminished or they have reached the age when they are no longer physically able to meet the rigorous demands of firefighting.

The following chart shows the number of members who have left the department in the past five years for the above reasons:

Lack of availability	Leave community	Dismissed/resigned	Retired
10	18	6	0

While recruitment is effective at maintaining membership levels, it should be noted the availability of members with the time to commit is of paramount importance to the continuation of a volunteer/paid call system. At such time that turnover becomes too great for effective training, member candidates are not available and/or current members cannot sustain the required time and energy for the job, there will be a significant financial impact should the City of Parksville need to hire full-time career firefighters.

RECOMMENDATIONS:

1. Develop retention strategy and related policies to promote benefits for members to remain in the department.
2. Continue to provide training opportunities for officers and senior firefighters to gain the necessary skills to move up in the organization and fill more senior roles in both volunteer and career ranks.
3. Review system of compensation with input from department members on a bi-annual basis as a component of the overall department retention strategy.
4. Establish system of casual employees to use for special projects and provide funding to sustain such a program.
5. Funding for previously identified fourth position is re-established in the 2014 operating budget.
6. The position of the emergency planning coordinator is reviewed and the additional time be increased from a .4 FTE and plans be established to find a deputy EPC upon retirement of the fire chief.

FIRE HALL FACILITIES

The current fire hall facilities consist of the recently renovated and expanded main fire hall located at 160 Jensen Avenue West and the department's training ground located at 1159 Franklin's Gull Road.



MAIN FIRE HALL

The main fire hall recently underwent a major renovation and expansion to address some long-standing issues. The facility now is able to house the entire department's equipment in one location; centrally located in the fire protection area. The location is close enough to residential areas that members are able to respond to the hall to crew apparatus in a relatively short-time frame. On average, the first out apparatus leaves the hall in 6 minutes 10 seconds based on a ten year average for all types of calls.

As constructed, the fire hall meets the needs of the fire department as it exists today. The design considered future needs and the renovated fire hall was designed so additional bays and dorm facilities could be added relatively easily should the need arise.

The requirement to add onto the current facility will depend largely on the future growth of the community, equipment requirements to meet the recommended Fire Underwriters Survey, call volume trends, availability of volunteer firefighters, just to name a few.

In order to determine the future requirements for the fire hall facility, a needs assessment should be conducted on a regular basis to ensure plans and funding are in place to keep pace with the growth of the community. An ideal schedule would be to review the future needs for any building expansion on a 5 year cycle at a minimum.

Visitor parking at the front of the administration area is not working as well as anticipated. The angle of the parking and the lack of signage make it difficult for members of the public to utilize the space efficiently. Consideration should be given to redesigning the parking area and surrounding landscaping to ensure efficient use of the area and provide easier parking for visitors.

The need for lighting in the parking lot area has been identified by members as a need to improve some safety in the parking lot area. The lighting for the parking lot area was not done at the time of construction due to budgetary constraints. Installation of lighting was planned for as the base and ducting for the wiring was installed during the construction phase of the parking area. Proper lighting for the parking area will be an improvement on the safety for responding firefighters during emergency calls.

Any future expansion of the current fire hall will depend on the future growth of the community. The recent expansion of the fire hall considered the possibility of future expansion in the design. The facility was designed to allow for a sixth bay to be added to the west side of the apparatus bays as well as the addition of dormitory or future administrative areas above the new apparatus bays. The need for a second fire hall is discussed later in this report.

TRAINING GROUNDS

The department is establishing a dedicated training ground. A request for proposals is currently being prepared for the construction of a facility which will serve as a base for the department to conduct a wide variety of member training required to maintain the skills necessary to effectively perform the duties of a firefighter.



To date, the department has constructed minor props in which to conduct some of our training. These include a small live fire prop where members simulate a dumpster fire, vehicle fires, propane tank fires, and fire extinguisher training. There is also a pad for members to train on auto extrication and a small technical rescue training prop.

The plan is to construct a larger multi-story facility where training on high-rise operations, search procedures, roof top operations, ventilation, hose handling, and multi-crew operations can be conducted. The construction of a quality training facility opens the possibility for revenue generation to cover costs of operating the facility. We will not duplicate other facilities on the Island.

Items such as washroom facilities and a small classroom should be included in the future design of the training grounds. Currently, portable toilets must be rented when longer duration training is conducted at the site. As well, there is no space that can be used as a classroom/briefing room prior to running scenarios at the facility. It may be possible to obtain a quality used building as a donation to the fire department which would significantly reduce costs.

Site grading and painting of the existing training structure will be addressed as part of the next phase of work to be completed.

In order to help reduce costs, discussions with neighbouring fire departments should be held to see if there is an interest in cost sharing. Developing a “regional training facility” would be a benefit to the area fire departments as there may be the opportunity to develop and implement standardized lessons on many of the basic skills required by firefighters. The ability to train area firefighters using standardized techniques is a significant benefit in the event of any mutual aid calls.

LOCATION FOR ADDITIONAL FIRE HALL

The subject of a second fire hall has been mentioned in previous strategic plans. With the continued development of the current training ground, it would be an appropriate location to establish a second facility. From an emergency planning perspective, additional resources on the east side of the Englishman River could be beneficial in the event of a large-scale natural disaster, such as an earthquake which could disable bridges.

The actual construction and staffing of the second fire hall is not in the immediate future; property set aside now for the anticipated construction would be a prudent move on part of the municipality.

There are many factors which will dictate the need for a second fire hall. These would include but are not limited to:

1. **BOUNDARY EXPANSION** – Should the boundaries of the municipality or the contracted fire protection area be enlarged, the need of a second hall may be required to adequately service any areas outside of the current fire protection area.
2. **POPULATION GROWTH** – There is a direct correlation between increased population growth and increased call volume. As call volumes increase, there may be a need for additional equipment to effectively serve the population. Should additional equipment be required, it may be beneficial to have an additional hall situated in an area with the highest call volumes in order to reduce response times if they are exceeding reasonable standards.
3. **BUILDING STOCK** – Depending on the type of buildings going into specific areas, an additional hall may be required to deal with specific hazards. This would most likely occur in more industrial type locations.
4. **PUMPING CAPACITY** – The fire underwriter’s recommended pumping capacity for the community is used as a guideline for future apparatus purchases. When the recommended pumping capacity reaches the point when an additional apparatus is required, it would again be an opportunity to review

the need for an additional fire hall in areas with a higher call volume and/or with response time issues which exceed reasonable standards.

5. **STATION LOCATION STUDY** – Before an additional fire hall is recommended or approved, a station location study would be conducted to ensure the facility is located in an area with the greatest need. This would be done using recognized criteria such as call volumes, travel times, location of populations to support a volunteer base, special hazards, etc.

As with other issues in this section, regular reviews should be conducted to ensure planning and related funding does not have to be done after the need for an additional facility has been identified.

RECOMMENDATIONS:

1. Install lighting in parking lot area to improve safety for responding firefighters. (2014)
2. Consider redesign of front visitor parking area to improve vehicle movements on front apron of fire hall.
3. Continue with plans for improvements to fire department training grounds. (2013 – 2014)
4. Begin discussions with other local fire department regarding funding and use of training grounds.
5. Plan to acquire properties to the west of the current fire station as they become available to allow for the expansion of parking area should an addition to the fire hall be required.
6. Conduct needs assessment for space requirements to determine future expansion of fire hall facility on a five-year cycle starting in 2018. This would include requirement for second fire hall location and building.

FIRE APPARATUS/EQUIPMENT

APPARATUS

The current fleet of major apparatus in use by the fire department includes the following:

E42 – 2011 Hub 1500 IGPM pumper (scheduled for replacement in 2031)



E41 – 1990 Anderson 1250 IGPM pumper (replacement currently on order and scheduled for delivery in 2014)



R45 – 1997 Superior 1050 IGPM Rescue pumper (scheduled for replacement in 2018)



L49 – 1991 Smeal 75' 1050 IGPM Aerial Ladder (scheduled for replacement 2016/17)



T47 – 2007 Sterling 1200 gallon Tanker (scheduled for replacement in 2027)



SOT 41 – 16' Special Operations Trailer (replacement to be determined depending on use)



The current rated pumping capacity of the Parksville Fire Department is 4850 IGPM. This allows the department to meet the requirements of the Fire Underwriters Survey – Table of Effective Response. (The FUS – Table of Effective Response is a guideline used for insurance companies to base their insurance rating on.) (Schedule A)

As part of the budget process, the replacement of these major pieces of equipment has been incorporated into the City of Parksville twenty year capital plan based on a twenty year lifecycle for each apparatus. ULC standards recommend 15 year replacement cycle for apparatus. The lifespan can be extended five years before the apparatus will require an annual pump test to maintain certification. Technological advances in apparatus design and equipment is another factor which will impact apparatus replacement schedules. Attached is a technical bulletin from the Fire Underwriters Survey outlining how the age of apparatus affects insurance premiums. (Schedule B)

Standardization of apparatus is critical for smooth operation of the fire department; having all apparatus laid out and able to operate in a similar manner will have a significant impact on the training cycle for the volunteer department members. In effect, it has the potential of dramatically reducing valuable training time on the operation of apparatus if the apparatus have similar equipment, controls, etc. With the current timing for the purchase of replacement apparatus, this provides the fire department with an excellent opportunity to standardize the fleet as much as possible.

ADDITIONAL PUMPING CAPACITY

The department should continually review the pumping requirements for the community. With the past, present and future growth of the municipality, the department may be required to have additional pumping capacity in order to meet the requirements of the Fire Underwriters Survey. As the community continues to grow, our ability to pump the required fire flows will need to be increased. Currently, the department is able to pump 4850 IGPM, which is in line with the lower scale of Table of Effective Response established by the Fire Underwriters Survey (see attached). In the event of two fire calls at the same time, the department has the pumping capacity to combat both fires depending on availability of personnel to crew the required apparatus.

Some of the issues which would cause the requirement for additional pumping capacity would be an increase in industrial and/or multi-residential, multi-story building stock.

SPECIALIZED RESCUE APPARATUS

Currently, the department stores some of the specialized rescue equipment in a special operations trailer parked outside the fire hall under a sheltered area. This includes some of the confined space rescue equipment and hazardous materials equipment.

The second option is to purchase "heavy rescue" type apparatus. This would be a self-sufficient unit that could contain all of the department's rescue equipment on one piece of equipment. This unit could also act as a command post at any large-scale incidents in the area. Depending on availability, there may be used apparatus of this type coming on the market that would accomplish the goal at a reduced rate. However, there is currently no secure space to store such a unit inside without the expansion of the fire hall with additional bays. This could be seen as a long-term solution as it has not yet been identified in the twenty-year capital budget.

At this time, the need for additional specialized rescue apparatus is not anticipated in the near future.

SMALL EQUIPMENT REQUIREMENTS

This section will deal with some of the more major equipment that the department uses on a regular basis. This would include but not limited to: self contained breathing apparatus (SCBA), communications equipment, technical rescue, medical equipment and small tools.

Self Contained Breathing Apparatus (SCBA) – SCBA is the critical piece of equipment that allows our department to enter hazardous atmospheres with a relative degree of safety for our firefighters. Much of the equipment has been in place since the mid 70's. There are 24 SCBA units in operation at the present time. The following charts shows a breakdown of the age of the current SCBA units.

SCBA#	MFG DATE	SCBA#	MFG DATE	SCBA#	MFG DATE	SCBA#	MFG DATE
1	1980	7	1981	13	1980	19	1999
2	1981	8	1980	14	1982	20	2011
3	1981	9	1980	15	1989	21	2011
4	1981	10	1980	16	1994	22	2011
5	1979	11	1982	17	1996	23	2011
6	1980	12	1980	18	1996	24	2011

The last upgrade was done in 2008 and while all of the SCBA units have been upgraded over the years, it is now time to look at a significant upgrade to the department's SCBA. Recent changes to NFPA standards for SCBA have put the department behind in meeting current standards. While many of the SCBA units are older, they have all been maintained on a regular basis and are able to pass required bi-annual testing.

Changes to the NFPA standard will have an impact on future SCBA purchases. As of August 2013, Scott Aviation, the manufacturer of the SCBA now used by the department will be only selling SCBA which meet the newest addition of the NFPA code requirements. This change to the low air alarm setting in the standard would be enough to cause operational concerns if the department were to use SCBA designed to two different standards. Standardization of SCBA is an even more critical issue than the standardization of apparatus as it is the one critical piece of equipment relied upon heavily for firefighter safety.

Discussions with neighbouring departments will benefit the standardization of equipment and the interoperability during large-scale mutual aid events. The department has developed a program to modernize all SCBA to the new standard. Funds have been identified and allocated in the fire department minor capital plan for 2018. This would allow the department to change out all SCBA to ensure units meet a consistent standard on the fire ground.

Communications Equipment

For the purposes of this section of the report, communications equipment is considered to be radio equipment, both mobile and portable, pagers, cellular phones, and on-board computers.

At this time, the radio equipment currently in use is adequate for the needs of the department. The department replaces older equipment on a regular basis to both standardize and update radio equipment which is a tremendous benefit to the department. There is a significant reduction in training when we only need to train on one specific type of radio. By the end of 2014, the department should change all portable and mobile radios to standardized models which will meet the needs of the department for the near future. As technology changes, there may be significant improvements to communications equipment which will have a significant benefit improving communications and safety to the department and our members.

Interoperability with mutual aid departments is also critical to the success of the department. As the fire department will use mutual aid at larger scale events, the importance of being able to communicate effectively with the other departments is vital to the success of the incident. At this time, communications capabilities with other departments are not an issue. Steps have been taken to ensure that common frequency lists on all radios are utilized by each department. This will help to reduce confusion at emergency scenes when multiple departments operate together. Changes

to radio equipment should be done in conjunction with mutual aid partners to ensure continued interoperability.

In order to improve radio communications in certain areas of the fire protection district, particularly the French Creek area, the department may need to look at additional equipment such as mobile or fixed station repeaters to effectively increase the radio capabilities. This would provide for better communications between portables when responding to incidents.

Pagers are one of the most critical pieces of equipment regularly purchased by the department. It is this piece of equipment which alerts volunteer staff members of an emergency incident. The department has developed a program of purchasing five to six pagers each year to ensure the inventory of pagers in use is reliable and will alert members to an emergency incident. While the department has several different types of pagers in use at this time, it is not as critical to standardize one specific pager as the models change on a regular basis. If the department were to standardize on one specific pager, it may not be available for purchase after a few years and/or parts for repairs may not be readily accessible.

The cellular needs for the fire department are supplied through the City of Parksville program and as such, the equipment is kept current. Cellular communications for the fire department are adequate at this time.

The department is moving to on-board computers to improve communications with the dispatch center located in Campbell River. This technology ensures the accurate location of incidents is sent to the department in digital format and is displayed on the computers located in each apparatus. In the future, the department will be able to utilize this technology to include pre-fire plans, hazardous materials information, and internet connections to obtain information at the site. This technology will only enhance the department's ability to deal with an emergency situation in an effective manner.

Technical Rescue Equipment

The fire department currently has sufficient technical rescue equipment and training to cover auto extrication, confined space rescue, and high angle/low slope rescue. The fire department has a written agreement with the City of Parksville public works department to provide confined space rescue coverage in any of the sites identified in the City.

One area where additional equipment may be required is for trench rescue. The fire department does not currently have suitable shoring equipment or training for such rescue. Public works has some equipment; however, whether it would be sufficient for all rescue possibilities is to be determined. To date, the fire department has not been requested to respond to any trench rescue type incidents. With increased construction in the area, it is a possibility that the fire department could be requested to respond to this type of incident, whether for City crews or an independent contractor. Without proper equipment or training, the successful outcome of a rescue is dramatically

reduced. As a low frequency event, this is not a high priority for the department at this time.

Building collapse is another area where the department has very few resources to perform an effective rescue. In a recent hazard, risk, and vulnerability analysis, earthquakes were determined to be in the top three risks for the municipality. Should a significant earthquake occur in the area, the potential for building collapse is a reality. The current stock of equipment utilized by the fire department does not include sufficient shoring equipment to perform basic rescues. In addition to the equipment, some additional training would also be required. This will be discussed in the training section of this document.

Medical Equipment

The department carries basic medical equipment on each apparatus with the exception of T47. The likelihood of this apparatus responding to a medical aid call on its own is highly unlikely. Each apparatus has the necessary medical equipment to provide the level of service that all members are trained to provide. This includes spinal immobilization and Automatic External Defibrillators (AED). The duty vehicles do not carry an AED at this time.

Until such time as the department expands the role of the first responder above the FR Level III requirement, the volume and type of equipment carried on each apparatus is considered sufficient.

Small Tools

For the purposes of this report, small tools will include such items as nozzle and hose appliances, electric and gas powered saws, positive pressure fans, assorted hand tools, ground ladders, flashlights, thermal imaging cameras, gas monitors, etc.

At this time, the department has not identified additional small tools needed to perform emergency operations. As new items are identified and/or items are up for replacement, the necessary resources are allocated in the annual operations budget. Over the years, budgets have been developed to account for the replacement of these items so there is not a big impact on the annual budget from year to year.

The department has developed a system of replacing small tools on a regular basis. While routine maintenance is conducted on many of these items on a regular basis, a more consistent system of maintenance should be developed to ensure items are ready for use. The need for additional resources to conduct a routine maintenance program is discussed in the staffing plan section of this report.

Annual hose testing is one area the department needs to address. This required testing will ensure all fire hose is ready for service and will reduce the potential for failure during emergency situations. This item has also been addressed in the staffing and health & safety sections of this report.

RECOMMENDATIONS

1. Formalize an apparatus replacement policy (draft attached) to ensure that all major pieces of apparatus are accounted for in the City of Parksville financial plan. Recommend a 15-year replacement cycle with a five year extension depending on the status and condition of the apparatus.
2. Review apparatus needs on a regular basis (five-year cycle) and provide resources for any additional equipment through the budgetary process.
3. Continue with plans for the replacement of SCBA in 2018.
4. Continue program of replacing communications equipment on a regular basis to ensure all equipment is reliable and able to communicate effectively with mutual aid partners.
5. Review equipment needs for technical rescue operations and work with public works on trench rescue capabilities.
6. Continue to work with mutual aid partners to standardize equipment which will improve interoperability between departments during larger scale incidents.
7. Complete installation of on-board computers in all apparatus.
8. A method of fire hose testing be implemented to ensure that all fire department fire hoses are ready for use at emergency scenes.

DELIVERY OF SERVICE

The purpose of this section is to provide Council with information on the service delivery levels for those areas specifically identified in this report. Our delivery of service is determined by population and the number of buildings for which we are mandated to provide protection. Attached are building inventory statistics/projections and population statistics/projections up to and including the year 2020 (Schedule C).

RDN FIRE SERVICE AGREEMENTS

The fire department provides fire protection services to RDN areas bordering the City of Parksville under two separate agreements. The areas covered include the French Creek area and the local area (San Paniel, Martindale Road, and Fourneau Road.) The funding received to provide this service is adequate compensation for service provided.

The following chart shows a breakdown of the incidents by area for the past five years.

Year	Total Incidents	City of Parksville	French Creek (RDN)	Local Area (RDN)	Other
2012	466	366	44	16	40
2011	414	315	54	18	27
2010	453	338	62	22	31
2009	495	390	69	15	21
2008	538	449	51	21	17

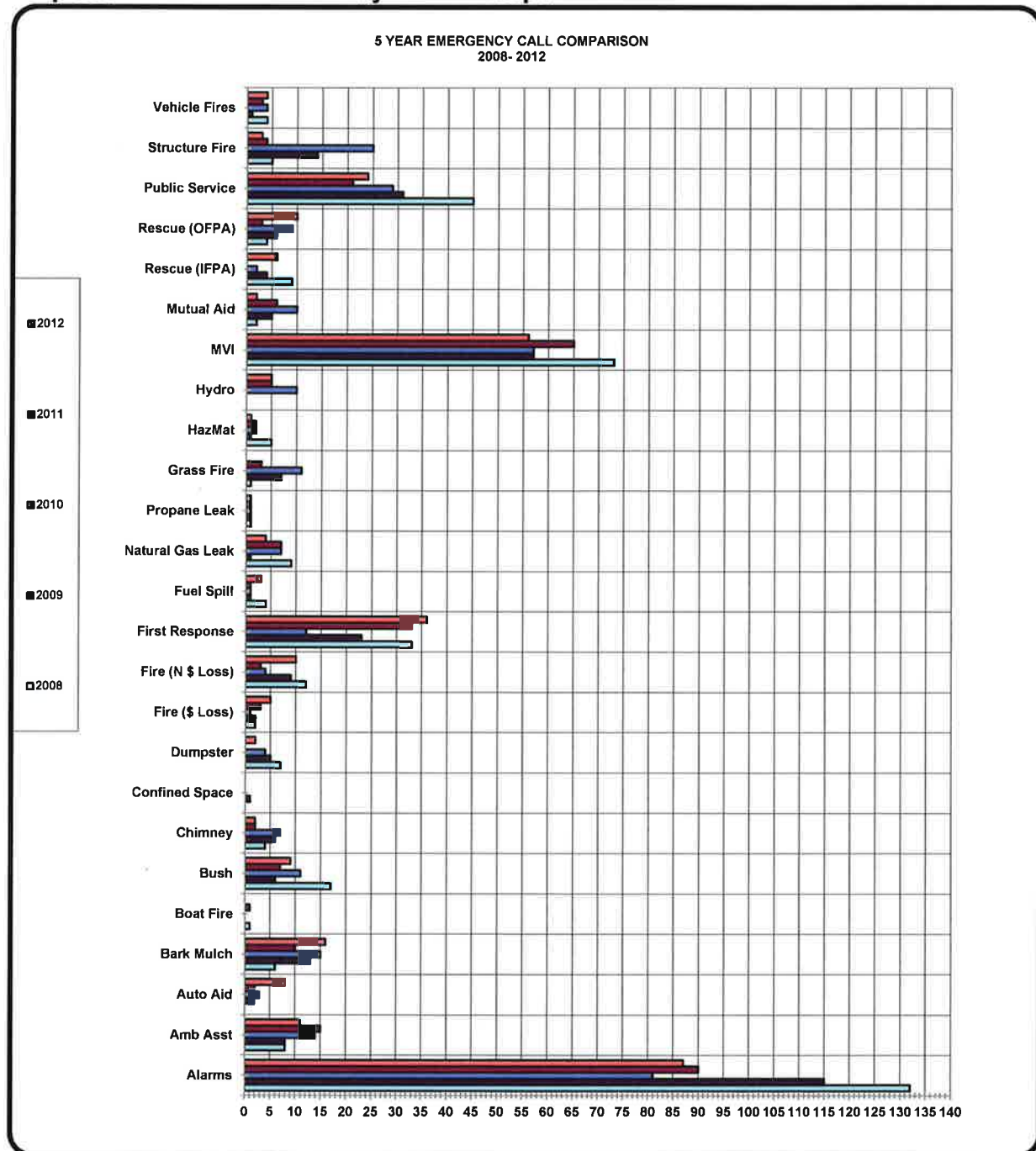
Fire suppression is the historic reason for the existence of fire departments. The Parksville Volunteer Fire Department does much more than simply put out fires. Typically if it is not a RCMP or BCAS issue, the fire department is called to resolve the issue. The fire department is the only emergency service that is in the direct control of the municipality.

While the incidents of fire-related emergencies seem to be generally declining in all areas of the province, the expectation that fire departments will deal with other types of emergencies has increased. As the population continues to grow in the community, the calls for service for all types of emergencies and non-emergencies will also increase.

The recent survey conducted as part of the strategic plan to gain input from the community as to their expectations for the fire service in Parksville revealed some interesting results. The number of responses was lower than hoped for so it is difficult to determine if the results are a true reflection of the community's expectation of the services they wish to see from the fire department. It was suggested to reduce the number of incidents the fire department deals with on an annual basis. This would

include some emergency and non-emergency responses typically dealt with by the fire department. Some of these will be discussed further in this report.

The following chart shows a five year comparison of emergency incident types responded to or dealt with by the fire department.



ALARM RESPONSE

The largest single response type for the fire department is response to alarm calls. With the requirement for fire alarm systems in larger buildings such as apartment and commercial, along with many residential systems installed by homeowners, this call type will continue to be a major portion of the fire department's calls. There is the general expectation that the fire department will respond to all alarm calls. Most suppliers/installers of residential systems promote the advantage of alarms being reported to the fire department automatically, adding to the expectation of a fire department response.

While the fire service endorses the use of early detection systems which will alert fire departments of a fire in the early stages, it does come at the price of increased alarm calls when there is no fire. In most cases, the detectors react to smoke conditions with no actual fire (cooking related incidents), or they have developed a fault and replacement is required.

The following chart shows the breakdown of alarm calls by occupancy classification for the period of 2002 – 2012 (942 total alarm calls for this period).

Occupancy Class	Number of alarms	Occupancy Class	Number of alarms
A-1 Theater Assembly	0	C-1 Single Family/Duplex	292
A-2 Clubs, Non-Residential	7	C-2 Single Story Apartment	6
A-2 Community Halls	12	C-3 Up to 3 Story Apartment	123
A-2 Fire Halls	3	C-4 High-Rise	50
A-2 Unclassified	117	C-5 Hotel/Motel	29
A-2 Restaurants	17	C-6 Assisted Living	10
A-3 Arenas	3	D – Business/Personal Service	38
B-1 Care/Detention	3	E - Mercantile	79
B-2 Treatment Occupancies	82	F-1 – High Hazard Industrial	0
B-3 Care Occupancies	0	F-2 – Moderate Hazard Industrial	45
		F-3 – Low Hazard Industrial	5

As noted in the above chart, alarm calls to single family residences are by far the largest portion of this call type. In the case of residential fire alarms, many of these call types are caused by cooking related activities which cause some smoke thereby activating the fire alarm system. These calls are typically confirmed by the occupant before any fire trucks leave the station; however, members have begun a response to the fire hall. In the event the nature of the call is not confirmed by occupants of the residence, the fire department response is somewhat modified. Given the past history of residential alarms and the equipment typically required, the department has reduced the number of apparatus initially dispatched to the call location. This call type is responded to by the duty officer and the first out engine. This reduces the number of apparatus responding

Code 3 thereby reducing the potential for an incident involving a fire apparatus and members of the public.

In the past five years, the number of alarms calls has declined. While many of these calls may be considered "false" because no action is required by the fire department, it is important that they are responded to in the same manner as any other emergency call. The department has documented cases where the fire alarm system has alerted the fire department in the early stages of a fire and the resulting damage has been minimal.

As mentioned, a large majority of this call type requires no action by the fire department. The reason for the activation of the fire alarms can vary from faulty parts in the system to malicious activation by persons. Until the fire department arrives on scene and can assess the situation, it cannot be confirmed there is an actual fire, not unless it is reported by someone in the building. In the case of many commercial buildings, any fire alarm activation after hours cannot be confirmed by staff as they are typically not present outside of normal working hours. In these cases, a full response by the fire department is deemed appropriate.

About 47 of the alarms calls occurring in this period have been caused by persons intentionally activating a pull station on the fire alarm system causing the alarm. The fire department works with the RCMP in these cases and has been successful in identifying the person responsible in a number of cases.

Parksville Fire Department in conjunction with Errington, Coombs/Hilliers, and Qualicum Beach fire departments have established an automatic aid agreement to deal with all call types including alarms to those buildings in their respective jurisdiction considered high risk. This would include care facilities and highrise buildings in Parksville's situation. As these types of occupancies are occupied by residents who may or not have mobility issues, it is important adequate resources initially respond in the event of an emergency. As is the case with many of the alarm type calls, this is a high-frequency event which typically results in no action required by the department other than to confirm there is a problem with the fire alarm system. Should the department reduce the first alarm assignments to the building identified in the automatic aid agreement, there would be a delay in critical resources needed to deal with the incident and the potential of serious harm or injury to the occupants of the building would be very real. The department believes it is better to have sufficient resources responding on the initial notification of alarm than to wait until the arrival of the duty officer or first due engine company and then request additional resources.

In the case of many of the alarm calls, the fire department takes the initiative when responding to these calls as an educational opportunity to promote to proper use and maintenance of the fire alarm system so "false" activations are reduced as much as possible.

MOTOR VEHICLE INCIDENTS (MVI's)

Motor vehicle incident responses are covered in two areas. The first being an incident that does not require extrication of patients from inside the vehicle/s. These call types may require the cleanup of spilled fluids, engine oil, transmission fluids, anti-freeze, etc. or require some other level of scene safety that the fire department can provide for the other emergency responders attending the incident. In all cases for this type of call, the duty officer is the only person sent and determines if additional resources are required. If no additional resources are required, the duty officer will deal with the situation on his/her own. Typically the duty officer is able to deal with the situation without the need for additional resources.

The second type of MVI is shown as a rescue call which requires extrication of persons trapped in the vehicle. These types of calls are relatively low in numbers and are discussed further in this report under the technical rescue section.

Response to motor vehicle incidents (MVI's) account for 12% of the department's call volume. The number of motor vehicle incidents responded to by the department in 2012 was consistent with 2011 levels. In most cases, the duty officer responded to the incidents and was able to deal with the situation without calling out a crew for further assistance. The fire department is requested to attend these types of incidents to provide scene safety for other responding emergency agencies.

Upon arrival, the duty officer will assess the need for any additional resources and request the page out of crew.



FIRE SUPPRESSION

For the purposes of this report, fire suppression will include the following incident types as tracked by the fire department. Bark mulch, boat fire, bush fire, chimney fire, dumpster fire, fire with and without dollar loss (miscellaneous), grass fire, structure fire (residential, commercial, industrial), and vehicle fire.

The primary focus of the fire department is to provide fire suppression capabilities to the citizens of Parksville and the surrounding areas of the Regional District of Nanaimo to which we are contracted to provide service. Fire suppression type calls may be low frequency; however, they are a high risk event for the community, fire department, and its members. The building stock that the fire department is responsible to protect is wide ranging and includes single family dwellings, commercial and high-rise construction, multi-family apartments, and complex care facilities. This takes a significant amount of training and preparation to enable the crews to deal with all of these situations.

Training provided to members to prepare them for fire suppression activities which they may encounter, is done to the NFPA 1001 standard and is appropriate to the level of service provided. While the number of fire suppression incidents is a small percentage of calls for the department, it is incumbent on the department to develop and maintain the skills necessary to deal with this type of incident in an efficient and safe manner.

TECHNICAL RESCUE

The Parksville Fire Department has an identified need for technical rescue capabilities. While technical rescue incidents are a low frequency event for the department, they require a higher level of training to ensure members have the adequate skills to perform the duties required to affect a successful rescue. As such, a significant amount of training resources are utilized in maintaining skill levels.

Technical rescue operations by the fire department would include but not be limited to the following call types: auto extrication, low slope rescue, high angle rescue, and confined space rescue.

The fire department is responsible for the confined space rescue for the public works department as required by written agreement. This requires the department to train members on the technical nature to deal with these incidents. Currently, the department has ten members trained in technical rescue which provides adequate coverage for the public works commitment. The department may also be required to utilize technical rescue skills (rope rescue) at other emergencies such as auto extrication events where a vehicle is over a bank, construction sites where workers may be injured or trapped in high places, or cases where BCAS has requested assistance to remove patients from difficult locations.

The department has been scheduling two members per year to take formal technical rescue training in order to have sufficient trained members available for these types of calls. Regular attrition of members has an impact on maintaining trained personnel available to deal with these incidents.

Auto extrication events are an ongoing incident type which requires attention due to the nature and severity of the incidents. The Parksville Fire Department has been responding to these types of incidents since the first auto extrication tools were put into service in the mid 1970's. While the number of incidents has reduced over the years as more departments in the area have taken on the capability of rescue services in their particular areas, the need to continue providing this type of service for the community is still relevant. On average, the department responds to about 15 calls per year.

The department is responsible for low slope and high-angle rescue, by-products of the confined space program. Both these incident types are low frequency events which can occur in the fire protection area requiring some type of training and equipment to effectively affect rescue. Typically, low slope rescue may be conducted in conjunction with an auto extrication event and high-angle rescue may be involved with some types of construction activities such as rescuing a patient from a roof top or a fall of a worker wearing a harness. The basic training required to provide confined space rescue provides members of the fire department with the skills necessary to deliver this level of service to the community.

MEDICAL AID CALLS (First Responder Medical)

Currently the Parksville Fire Department responds to only Echo type medical calls (Echo type calls are described as "life status questionable" according to the criteria established in the Medical Priority Dispatch System) or when there is no ambulance available in the area or when an ambulance will be unduly delayed (15 minutes or more). The decision to respond to Echo type calls was based on the fact that the department was being asked to provide assistance for this type of call (cardiac arrest) by on scene BCAS staff. This call type requires many personnel to provide effective CPR to the patient. The department will also respond for "ambulance assist" type calls when requested by on scene BCAS personnel when additional manpower is required for lifts of heavier patients or to help remove a patient from a second story.

The first responder program is totally "voluntary" on the part of fire departments. Fire departments can choose the level of service they wish to provide in the first responder program. Fire departments do have the ability to determine what level they wish to participate in the program, if any. As an example, some fire departments only respond to Delta and Echo calls, while some of the larger fulltime departments respond to all calls where first responders are recommended. It is entirely up to the individual fire department to determine what level they are comfortable to provide.

The following chart is an indication of the number of medical calls by type occurring in the Parksville area during 2011.

Event - MPDS Determinant Code	Events
Alpha (definition)	833
Bravo	471
Charlie	630
Delta	594
Echo	34
Other	99
Total	2,661

The Medical Priority Dispatch System (MPDS) is a medically approved, unified system used to dispatch appropriate aid to medical emergencies including systematized caller interrogation and pre-arrival instructions.

During 2012, the department responded to 36 first responder calls and 11 ambulance assist type calls.

Should the department participate further in the first responder program, such as respond to Delta calls, we could anticipate an additional 600+ calls per year based on statistics provided by BCAS. Adding this amount of call volume to the current delivery method of the fire department will definitely cause a strain on the membership as well increase costs to operate the program.

From a BCAS perspective, having additional resources available at the initial outset of the call is not only a benefit to the crew, but the patient as well. With the Echo type calls being imminently dangerous to life, it is critical that all resources are at the scene as soon as possible.

At this time, without over taxing the resources of the department, the current level of service is considered appropriate for the department as well at the citizens of the fire protection area.

HAZMAT RESPONSES/POTENTIAL

Almost every incident that the department responds to has the potential to become a HazMat incident. The amounts of fuels transported on the highways are a prime example of the potential. Another example is the normal amount of chemicals stored in sheds or garages in typical residential occupancies. Members must always be vigilant at fire scenes for signs of hazardous materials which may affect safety at any emergency scene. Many of the commercial and/or industrial occupancies may contain materials considered to be hazardous materials. The department is also asked to identify unknown substances.

While the department responds to a small number of incidents each year categorized as a HazMat incident, there are many incidents the department deals with each year which have the potential to evolve into a call requiring some type of Hazmat response to mitigate the full potential of the emergency. The department has basic equipment to deal with the initial response to the incident. The department's main focus is to identify the product and establish a safe perimeter around the affected area. This may include starting an evacuation of the area to reduce the impact on the citizens affected by the incident. Department members are trained to the NFPA 472 operations level as part of their regular training. While this training is valuable, depending on the incident, a higher level of training may be required to effectively handle the situation.

Providing an advanced level of training for members may not be the solution when dealing with this type of situation. With the low frequency of this type of call and the definite need for significant training in this area, members may not be able to commit the time necessary to reach and maintain the technician level training. The department should be able to identify the products and have the basic skills to secure the area to limit the exposure of the products until such time as expert resources arrive on scene to assist.

FIRE PREVENTION INSPECTIONS/PUBLIC EDUCATION

The Department is responsible for 795 inspectable occupancies. At the present frequency, this represents a total number of required annual inspections of 650 (average). In 2012, the department was able to complete 349 inspections. The frequency of inspections is based on the City of Parksville Policy 9.9 last reviewed and adopted in 2007. The following chart shows the steady increase in inspectable occupancies over the past years

Inspection Program	2012	2011	2010	2009	2008
Inspectable Occupancies (Approx.)	795	787	769	742	725
Inspections Past Due (Approx.)	446	483	458	335	287
Inspections Completed	349	500	369	407	438

With the past and continued growth in the community, the number of inspectable occupancies that the fire department is mandated to inspect has seen steady growth.

The data entry for the inspections completed has been reduced dramatically in the past years with the addition of mobile software which allows the fire inspector to complete the inspection, update the database, and provide the client with a copy of the inspection report before leaving the premises.

The following chart shows a breakdown of inspectable occupancies by type and the current frequency of inspection.

Classification of Occupancy	Number	Minimum Inspection Frequency	3 Year Total Inspections Required	Annual Average Inspections Total
A-2 Community Halls	2	12 Month	6	2
A-2 Fire Hall	1	12 Month	3	1
A-2 Public Assembly (unclass)	50	12 Month	150	50
A-2 Restaurants	37	12 Month	111	37
A-3 Arenas	3	12 Month	9	3
B-2 Special Care	6	12 Month	18	6
B-3 Special Care	4	12 Month	12	4
C-1 Single/Duplex	45	12 Month	135	45
C-2 Single Story Apartments	7	12 Month	21	7
C-3 Up to 3 Story Apartments	41	12 Month	123	41
C-4 High Rise Apartments	5	12 Month	15	5
C-5 Hotels/Motels	26	12 Month	78	26
D-1 Service	180	18 month	360	120
E-1 Mercantile	246	18 month	492	164
F-1 Hi-Hazard Manufacturing	3	12 month	12	3
F-2 Mod-Hazard Manufacturing	96	12 month	288	96
F-3 Low-Hazard Manufacturing	39	12 month	117	39
Other – Unclassified/Outdoor	4	12 month	12	4
	795 Total Occupancies		1959 total Inspections/3 year period	653 average annual inspections

The fire department is not able to meet the current policy on the frequency of inspections. In order to reduce the liability related to not meeting the frequency, Council can either hire additional staff; reduce the frequency of inspections, or a combination of both.

Business licence inspections are conducted prior to the issuance of a new business licence to a business with an ongoing inspection requirement. This allows the fire

department to record any changes to existing occupancies or add to the database new construction which has taken place as well as updating the contact information for the business owners. Implementing this procedure has helped to reduce issues which may arise in future inspections as the business owner has the requirements prior to opening for business.

FIRE INSPECTION

Comparisons were drawn between our fire prevention program and two other similar municipalities. The comparisons were based on the duties of the people responsible for fire inspection and prevention and the number of properties to inspect. These communities were Sechelt and Salmon Arm, BC. Both departments utilize fire inspectors for duty rotation, fire suppression officers, fire prevention program coordinators and investigators as well as conducting all fire inspection tasks including re-inspection and enforcement. Both municipalities have around 800 +/- Inspectable properties. On average, Sechelt conducts 300-400 inspections annually and Salmon Arm conducts 600-700 inspections. Salmon Arm currently has two inspectors and Sechelt recently hired a fulltime inspector. The six-year average shows we are currently conducting 402 inspections per year. Inspections are now carried out on a yearly (365) day rotation or in some cases an 18 month (550) day rotation to assist the department in meeting the inspection frequency.

As the community continues to grow and expand, the number of inspectable occupancies is increasing. Our current company officers are completing company officer inspection components for their continuing education in the fire officer program. Utilizing officers on duty weekends to conduct "company officer inspections" on Class 'E' occupancies would assist the department to meet the required frequency of inspections. Class 'E' properties are the largest group of properties currently inspected and are the least complex in most situations.

Added training in conducting company officer inspections as well as entering inspection information into FDM could be provided in-house for officers.

Another solution would be to hire additional staff to assist with fire inspections during the day. Some inspections do require a second person to assist with access to roofs or areas which cannot be accessed with just one person. The topic of additional staffing for the fire department including fire inspections was discussed in the staffing plan section of this report.

FIRE CODE ENFORCEMENT

The enforcement of fire code violations is currently carried out by the assistant chief/prevention officer. Enforcement is multi-staged and progressive. Once the initial inspection has been completed, it is marked as either "satisfactory" or "unsatisfactory." Unsatisfactory inspections automatically generate a re-inspection date based on the advice of the fire inspector. In most cases, when a property is found in violation of the BC Fire Code on a recurring basis, a letter from the chief fire prevention officer will be

delivered. Where a property owner or occupier refuses to comply with code requirements, a provincial order will be written in accordance with the Fire Services Act [RSBC 1996] Chapter 144 and BC Regulation 263/2012.

For example, 349 fire safety inspections were completed in 2012 of which eight were considered unsatisfactory. The follow-up on these unsatisfactory inspections can be time consuming. For the most part, many of the items identified which need attention, are resolved by the occupant or owner. Minor infractions are not re-inspected to check for compliance and are followed up at the next scheduled inspection. If the infraction is deemed to be of a more urgent nature, a follow-up inspection is scheduled in a reasonable timeframe. Depending on the nature of the infraction and the cost of remediation to bring the item into compliance with the BC Fire Code Regulation along with the ability of the owner or occupant to fund such works, continued monitoring of the situation is required. This takes valuable time away from other duties of the Fire Inspector and reduces the available time to conduct regularly scheduled fire safety inspections on other occupancies.

The City's current change to bylaw adjudication and cooperation with the City of Nanaimo would suggest a chance to adopt an enforcement bylaw similar to the City of Nanaimo, Bylaw 7108, where a fee for re-inspections and violations may result in compliance sooner. This tool may give the fire prevention division the tools needed to gain compliance on fire code infractions without having to go through the lengthy process of issuing an order under the Fire Services Act.

PUBLIC EDUCATION

Public education is an important aspect of the department's fire prevention program. The department has developed a fairly consistent public education program over the years. The majority of events are conducted at the elementary school level. With the exception of Canada Day display in the community park, Fire Prevention Week open house, and the youth's and explosive presentation to Grade 7 classes in October, the department responds to requests from groups to deliver presentations. The department delivers more than 40 events each year. These will include fire hall tours, fire safety talks to schools and senior groups, fire extinguisher demonstrations to community groups or businesses and customized programs depending on the request. The assistant chief has been tasked with the responsibility of coordinating the various public education events and is assisted by a committee of volunteers to help with program delivery.

It is a priority for the department to conduct as many public education programs as possible with assistance of the volunteer members. The availability of the assistant chief to actually deliver the public education events is becoming more difficult as the need to conduct life safety inspections is the priority of the position. The department is becoming more reliant on volunteer members to deliver these programs. With the dependence on the availability of the volunteer members of the department to deliver

the department's public education programs, there may be a resulting reduction in the service levels in this area in order to meet other department priorities.

Because many of the fire safety presentations conducted on a regular basis are performed by the volunteer members of the department, it would be prudent to provide a greater level of training for these members. Provincial programs and initiatives are to provide a consistent message to everyone who receives education in fire safety. The suggestion would be to provide those members interested in conducting fire safety presentations with a minimum level of training such as Fire and Life Safety Educator (I) which is available through the Justice Institute. The suggestion would be to provide funding for this training either through the training budget or through the fire prevention professional development budget. Other specific initiatives and programs can be taught in house by the chief fire prevention officer.

In order to assess the effectiveness of the department's public education programs and ensure we are connecting with the segments of the population most at risk, a complete review of the programs should be undertaken. This evaluation would provide the department with information on the effectiveness of current programs and if there are any "at risk" segments of the community which should be a focus of future fire prevention programs.

PRE-FIRE PLANNING

Pre-fire planning is an important function for the fire department. The department currently has 240+ pre-fire plans on file. Many of these plans are in need of updating as businesses change and move or buildings are renovated. Without up to date, accurate pre-fire plans available for members at an emergency incident, the safety of the crews and occupants can be compromised. Current staffing levels of the department do not allow for sufficient time to adequately address this situation.

New changes to the dispatching software available from NI 9-1-1 will assist the fire department in accessing pre-fire plans when responding to incidents as they can be attached to the mapping system and available through on-board computers anticipated to be installed in main line apparatus.

Pre-fire planning is considered to be a proactive function to assist fire crews with effective response to emergency incidents in specific building. While not all buildings in the fire protection area need to have a pre-fire plan, the department will need to prioritize those buildings that require a PFP in order to provide an effective emergency response. This would require the department to start with "high-risk" occupancies which will be resource intensive.

As many larger complex buildings will require pre-fire planning, the department should work with neighbouring jurisdictions to establish a common format for all PFP's. This would ensure any mutual aid companies responding to a request for assistance would be familiar with the content and layout of the PFP, thereby creating a smoother, more effective emergency response.

Additional resources for this important project have been identified in the staffing plan section of this report.

TRAINING

The Parksville Volunteer Fire Department trains members to the NFPA 1001 Level II standard. This is the recognized standard for the size and type of community we protect. Training to this standard ensures members of the fire department have been given the skills necessary to perform their duties at most emergency situations.

On average, it takes members of the fire department three years to complete all required modules to complete this standard. The completion of each module involves members receiving instruction on the theory and practical skills necessary to meet the objectives of the standard. Once members have completed both the theory and practical skills training, they must then complete both a written and practical examination to demonstrate they have understood and can adequately execute the required skills. Currently all of the members of the department are enrolled in the certification program with fifteen of the thirty-seven active volunteers completing the certification program. The remaining volunteers are at various stages of the process depending on their time in the department. The following chart shows the breakdown of time served and certification completed by the volunteer members of the department.

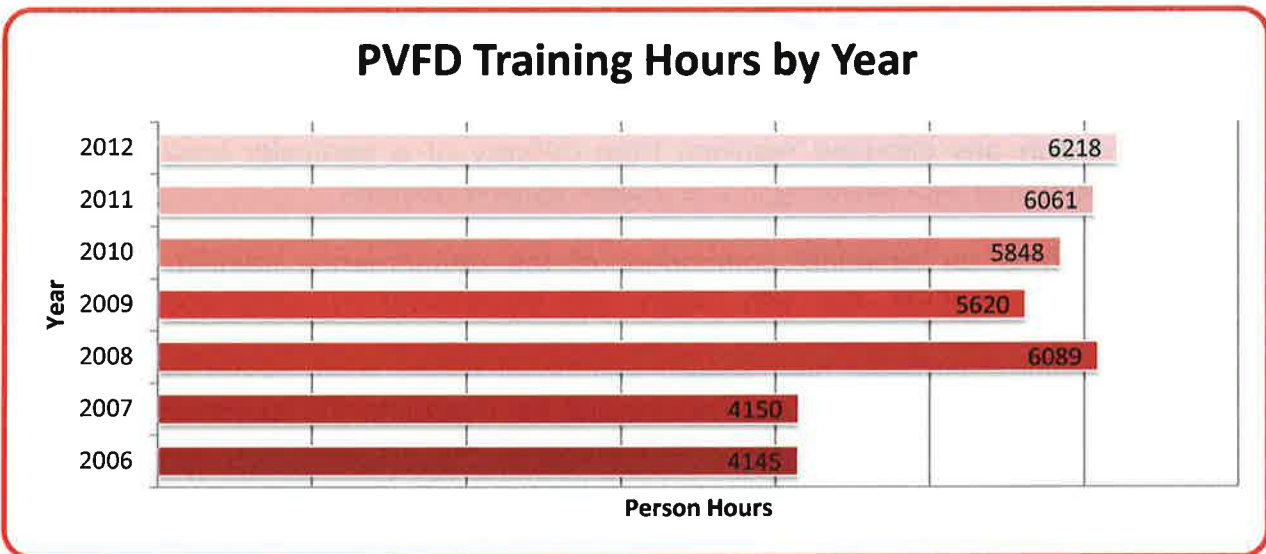
	Less than 1 year	1 – 5 Years	5 – 10 Years	10 – 20 Years	20 Years +
2012	5	20	4	7	1
# Certified	0	3	4	7	1

The members with less than one year service are the recruit members who have just started the certification process. At the end of the recruit training, these members will have completed seven of the required ten modules.

For many of the members who have between one and five years' service, they only have two or three modules remaining to complete the certification process.

Regular training occurs every Monday night throughout the year unless the Monday falls on a Statutory holiday when the training is scheduled for Tuesday. On average, there are 50 regular training sessions throughout the year. Additional required training is conducted on weekends in most cases or during weekdays for some of the more specialized training.

The following chart shows a comparison of the number of training hours contributed by members over the last several years.



The availability for member to take on any more training has become a challenge for the department. Members have reached the point where it is difficult to find the time to commit to additional training.



Officer training is another area the department should develop in a more consistent manner. Of the current nine volunteer officers in the department, five have completed Fire Officer I. While all of the officers in the department have completed various other courses to become a fire officer, it is important that the fire officer program be provided to all current officers and any senior firefighters identified as part of the succession plan. It should be the goal of the department to ensure that any member of the department

identified as a potential officer candidate is enrolled in the fire officer program and complete fire officer I before appointed as a new officer.

Ensuring lesson plans are current and relevant should be a priority of the department. Training standards are continuously changing and the department must be up-to-date on the latest trends to ensure the safety of the members. Additional resources may be required to assist in this area. The current company officers are responsible to update lesson plans with any changes resulting from delivery of a particular lesson. Duty officer may be tasked with assisting in this project as time permits.

Record keeping is an essential component of the department's training program. Accurate training records not only allow the department to determine lessons completed, it also helps to reduce the liability to the department should the need arise. After officers have completed their weekly training of crews, they submit the training report with any comments to the training division for input into the database. At this time, the resources required to maintain the training records are sufficient. Should extra resources be needed, additional hours could be added to the office assistant position to ensure records are accurate and up to date.

While there is currently no officially adopted provincial standard for the training of firefighters in the Province of BC, it is up to each jurisdiction to determine their level of training. The Parksville Fire Department currently trains to the National Fire Protection (NFPA) 1001 "Standard for Firefighter Professional Qualifications" Level II standard. This is an internationally recognized standard which has become the industry standard for the fire service. In addition to the NFPA 1001 standard, the department also follows or is influenced by the following standards:

NFPA 1006 Standard for Technical Rescuer Professional Qualifications	NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications
NFPA 1031 Standard for Professional Qualifications for Fire Inspector and Plan Examiner	NFPA 1021 Standard for Fire Officer Professional Qualifications
NFPA 1035 Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Fire setter Intervention	NFPA 1041 Standard for Fire Service Instructor Professional Qualifications
NFPA 1403 Standard on Live Fire Training Evolutions	NFPA 1405 Guide for Land-Based Fire Departments that Respond to Marine Vessel Fires
NFPA 1407 Standard for Fire Service Rapid Intervention Crews	NFPA 1500 Standard on Fire Department Occupational Safety and Health Program
NFPA 1521 Standard for Fire Department Safety Officer	Applicable Worksafe BC Regulations
First Responder Level III c/w Spinal and AED Endorsements	

In order to maintain our current service levels the community has come to expect and deserve, and to maintain our position as a fire service leader in our local region, it is imperative additional resources be allocated in support of the training function critical to the success of the department. The Staffing Plan section of this report addresses the additional resources required to deliver the level of services outlined in the Service Delivery Section.

RECOMMENDATIONS

1. Maintain current level of fire service to outside areas.
2. Maintain current level of medical response. Do not expand without policy direction from Council.
3. Evaluate technical rescue program for sustainability.
4. Addition or reallocation of resources to meet frequency of inspection or change frequency of inspection policy.
5. Establish priorities and/or goals for public education programs as well as identify additional resources that may be needed to sustain programs.
6. Allocate resources to accomplish pre-fire plan goals and objectives.
7. Allocate additional staff resources to supplement current training resources.

HEALTH AND SAFETY PROGRAMS

The Parksville Volunteer Fire Department has adopted a health and safety program as part of required operational guidelines for the department. This document was recently updated in 2011.

The department provides the following services to members as part of an ongoing health and safety program:

Annual Lung Function Testing	Annual Fit Testing of Respirators
Medicals for Recruit Members	EFAP Program for all members
Supply Gym Equipment for members to use to promote physical fitness	

Generally, the department follows the guidelines established in the health and safety program. The exception is the follow up medicals for members who have been with the fire department for five years or more. To date, no funding has been allocated to provide for medicals on an ongoing basis. Funding this function is important to ensure that members of the department are mentally and physically capable of performing duties necessary to meet the requirements of the position.

Additional WHMIS training is needed to provide members with the information required to meet the requirements of WorkSafe BC. With the turnover of membership and the constant training of new recruits, the available time to train members in WHMIS is difficult to achieve. The department will need to review the training schedule and identify potential periods when WHMIS training could fit into the schedule. In order to meet the requirements for WHMIS training, the department could utilize a combination of methods to achieve this important information such as:

1. Online training – would allow members to complete the training at their own pace and available time. This would not impact on regular training nights leaving more time for critical hands-on training.
2. Combine with other similar training – components of WHMIS training could be included as part of other regular training such as HAZMAT review.
3. As part of regular business meeting, an annual review of the departments WHMIS program could be completed at one of the department's monthly business meetings. As the department has set aside part of every other business meeting for the opportunity to update members on issues not requiring a full practice, it may be the best solution to meet the requirement for an annual review of the WHMIS program.

The department's health and safety committee meets on the first Monday of the month prior to the regular practice. The committee is functioning as required and is able to deal issues as they arise. Safety is a big part of what the fire department does and it is reflected in how the health and safety committee responds to and provides resolutions to issues being brought forward for review.

Training of members is conducted in accordance with the guidelines outlined in the health and safety program for the department.

Equipment is maintained in accordance with the health and safety program with the exception of annual hose testing. This issue needs resolution to ensure fire hose is fully operational and ready for use in an emergency situation. This issue was also addressed in the staffing plan section of this report.

While the injuries and incidents involving damage to equipment are relatively low compared to the potential due to the type of work being conducted, there are the occasional incidents that require follow-up. The health and safety committee ensures a follow-up is conducted on all incidents and the findings are reported to all members to make them aware of potential situations where injuries or damage to equipment could occur.

Physical fitness of members is an important issue for the fire department. In conjunction with the Volunteer Firefighters Association, the department purchased equipment for the use of members to promote physical fitness. Areas in the fire hall have been set aside for the use of the fitness equipment and members are encouraged to use the facility and equipment. Not only does this promote increased fitness levels for the members, which will serve them well during emergency incidents, it has the added benefit of members being around the fire hall at times when no one else may be on site and possibly reducing response time for emergency incidents.

Recommendations:

1. The occupational health and safety program for the department be reviewed on an annual basis by the occupational health and safety committee and recommendations brought forward for review.
2. The delivery of an annual review of WHMIS be instituted and a regular review of the department's WHMIS program be established.
3. Funding be established to provide for ongoing medical exams for fire department members.
4. Training for safety committee members be provided on a consistent basis.
5. The department continues to promote physical fitness programs for members and make space and funding available to help increase fitness levels of firefighters.

EMERGENCY PREPAREDNESS PROGRAM

The City of Parksville Emergency Program follows the FOUR pillars of emergency management: mitigation, preparation, response and recovery. In order to do this, the program is broken down into three parts. The Emergency Operations Centre (EOC), Emergency Support Services (ESS) and the Emergency Communications Team (ECT). The City of Parksville engineering and operations department play a vital role in the response and recovery portions of a man made or natural disaster.

THE EMERGENCY OPERATIONS CENTRE (EOC)

The Provincial Emergency Act requires that all local governments have their own emergency program including a staffed EOC. The Parksville EOC is based out of the PCTC and is located in the Forum, room 100, room 105 and can expand as necessary into other rooms and areas of the PCTC. The PCTC is the main area of coordination for the EOC and communicates as needed with public works and engineering, the fire department, other emergency services and responders, and the Emergency Management BC Program in Victoria.

The EOC is staffed by staff from the City. The emergency preparedness co-ordinator (EPC) is responsible for filling the positions within the EOC with appropriate City staff and providing them with the training to be able to guide the City through any emergency. Training and exercising the EOC is ongoing as new staff require training and existing staff need to have their skills maintained.

REGIONAL FOCUS

Although the City is required to have a standalone emergency program, the EPC works closely with the Town of Qualicum Beach and the Regional District of Nanaimo to develop a regional approach to managing emergencies. In a large-scale emergency requiring a 24/7 EOC activation, the three local governments separately do not have enough staff to maintain an EOC longer than 24 hours. By combining the trained staff from the three local governments, a rotating schedule can be created ensuring relatively fresh people are available to guide the region through an emergency. This relationship between local governments is vital to the overall success of the program.

OCEANSIDE EMERGENCY SUPPORT SERVICES (OESS)

OESS is a volunteer-based program which is a component of the overall emergency program. This group provides care, support and coordination for people in the area affected by an emergency, not only for Parksville, but the entire area within District 69. OESS can provide three days (72 hours) of food, lodging and emotional support to people who are forced from their home or stranded in Parksville due to an emergency in the surrounding area. OESS volunteers are available on a 24 hour call out rotation and respond to provide support for uninsured loss for anything from a house fire to a neighbourhood evacuation in an emergency. When large numbers of people are displaced due to an emergency, the OESS team has two reception centres at its disposal in Parksville (PCCC and the Baptist Church on Pym Street) and six more

located within the Regional District of Nanaimo and one in the Town of Qualicum Beach. The team is trained to receive, register and support displaced people within 60 to 90 minutes of being called out during an emergency.

The EPC works closely with the volunteer OESS director to ensure that four areas are maintained in order for the team to function most effectively. Staffing and Succession planning, training, support agreements and reception centre supply maintenance are the key functions within OESS which require ongoing time and resources.

Due to an aging population and a global change in volunteerism, OESS has gone from a robust group of over 100 to 25 dedicated volunteers. Volunteer recruitment, training and maintenance is the first priority for this team as the current roster of 25 volunteers is well below what is necessary to provide adequate service to the City of Parksville and does not begin to cover the needs within the District 69 community. In addition to recruitment struggles, current volunteers are not willing to accept positions with high levels of demand and responsibility. OESS is now experiencing this situation with the planned departure of the volunteer director at the end of 2013. Identified replacement candidates from the current volunteer base have declined to move into the director position and the remaining volunteer base also refused the opportunity when offered. At this time, OESS will not have a leader as of January 1, 2014.

Training of newly recruited volunteers is the next priority. Existing volunteers require rest from the constant requirement of on-call. For perspective, 10 trained volunteers are required to operate a reception centre for one shift; within District 69, there are nine reception centres.

Reception centre maintenance is ongoing. Each Centre must be inventoried and items such as batteries must be changed. In addition, volunteers need to exercise the reception centre annually to maintain knowledge of the specific centre, equipment and area in order to provide the best response in an emergency. As the population continues to grow within District 69, the development of new reception centres, complete with supplies, emergency power, agreements for use of the building, communication equipment and trained staff must be undertaken. Parksville is currently working with the RDN to develop new centres in Coombs and in Bowser.

A reception centre is only as effective as the support system behind it. In addition to adequate levels of trained staff, supplier agreements must be maintained for food, lodging and other supplies. OESS volunteers are actively renewing all supplier agreements across District 69 in order to ensure this is available when needed.

EMERGENCY COMMUNICATIONS TEAM (ECT)

The Emergency Communications Team (ECT) is a group of trained radio operators key to the success of any emergency. When communications break down, nothing can function properly at any level or in any situation. The main function of the ECT is to provide communications from reception centres to the EOC and from the EOC to provincial communications when conventional forms of communications are not available. Landline telephone, cellular and internet communications can be easily

interrupted in an emergency. Radio communications are always available. The ECT has the volunteer base to provide personnel anywhere communication is required.

The City has supplied the ECT with communications equipment capable of short and long distance voice communications as well as short and long-distance digital communications. The digital communications ability allows the City to send email by radio waves when the internet is not available. This is critical when sending requests for supplies and help to the province. As a regional response, the three local governments partnered to build a custom trailer which provides all of the above noted communications on a portable platform which can be located anywhere it can be towed. Although new equipment has been purchased, much of the existing infrastructure allowing communication to the reception centres and the outside world is old and near its replacement date. Repeater systems and equipment for reception centres are a priority for the ECT to remain functional.

The main focus of the ECT at this time is training to ensure that all volunteers are familiar with the use of the radio equipment. Ongoing training for this group includes exercises to familiarize volunteers with area terrain and the location of all reception centres to ensure that radio communication with the EOC from any location in District 69.

The ECT is made up of men and women licensed by Industry Canada to operate radio equipment. This volunteer group is strong in numbers and extremely strong in knowledge and background. District 69 is fortunate to have one of the strongest ECT groups in the province. Although a large group, the ECT struggles with the same volunteer concerns of demand and responsibility. The current Municipal Emergency Radio Coordinator (MERC) will leave the position at the end of 2013 due to a change in fulltime employment. This position has been offered to the remaining volunteer group with no interest. At this time, the ECT will not have a leader as of January 1, 2014.

The potential weakness is that most of the volunteers are over 65 with one very capable 85 year old. Succession planning is the top priority for the ECT. We have been successful in recruiting some younger volunteers who are now actively recruiting from their age group. Although some success, much like ESS, there is a smaller pool to draw from for the next generation of volunteers to ensure the ECT remains strong.

PUBLIC EDUCATION

Education of the public to care for themselves in an emergency or disaster is a priority for the City. Current resources and staffing levels make it difficult to be proactive to the needs of the community. Currently, the EPC only delivers education programs on an as requested basis. The program consists of presentations about personal, family and neighbourhood preparedness. The more prepared residents are, the more the EOC can focus on the site of the emergency or disaster and the faster the City can recover.

NEIGHBOURHOOD PROGRAMS

As an extension of public education, the City works with neighbourhoods wishing to develop a neighbourhood emergency program. Currently, Craig Bay, Estuary Place, Pioneer Crescent Residents Association, and a number of strata complexes have organized in this fashion. The EPC delivers a presentation and materials to a willing neighbourhood on how they can work together to look after each other with the education and tools existing within their group. The neighbourhood plan is designed to complement the EOC by having the neighbourhood organized to report to the EOC with a situation report on their neighbourhood. This allows the EOC to deliver help where it is needed in a more timely fashion.

RECOMMENDATIONS

Although the Parksville emergency plan is well developed, there is considerable work to be completed before Parksville can call itself "prepared". The following are recommendations which if approved would move the emergency program towards completion.

1. The fire chief is currently both supervisor and deputy to the EPC. The fire chief does not have time in his position to support the EPC as a deputy. As a .4 position, the EPC currently does not have the time to complete projects necessary to sustain the emergency program. The EPC currently spends a majority of the .4 position acting as a volunteer coordinator for the OESS and ECT. In order to address struggles with volunteer management and the need to make time available for other aspects of the emergency program supporting the EPC, a deputy EPC/volunteer coordinator position is needed. This proposed position could be partly funded by the Regional District of Nanaimo and Town of Qualicum Beach as the volunteer coordinator portion looks after the needs of District 69, not just the City of Parksville.
2. Develop and implement a recruitment and retention strategy for both the OESS and ECT to ensure an adequate pool of trained volunteers are available for emergency response in the event of any large scale disaster.
3. Develop a training program to support the emergency program by reviewing the current program and future needs. Ensure that the new program is adequately funded in order to provide a successful program.
4. Develop a strategy for increasing the profile of emergency preparedness in the community.
5. Continue to develop the relationship with regional partners creating a consistent approach to emergency management within District 69.

6. Work with regional partners to create a regional recovery program for District 69.

Schedule A

FIRE UNDERWRITERS SURVEY – Table of Effective Response.

**FIRE UNDERWRITERS SURVEY**

c/o CGI Information Systems and Management Consultants

Excerpt:

Fire Underwriters Survey Manual: A Guide to Public Fire Protection

Basis of Table of Effective Response

Fire Underwriters Survey considers it appropriate from available data that speed of response can be transposed to plans for the general assessment of travel times, as a rule of thumb, using the formula: kilometres = travel time minus one; that is if the travel time required is four minutes, then travel time minus one equal three kilometres. This formula reflects data showing that average speeds of response increase with the length of the run, and is close to the result of several major studies.

Variable conditions of severe weather and traffic congestion may be expected to affect this by as much as 20% or more. Municipalities should always run comparisons with actual conditions by calculating their own times, but should be wary of extending allowable runs much beyond those indicated in the Table of Effective Response.

A number of modifications to the indicated requirements of the table may be necessary in the case of such factors such as severe life hazard conditions, exceptional street and traffic problems, high frequency fire incidence and the availability of automatic aid fire company response available from adjoining communities. Qualified judgements will be a necessary part of any application of the system.

For severe life hazard, first alarm availability times generally should be reduced by one time-group in the table. While times shown may, for a fairly broad range of travel conditions, be transposed to kilometres for application to plans simply by subtracting one, this should be modified downward in circumstances for such factors as steep grades, narrow or traffic congested streets, or conversely, upward for fire department control of traffic lights of exceptionally fast arterial routes.



FIRE UNDERWRITERS SURVEY

c/o CGI Information Systems and Management Consultants

Notes to Table

- (a) When unsprinklered buildings over six stories have fire flow requirements less than Group 4, the number of Pumper and Ladder Companies under "Total Availability Needed" should be increased at least to the next group to provide the additional manpower required except where this additional manpower regularly responds in the time allotted, as occurs in some volunteer or composite fire departments.
- (b) * A ladder company is required here only when exceptional conditions apply, such as 3 storey heights, significant life hazards.
- (c) ** For numerous or large single buildings over three stories use two ladder companies in 5 minutes.
- (d) The table gives travel times for apparatus AFTER dispatch and turn-out. Under very exceptional conditions affecting total response time, these nominal figures should be modified.

Fire Underwriters Survey - Table of Effective Response¹

The following Table aids in the determination of Pumper and Ladder Company distribution and total members needed. It is based on availability within specified response travel times in accordance with the fire potential as determined by calculation of required fire flows, but requiring increases in availability for severe life hazard.

RISK RATING ²	BUILDING DISTRICT EXAMPLES	FIRE FLOW		INITIAL RESPONSE TO ALARMS			1ST DUE		2ND DUE		1ST DUE		TOTAL AVAILABILITY NEEDED	
		L/min X1000	Approx. Range	Pumper Companies	Ladder Companies	Pumper Company, Minutes	Pumper Company, Minutes	Ladder Company, Minutes	No.	Min.	Pumper Co's, No.	Min.	Ladder Co's, No.	Min.
1 (a) (b)	Very small buildings, widely detached. Scattered development (except where wood roof coverings).	2	400	1	0	7.5	-	*9	1	7.5	*1	9		
		3	600	1	0	6	-	*7.5	1	6	*1	7.5		
2	Typical modern, 1 - 2 storey residential subdivision 3 - 6 m 10 - 20 ft. detached).	4-5	800-1000	2	0	4	6	*6	2	6	*1	6		
3 (a)	Close 3 - 4 storey residential and row housing, small mercantile and industrial.	6-9 10-13	1200-2000 2200-2800	2	1 (if required by Hazards)	3.5 3.5	5 5	*4 *4	2 3	5 6	*1 *1	4 4		
3 (b)	Seriously exposed tenements. Institutional. Shopping Centres. Fairly large areas and fire loads, exposures.	14-16 17-19	3000-3600 3800-4200	2	1	3.5 3.5	5 5	4 4	4 5	7 7	1 **1	4 4		
4 (a)	Large combustible institutions, commercial buildings, multi-storey and with exposures.	20-23 24-27	4400-5000 5200-6000	2	1	2.5 2.5	4 4	3.5 3.5	6 7	7.5 7.5	2 2	5 5		
4 (b)	High fire load warehouses and buildings like 4(a).	28-31 32-35	6200-6800 7000-7600	3	1	2.5 2.5	3.5 3.5	3.5 3.5	8 9	8 8	3 3	7 7		
5	Severe hazards in large area buildings usually with major exposures. Large congested frame districts.	36-38 39-42 43-46	7800-8400 8600-9200 9400-10000	3	3	2.0 2.0 2.0	3.5 3.5 3.5	2.5 2.5 2.5	10 12 14	8 9 9	4 5 6	7.5 8 9		

¹ Source: Fire Underwriters Survey Manual: A Guide to Public Fire Protection

² These groupings do not refer to Dwelling Protection Grade classification (also a 1-5 scale).

Schedule B

**FIRE UNDERWRITERS SURVEY – Technical Bulletin Re: Insurance on
Fire Apparatus.**



TECHNICAL BULLETIN

FIRE UNDERWRITERS SURVEY™

A Service to Insurers and Municipalities

INSURANCE GRADING RECOGNITION OF USED OR REBUILT FIRE APPARATUS

The performance ability and overall acceptability of older apparatus has been debated between municipal administrations, the public fire service and many others for years. Fire Underwriters Survey (FUS) has reviewed experiences across Canada and in other countries and has developed a standard for acceptance of apparatus as the apparatus becomes less reliable with age and use.

The public fire service is unique compared to other emergency services in that fire apparatus vehicles are not continuously in use. However, when in use, the apparatus is subject to considerable mechanical stress due to the nature of its function. This stress does not normally manifest itself on the exterior of the equipment. It is effectively masked in most departments by a higher standard of aesthetic care and maintenance. Lack of replacement parts further complicates long term use of apparatus. Truck and pump manufacturers maintain a parts inventory for each model year for a finite time. After that period, obtaining necessary parts may be difficult. This parts shortage is particularly acute with fire apparatus due to the narrow market for these devices.

Fire Underwriters Survey lengthy experience in evaluating fire apparatus indicates that apparatus should be designed to an acceptable standard. The standard that is accepted throughout Canada by Fire Underwriters Survey is the Underwriters' Laboratories of Canada (ULC) Standard S515 (most updated version) titled, "Automobile Fire Fighting Apparatus," which was adopted as a National Standard of Canada in September 2004. Alternatively, NFPA 1901, the Standard for Automotive Fire Apparatus (most updated version) is also accepted by Fire Underwriters Survey with respect to apparatus design. Fire apparatus should be built by recognized manufacturers and tested by a suitably accredited third party.

Fire apparatus should respond to first alarms for the first fifteen years of service. During this period it has reasonably been shown that apparatus effectively responds and performs as designed without failure at least 95% of the time. For the next five years, it should be held in reserve status for use at major fires or used as a temporary replacement for out-of-service first line apparatus. Apparatus should be retired from service at twenty years of age. Present practice indicates the recommended service periods and protocols are usually followed by the first purchaser. However, at the end of that period, the apparatus is either traded in on new apparatus or sold to another fire department. At this juncture, the unit may have one or more faults which preclude effective use for emergency service. These deficiencies include:

- a. Inadequate braking system
- b. Slow pick-up and acceleration



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- c. Structurally weakened chassis due to constant load bearing and/or overloading
- d. Pump wear

FUS has modified its application of the age requirement for used or rebuilt apparatus. Due to municipal budget constraints within small communities we have continued to recognize apparatus over twenty years of age, provided the truck successfully meets the recommended annual tests and has been deemed to be in excellent mechanical condition. The specified service tests are outlined below under the heading "Recommended Service Tests for Used or Modified Fire Apparatus". Testing and apparatus maintenance should only be completed by a technician who is certified to an appropriate level in accordance with NFPA 1071, *Standard for Emergency Vehicle Technician Professional Qualifications*.

Insurance grading recognition may be extended for a limited period of time if we receive documentation verifying that the apparatus has successfully passed the specified tests. If the apparatus does not pass the required tests or experiences long periods of "downtime" we may request the municipal authority to replace the equipment with new or newer apparatus. If replacement does not occur, fire insurance grading recognition may be revoked for the specific apparatus which may adversely affect the fire insurance grades of the community. This can also affect the rates of insurance for property owners throughout the community.

Table 1 Service Schedule for Fire Apparatus For Fire Insurance Grading Purposes

Apparatus Age	Major Cities ³	Medium Sized Cities ⁴	Small Communities ⁵ and Rural Centres
0 – 15 Years	First Line Duty	First Line Duty	First Line Duty
16 – 20 Years	Reserve	2 nd Line Duty	First Line Duty
20 – 25 Years ¹	No Credit in Grading	No Credit in Grading or Reserve ²	No Credit in Grading or 2 nd Line Duty ²
26 – 29 Years ¹	No Credit in Grading	No Credit in Grading or Reserve ²	No Credit in Grading or Reserve ²
30 Years +	No Credit in Grading	No Credit in Grading	No Credit in Grading

¹ All listed fire apparatus 20 years of age and older are required to be service tested by recognized testing agency on an annual basis to be eligible for grading recognition. (NFPA 1071)

² Exceptions to age status may be considered in a small to medium sized communities and rural centres conditionally, when apparatus condition is acceptable and apparatus successfully passes required testing.

³ Major Cities are defined as an incorporated or unincorporated community that has:

- a populated area (or multiple areas) with a density of at least 400 people per square kilometre; AND
- a total population of 100,000 or greater.

⁴ Medium Communities are defined as an incorporated or unincorporated community that has:

- a populated area (or multiple areas) with a density of at least 200 people per square kilometre; AND/OR
- a total population of 1,000 or greater.

⁵ Small Communities are defined as an incorporated or unincorporated community that has:

- no populated areas with densities that exceed 200 people per square kilometre; AND
- does not have a total population in excess of 1,000.



Table 2 Frequency of Listed Fire Apparatus Acceptance and Service Tests

	Frequency of Test					
	@ Time of Purchase New or Used	Annual Basis	@ 15 Years	@ 20 Years <i>See Note 4</i>	20 to 25 Years (Annually)	After Extensive Repairs <i>See Note 5</i>
Recommended For Fire Insurance Purposes	Acceptance Test if new; Service Test if used & < 20 Years	Service Test	Acceptance Test	Acceptance Test	Acceptance Test	Acceptance or Service Test depending on extent of repair
Required For Fire Insurance Purposes	Acceptance Test if new; Service Test if used & < 20 Years	No Test Required	No Test Required	Acceptance Test	Acceptance Test	Acceptance or Service Test depending on extent of repair
Factor in FUS Grading	Yes	Yes	Yes	Yes	Yes	Yes
Required By Listing Agency	Acceptance Test	No	No	No	N/A	Acceptance Test
Required By NFPA <i>See Note 6</i>	Acceptance Test	Annual Service Test	Annual Service Test	Annual Service Test	Annual Service Test	Service Test

Note 1: See: 'Service Tests for Used or Rebuilt Fire Apparatus' for description of applicable tests

Note 2: Acceptance Tests consist of 60 minute capacity and 30 minute pressure tests

Note 3: Service Tests consist of 20 minute capacity test and 10 minute pressure test in addition to other listed tests

Note 4: Apparatus exceeding 20 years of age may not be considered to be eligible for insurance grading purposes regardless of testing. Application must be made in writing to Fire Underwriters Survey for an extension of the grade-able life of the apparatus.

Note 5: Testing after extensive repairs should occur regardless of apparatus age within reason.

Note 6: Acceptance Tests: See NFPA 1901, Standard for Automotive Fire Apparatus

Service Tests: See NFPA 1911, Standard for Service Tests of Fire Pump Systems on Fire Apparatus, Article 5.1



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SERVICE TESTS FOR USED OR MODIFIED FIRE APPARATUS

The intent of this document is to ensure that all used or modified fire apparatus, equipped with a pump or used for tanker service, essentially meet the requirements of Underwriters' Laboratories of Canada (ULC) "Standard for Automobile Fire Fighting Apparatus" S515-04 or subsequent (current) editions of the Standard. Full adherence with the following specified tests is recommended when purchasing used apparatus.

Weight Tests

Load Balance Test:

When fully laden (including a 460kg (1000 lbs) personnel weight, full fuel and water tanks, specified load of hose and miscellaneous equipment), the vehicle shall have a load balance of 22% to 50% of total vehicle mass on the front axle and 50% to 78% of this mass on the rear axle.

Distribution of mass of 33% and 67% respectively on the front and rear axles is preferable for a vehicle having dual rear tires or tandem rear axles.

For a vehicle having tandem rear axles and dual tires on each axle, a loading of between 18% and 25% on the front axle with the balance of mass on the rear axles is permissible.

Road Tests

Acceleration Tests:

- 2.1.1) From a standing start, the apparatus shall attain a true speed of 55 km/h (35 mph) within 25 seconds for Pumpers carrying up to 3,150 litres (700 gallons) of water.

For apparatus carrying in excess of 3,150 litres (700 gallons) or apparatus equipped with aerial ladders or elevating platforms, a true speed of 55 km/h (35 mph) in 30 seconds should be attained.

- 2.1.2) The vehicle should attain a top speed of at least 80 km/h (50mph).

Braking Test:

The service brakes shall be capable of bringing the fully laden apparatus to a complete stop from an initial speed of 30 km/h (20 mph) in a distance not exceeding 9 metres (30 feet) by actual measurement. The test should be conducted on a dry, hard surfaced road that is free of loose material, oil and grease.



Pump Performance Tests**Hydrostatic Test**

Recent evidence of hydrostatic testing of the pump for 10 minutes at a minimum pressure of 3,400 kPa (500 psi). APPLICABLE TO NEW OR REBUILT PUMPS ONLY (see 3.3).

Priming and Suction Capability Tests**Vacuum Test:**

The pump priming device, with a capped suction at least 6 metres (20 feet) long, shall develop -75 kPa (22 inches of mercury) at altitudes up to 300 metres (1000 feet) and hold the vacuum with a drop of not in excess of 34 kPa (10 inches of mercury) in 10 minutes.

For every 300 metres (1000 feet) of elevation, the required vacuum shall be reduced 3.4 kPa (1 inch mercury).

The primer shall not be used after the 10-minute test period has been started. The test shall be made with discharge outlets uncapped.

Suction Capability Test:

The pump (in parallel or series) when dry, shall be capable of taking suction and discharging water with a lift of not more than 3 metres (10 feet) through 6 metres (20 feet) of suction hose of appropriate size, in not more than 30 seconds and not over 45 seconds for 6000 L/min (1320 lgpm) or larger capacity pumps. Where front or rear suction is provided on midship pumps, an additional 10 seconds priming time will be allowed. The test shall be conducted with all discharge caps removed.

Pump Performance**Capacity Test:**

Consists of drafting water (preferably with a 10 feet lift) and pumping the rated capacity at 1000 kPa (150 psi) net pump pressure for a continuous period of at least 1 hour.

Pressure Test:

Under the same conditions as in 3.3.1 above pumping 50% of the rated capacity at 1700 kPa (250 psi) net pump pressure for at least ½ hour



For additional information on the above noted tests and test procedures, the following documents provide useful data:

- Underwriters Laboratories of Canada (ULC) publication titled S515 Standard for Automobile Fire Fighting Apparatus, latest edition.
- Fire Underwriters Survey (FUS) publication titled Fire Stream Tables and Testing Data latest edition.
- International Fire Service Training Association (IFSTA) publication titled Fire Department Pumping Apparatus, latest edition.
- National Fire Protection Association (NFPA) 1901 Standard for Automotive Fire Apparatus, latest edition.
- National Fire Protection Association (NFPA) 1911 Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus, latest edition.
- National Fire Protection Association (NFPA) 1912 Standard for Fire Apparatus Refurbishing, latest edition.

For further information regarding the acceptability of emergency apparatus for fire insurance grading purposes, please contact:

Western Canada	Quebec	Ontario	Atlantic Canada
Risk Management Services Fire Underwriters Survey 3999 Henning Drive Burnaby, BC V5C 6P9 1-800-665-5661	Risk Management Services Fire Underwriters Survey 1611 Crémazie Blvd. East Montreal, Quebec H2M 2P2 1-800-263-5361	Risk Management Services Fire Underwriters Survey 150 Commerce Valley Drive, West Markham, Ontario L3T 7Z3 1-800- 268-8080	Risk Management Services Fire Underwriters Survey 238 Brownlow Avenue, Suite 300 Dartmouth, Nova Scotia B3B 1Y2 1-800-639-4528



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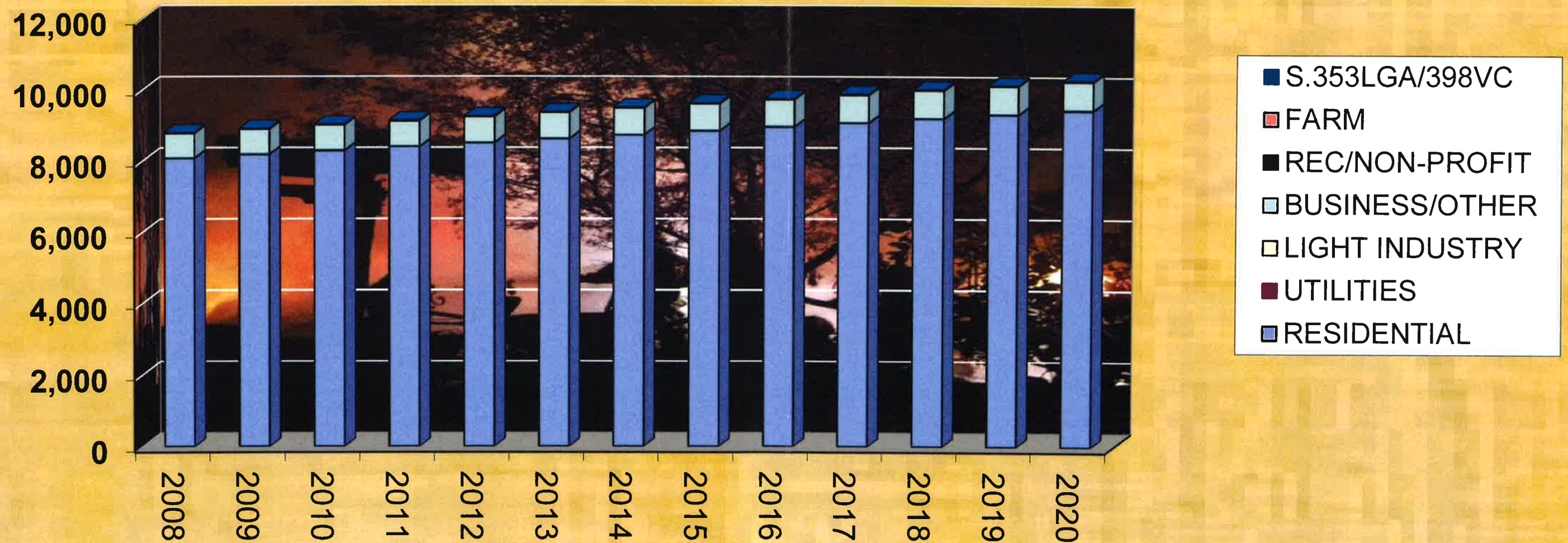
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Schedule C

-Building Inventory Statistics/Projections

-Population Statistics/Projections

Building Inventory Projections



Population Projections

