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December 12, 2013

Board of Commissioners
Snohomish County FPD 8
1825 S. Lake Stevens Rd.
Lake Stevens, Washington 98258

Dear Commissioners:

The Washington Surveying and Rating Bureau (WSRB) have completed its evaluation of the fire protection capabilities, as they relate to fire insurance rating, of your community. We wish to inform you that the Protection Classification (PC) for Snohomish County FPD 8 has remained a Protection Class 5.

Snohomish County FPD 8 was also evaluated for WSRB Tender Credit, and it was determined that the community will retain this PC rating credit.

A Protection Class (PC) 5 rating will apply to dwelling and commercial properties located in the community, within 5 road miles of a responding fire station and having standard fire hydrant distribution and water supply. Properties in the community not meeting the above requirements will receive a different PC rating.

Protection Class ratings for individual dwelling and commercial properties are available by calling WSRB Customer Service at (206) 217-0101.

We wish to thank Deputy Fire Chief Larry Huff and Fire Marshal Robert Marshall for their cooperation during the evaluation.

Please find enclosed a copy of the new Protection Class Report. This report shows the various items evaluated and points associated with each item. The points total for all items determines the Protection Class of the community.

This survey was not conducted for property loss prevention or for life safety purposes. The purpose was to gather information needed to determine a fire insurance relevant Public Protection Classification that may be used to develop fire insurance rates or loss costs. Our evaluation criteria incorporate many national recognized standards, such as those developed by NFPA and AWWA, and has been filed with and approved by the Washington State Office of Insurance Commissioner.



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If you have any questions, please let us know.

Sincerely,

Daryl Girnus
Public Protection Field Representative
Seattle Office 206.273.7148
daryl.girnus@wsrb.com

Enclosure

cc: Fire Chief David Lingenfelter



Protection Class Report for:

SNOHOMISH COUNTY FIRE DISTRICT 8

Effective Date: January 1, 2014

Prepared By:

Washington Surveying and Rating Bureau

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WSRB

The Washington Surveying & Rating Bureau (WSRB) is a 100-year-young property rating bureau operating in the State of Washington. WSRB is an independent, non-profit public service organization.

We are, first and foremost, an information-gathering and publishing organization. We are an independent, authoritative resource for the insurance industry.

Our mission is to deliver accurate, reliable and timely information about a risk.

One of the services WSRB provides for the insurance industry is determining the Protection Class Gradings of communities and the Protection Class ratings of the properties in those communities. This service is provided by the Public Protection Department of the WSRB

Public Protection Department

WSRB Public Protection department evaluates fire protection/suppression capabilities of cities and fire protection districts using a schedule approved by the Washington State Office of the Insurance Commissioner. WSRB assigns each community a Protection Class of 1 through 10, where 1 indicates exemplary fire protection capabilities, and 10 indicates the capabilities, if any, are insufficient for insurance credit.

The Protection Class evaluation process recognizes the efforts of communities to provide fire-protection services for citizens and property owners. This is why insurance companies use Protection Classes to help establish fair premiums for fire insurance — generally offering lower premiums in communities with better protection. By offering economic benefits for communities that invest in their firefighting services, the evaluation provides a real incentive for improving and maintaining fire protection.

To determine a community's Protection Class WSRB uses the 2013 version of the Community Protection Class Grading Schedule. The Grading Schedule measures the fire protection capabilities of a community by means of a point system or, for communities without a recognized water supply, by comparison with minimum criteria.

Under the point system, pertinent items are evaluated against the standards set forth in this schedule and points are assigned for each deviation from these standards, depending on the importance of the item and the degree of deviation.

The four major features considered under the point system, as well as the relative value allocated to each are listed below.

- Water Supply – 35%
- Fire Department – 40%
- Emergency Communications – 9%
- Fire Safety Control – 16%

Additional point consideration is given to communities where the water supply is considerably better than the fire department, or vice versa, such that the better feature cannot be utilized to full value. See section titled DIVERGENCE in the report for more details.

The Protection Class (PC) for communities without a recognized water supply and having an established fire department will be determined by comparing the fire defenses provided with the minimum criteria for a PC 8 and PC 9. If these minimum criteria are not met, PC 10 will be assigned to the community.

The following pages provide a point summary of all the items evaluated to determine the Protection Class Grading for the community. The point system employed is a deficiency point system with zero being the best score. Items evaluated not meeting the requirements set forth in the Community Protection Class Grading Schedule are assigned points based on how deficient the item is and the point value of the item. At the end of the point summary pages is a page showing the total points for each of the four major features (water supply, fire department, emergency communications and fire safety control), the relative class rating of the feature and the calculation of the Protection Class Grading for the community.

Following the point summary is a report showing each item evaluated under the Water Supply, Fire Department, Emergency Communications and Fire Safety Control sections, and explanation of the item, the points scored in the item and the percentage of credit attained for the item.

When used in the Grading Schedule, "residential" refers to one- to four-family dwellings, and "commercial" refers to business, industrial, warehouse, institutional, educational, hotel, apartment, and other non-residential occupancies.

The Protection Class produced by the grading schedule is the overall Protection Class of the community, not the Protection Class of all the property located in the community. The rules of the applicable protection class manual must be applied to the Community Protection Class to determine the PC of an individual property located within the community. Buildings and property located within the graded community are



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eligible for the Protection Class of the community, but no better, if they meet the distance to fire station and applicable fire hydrant requirements. If these requirements are not met, the building will receive a different Protection Class Rating than the Protection Class of the community.

If there are questions on the Protection Class grading of the community please contact the Public Protection Field Representative that conducted the evaluation. Their contact information is provided at the bottom of the cover letter.

If there are questions on the Protection Class rating of individual properties in the community please contact WSRB Customer Service at 206-217-0101 or customerservice@wsrb.com. If the community is receiving Protection Class inquiries from insurance professionals, feel free to refer these inquiries on to WSRB Customer Service.

SUMMARY OF POINTS - Water Supply

<u>Item</u>	<u>Points</u>
1 Adequacy of Water Supply	90
1a. Commercial districts	<u>90</u>
1b. Residential districts	<u>0</u>
2 Distribution of Hydrants	219
2a. Commercial districts	<u>158</u>
2b. Residential districts	<u>61</u>
3 Hydrants Size, Type and Installation	<u>5</u>
4 Hydrants Inspection and Condition	<u>34</u>
5 Arrangement, Operation and Maintenance of Water System Components	168
5a. Arrangement and Operation	<u>34</u>
5b. Maintenance	<u>134</u>

Total Points: 516

EXPLANATION OF POINTS

WATER SUPPLY

Points % of
Scored Credit

1. Adequacy of Water Supply

1a. Commercial Districts

This item evaluates the water system's ability to deliver the required fire flow for commercial properties in the community. The score for this item is determined by comparing the required fire flow for a building to the available fire flow. A building's required fire flow is calculated using type of construction, square footage, occupancy, external exposure, and whether the building is equipped with an automatic sprinkler system. Available fire flow is measured using hydrant flow tests and the capacity of the water system storage, pumps, filters, and mains.	90	88%
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1b. Residential Districts

Fire flow availability is also evaluated in the residential districts of the community. The base fire flow requirement for residential properties is 1,000 gpm for a one-hour duration. In the context for the Protection Class Grading Schedule, "residential" refers to one- to four-family dwellings.	0	100%
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2. Distribution of Hydrants

2a. Commercial Districts

This item evaluates whether commercial buildings located in the community have an adequate number of fire hydrants and if the fire hydrants are well distributed around the building. Buildings specifically rated by WSRB are used in evaluating this item.	158	55%
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2b. Residential Districts

Residential structures in the community will be evaluated to determine if a fire hydrant is available within 600 feet. Point score is based on the total number of properties as compared to the number of properties with a fire hydrant within 600 feet.	61	70%
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3. Hydrant size, type & installation

Hydrants shall conform to American Water Works Association (AWWA) Standards for dry-barrel hydrants. Standard hydrants must have a minimum of one pumper outlet and two 2.5-inch outlets, be connected to at least a 6-inch water main, and be provided with a control valve on connections between the hydrant and street main. Hydrants should also have a quick-connect fitting on the pumper port and uniform operating direction.	5	95%
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4. Hydrants Inspection and Condition

Hydrants must be inspected annually, including operating the hydrant and checking the static pressure. Flow tests of hydrants must be conducted at least every 5 years. Fire hydrants shall be marked for available water flow, free of obstructions, and kept in good condition.	34	66%
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5. Arrangement, Operation and Maintenance of Water System Components

5a. Arrangement and Operation

"Arrangement" of the water system components evaluates the location and number of water sources and water storage units. Multiple water sources and water storage locations provide redundancy in order to reduce the impact of failure of one part of the system. "Operation" considers how the system is monitored and controlled (telemetry), how water is delivered (pumps or gravity), and if backup power is provided for pumps. The water system shall be managed by a state-certified	34	66%
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5b. Maintenance

This item evaluates the frequency of visits to and inspections of water system components other than hydrants. Regular visits and inspections allow for timely maintenance and repair of components. Water system components including wells, pumps, water tanks and reservoirs, pressure reduction, altitude, float control, and water main control and isolation valves shall be	134	33%
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SUMMARY OF POINTS - Fire Department

<u>Item</u>	<u>Points</u>
1 Pumpers	<u>22</u>
1a. Number of Pumpers in Service	<u>15</u>
1b. Number of Reserve Pumpers	<u>7</u>
2 Ladder Trucks/Ladder Service	<u>62</u>
2a. Number of Ladder Trucks in Service	<u>45</u>
2b. Number of Reserve Ladder Trucks	<u>13</u>
2c. Ground Ladder Service	<u>4</u>
3 Distribution of Companies	<u>101</u>
4 Pumper Capacity	<u>16</u>
4a. Pumper Capacity	<u>11</u>
4b. Reserve Pumper Capacity	<u>5</u>
5 Maintenance and Condition of Apparatus	<u>99</u>
6 Number of Officers	<u>36</u>
6a. Number of Chief Officers	<u>0</u>
6b. Number of Company Officers	<u>36</u>
7 Department Staffing	<u>157</u>
7a. Normal Minimum Strength of Day Shift	<u>83</u>
7b. Normal Minimum Strength of Night Shift	<u>74</u>
8 Engine and Ladder Company Unit Staffing	<u>122</u>
9 Stream Devices	<u>20</u>
10 Equipment for Pumpers and Ladder Trucks	<u>5</u>
11 Hose	<u>7</u>
11a. Total Amount of LDH & 2½-inch Hose	<u>7</u>
11b. Total Amount of 1½-inch Hose	<u>0</u>
11c. Total Amount of Pre-Connected Hose	<u>0</u>
12 Condition of Hose	<u>23</u>
13 Training	<u>152</u>
14 Response to Alarms	<u>3</u>
15 Fire Operations	<u>162</u>
16 Special Protection	<u>0</u>
16a. Fireboats in Service	<u>0</u>
16b. Other Needed Special Protection	<u>0</u>
17 Miscellaneous Factors and Conditions	<u>37</u>
17a. Fire Stations	<u>9</u>
17b. Fuel	<u>15</u>
17c. Delays in Response	<u>13</u>

Total Points: 1024

EXPLANATION OF POINTS

FIRE DEPARTMENT

Scored points % of Credit

1. Pumpers

1a. Pumpers

The number of pumpers in service and regularly responding to alarms must be sufficient to properly protect the community. The number of pumpers required is determined by evaluating the fire flow requirements in the community, geographical distribution of structures, response of engines outside the community, and frequency of alarms. The required number of pumpers is compared to the number of pumpers in service. Pumper-ladder trucks will be credited under this item. Automatic aid will be considered in this item, but credit will not exceed 1/3 of the requirement.	15	93%
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1b. Reserve Pumpers

One reserve pumper is required for every 8 pumpers required to be in service, but no fewer than 1. Reserve pumpers shall be fully equipped, tested, and maintained for service.	7	83%
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2. Ladder Trucks/Ladder Service

2a. Number of Ladder Trucks in Service

The number of ladders trucks in service and regularly responding to alarms must be sufficient to properly protect the community. A ladder truck is required when a community has at least 5 buildings with a required fire flow of 4,000 gpm or greater and/or 3 stories (35 feet) in height. The required number of ladders is compared to the number of ladders in service. Pumper-ladder trucks will be credited under this item. Automatic aid will be considered in this item, but credit will not exceed 1/3 of the requirement. The height and type of ladder tuck will also be evaluated in this item.	45	55%
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2b. Number of Reserve Ladder Trucks

One reserve ladder truck is required for every 5 ladder trucks required to be in service, but no fewer than 1. Reserve ladders shall be fully equipped, tested, and maintained for service.	13	35%
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2c. Ground Ladder Service

In those communities not considered to require a standard ladder truck, sufficient ground ladders to reach the roofs of buildings must be carried on pumpers or special apparatus. The number, type, height, and testing of ground ladders will be evaluated in the item.	4	92%
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3. Distribution of Companies

Engine and ladder companies must be distributed to provide effective protection to the community. Structures should be within 1.5 road miles of a first-alarm engine company and 2.5 miles of a ladder company. Distances may be increased to 4 road miles in areas with separation of 100 feet or more between buildings. Pumper-ladders and automatic aid will be considered in this item.	101	50%
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4. Pumper Capacity

4a. Pumper Capacity

Adequate pumper capacity must be provided on the first alarm to meet or exceed basic fire flow. All fire pumps must be tested annually to receive full credit. Automatic aid will be considered in this item.	11	95%
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4b. Reserve Pumper Capacity

The total pumper capacity, including reserve pumpers, with 1 for each 8 required pumpers (but not fewer than 1 and including the largest) out of service, must be sufficient to maintain the total pumper capacity required.	5	75%
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5. Maintenance and Condition of Apparatus.....

99 34%

5a. Facilities and Personnel

Facilities, preferably departmental, must be adequate to properly service all apparatus, and an adequate number of personnel trained in fire apparatus maintenance must be provided. This item evaluates who operates the maintenance facility and the certifications of the maintenance personnel.	N/A	40%
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5b. Preventative Maintenance

A suitable preventive maintenance program must be in effect; this includes service tests of pumpers and inspection and testing of aerial ladders and elevating platforms. This item evaluates how often apparatus are checked and inspected. The testing frequency of pumps, aerials, foam systems, CAFS, breathing air systems, road test, and weight verification are also evaluated.	N/A	30%
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5c. Age of Apparatus

The age of apparatus will be considered in determining condition. Pumpers, ladders, and support vehicles older than 15 years will receive deficiency points. Apparatus older than 25 years will receive additional deficiency points.	N/A	58%
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EXPLANATION OF POINTS

FIRE DEPARTMENT

Scored points % of Credit

6. Number of Officers

6a. Number of Chief Officers

A chief officer in charge of the department must be on duty at all times but need not sleep at a fire station to be considered on duty provided there are adequate means for notification and response to alarms. Departments with more than 8 companies, in addition to the chief and assistant chief, must have sufficient battalion or district chiefs to provide one on duty in a fire station at all times for each 8 companies or major fraction required. Two active volunteer officers may be considered equivalent to one full on-duty officer, up to half the number of officers required.	0	100%
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6b. Number of Company Officers

There must be sufficient company officers to provide one on duty at all times with each required engine or ladder company. Two active volunteer officers may be considered equivalent to one full on-duty officer, up to half the number of officers required.	36	28%
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7. Department Staffing

7a. Normal Minimum Strength of Day Shift

There must be 6 firefighters on duty for each of the required engine and ladder companies. Only personnel who participate in actual structural firefighting operations will be credited. Personnel staffing ambulances or other units serving the general public may be credited depending on the extent they are available for firefighting duties. Three call and/or volunteer firefighters will be considered equivalent to 1 on-duty firefighter. Call or volunteer firefighters may not exceed half the required strength of required companies. If adequate records of response are not kept, credit may be limited to 1 on-duty for each 6 call or volunteer firefighters. Call or volunteer firefighters working defined shifts at fire stations may be considered equivalent to on-duty firefighters. Response of firefighters on automatic aid apparatus and the response of off-shift personnel will also be considered in this item.	83	59%
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7b. Normal Minimum Strength of Night Shift

There must be 6 firefighters on duty for each of the required engine and ladder companies. Only personnel who participate in actual structural firefighting operations will be credited. Personnel staffing ambulances or other units serving the general public may be credited depending on the extent they are available for firefighting duties. Three call and/or volunteer firefighters will be considered equivalent to 1 on-duty firefighter. Call or volunteer firefighters may not exceed half the required strength of required companies. If adequate records of response are not kept, credit may be limited to 1 on-duty for each 6 call or volunteer firefighters. Call or volunteer firefighters working defined shifts at fire stations may be considered equivalent to on-duty firefighters. Response of firefighters on automatic aid apparatus and the response of off-shift personnel will also be considered in this item.	74	63%
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8. Engine and Ladder Company Unit Staffing

Unit staffing strength for engine and ladder companies only considers companies with apparatus in service credited in items 1 and 2. The amount by which the required 6 on-duty firefighters per company exceeds the on-duty strength (as determined in Item 7), divided by the number of in-service companies, equals the average deficiency per company.	122	62%
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9. Stream Devices

Turrets, nozzles, foam equipment, and, where required, elevated stream devices must be provided. This item evaluates the required stream devices to the devices provided. Credit will be limited if annual testing is not conducted and maintenance records are not provided.	20	60%
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10. Equipment for Pumpers and Ladder Trucks

This item will consider equipment for existing pumpers and ladder trucks, except for such equipment considered in Items 2c (ground ladders), 9 (stream devices), and 11 (hose). Credit will be limited if annual testing is not conducted and maintenance records are not provided.	5	95%
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11. Hose

11a. Total Amount of LDH & 2 1/2 " Hose

This Item considers whether adequate hose is carried on each pumper and whether adequate reserve hose is provided. The requirement for large diameter hose (3.5 inches or larger) for each pumping apparatus is 600 feet on the apparatus and 300 feet in reserve. The requirement for 2.5-inch + hose is 800 feet on the apparatus and 400 feet in reserve.	7	91%
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EXPLANATION OF POINTS

FIRE DEPARTMENT

Scored points % of Credit

	Scored points	% of Credit
11b. Total Amount of 1 1/2 " Hose		
The requirement for 1.5-inch + hose on each pumping apparatus is 400 feet with 200 feet in reserve.	0	100%
11c. Total Amount of Pre-Connected Hose		
The requirement for pre-connected, 1.5-inch + hose on each pumping apparatus is 200 feet. Booster hose that is pre-connected to the pump is creditable, but booster hose smaller than 1.5 inches will only receive 50% credit.	0	100%
12. Condition of Hose.....		
12a. Hose Testing Frequency		
All hose, in service and reserve, must be maintained in good condition and tested annually in accordance with NFPA Standard 1962.	N/A	80%
12b. Age of Hose		
The age of all hose in service and in reserve is evaluated for the item.	N/A	47%
12c. Hose Washing, Drying, and Storage Facilities		
Suitable facilities and procedures must be provided for washing, drying, and storing hose. This is to prevent mildew in the hose jackets and rust / corrosion in hose compartments.	N/A	30%
12d. Cotton Jacket Hose		
An additional deficiency will be added for cotton-jacketed hose.	N/A	100%
13. Training.....		
13a. Supervision		
Training must be under the guide of a qualified training officer. Maximum credit is achieved when the training officer has at least 10 years of direct incident command experience, a rank of captain or better, and certification as a Fire Instructor II. Personnel in charge of training sessions must be certified as fire instructors.	N/A	80%
13b. Company Training		
Firefighters are required to have a minimum of 20 hours of structural fire fighting training per firefighter, per month. This amount can be reduced by 25%, to 15 hours, for firefighters that are certified Firefighter I and by 50%, to 10 hours, for firefighters that are certified firefighter II. Training should include topics outlined in NFPA 1001: <u>Standard for Fire Fighter Professional Qualifications</u> .	N/A	43%
13c. Training Center Training		
This item evaluates the quantity of training at a training center and the quality of the training center. A minimum of 8 half-day (3-hour) drills per year, including 2 drills at night and 4 multiple-company drills, shall be provided for all firefighters. Training centers should provide a drill tower that is 3 stories in height (4 stories in height if a ladder truck is required in the community), a structure to support live fire simulation, a combustible liquid pit (minimum of 20-foot radius accessible from all directions), training aids and props, and an area of at least 2 acres suitable for multi-company operations.	N/A	33%
13d. Officer Training		
A minimum of two days per year (16 hours) is required for all officers. This amount can be reduced by 25%, to 12 hours, for officers that are certified Fire Officer I and by 50%, to 8 hours, for officers that are certified Fire Officer II. Officer training should include topics outlined in NFPA 1021: <u>Standrad for Fire Officer Professional Qualifications</u> that focus on leadership, fire tactics, and incident command.	N/A	100%
13e. Driver & Operator Training		
Personnel who drive and/or operate apparatus should participate in a minimum of 1 day (8 hours) of training per year. Training should include topics outlined in NFPA 1002: <u>Standard for Fire Apparatus Driver/Operator Professional Qualifications</u> . Current state-approved EVIP certification can serve in lieu of annual training.	N/A	40%
13f. Recruit Training		
New fire department members should receive a minimum of 240 hours of recruit training during their first year of membership. Training should include topics outlined in NFPA 1001: <u>Standard for Fire Fighter Professional Qualifications</u> .	N/A	40%
13g. Pre-Fire Planning		
An annual inspection of all commercial or similar type buildings is required. Pre-fire information should be readily available on responding apparatus. Pre-fire plans should be in accordance with NFPA 1620: <u>Recommended Practice for Pre-Incident Planning</u> .	N/A	60%

EXPLANATION OF POINTS

FIRE DEPARTMENT

	Scored points	% of Credit
14. Response to Alarms	3	97%
14a. Run Cards		
Run cards detailing the fire department response to fires must be developed for all areas of the community.	N/A	100%
14b. Commercial Districts		
Adequate response to alarms must be established. The required first alarm response depends on the district's basic fire flow. For districts with basic fire flow from 1500-3,999 gpm, at least 1 chief officer, 2 engine companies, and 1 ladder service company are required. For districts with basic fire flow from 4,000-8,999 gpm, at least 1 chief officer, 3 engine companies, and 1 ladder truck company are required. When basic fire flow is 9,000 gpm or higher, at least 1 chief officer, 3 engine companies, and 2 ladder truck companies are required.	N/A	88%
14c. Residential Districts		
At least 1 chief officer, 2 engine companies, and adequate ladder equipment are required to respond to residential districts.	N/A	100%
14d. Multiple Alarms		
Engine company response to each additional alarm for the same fire should approximate the number of engine companies required for the first alarm.	N/A	100%
14e. Cover Plan		
Response areas in the community must have a cover plan for when the first due companies are out of service.	N/A	100%
15. Fire Operations		
Consideration will be given to the ability of the department to operate effectively at fires. Effectiveness is dependent on staffing and training; however, others factors can also affect fire operations. Percentage for this item will be determined by taking the average of the percentages from Items 7, 8, and 13 and adjusting as conditions warrant.	162	49%
16. Special Protection		
16a. Insufficient Fireboats in Service		
A suitably staffed, equipped, and maintained fireboat will be required where at least 1 mile of wharf frontage necessitates firefighting operations from the water side. Such frontage must be within 1.5 miles of a fireboat.	0	100%
16b. Lack of Other Needed Special Protection		
Conditions in the municipality that require special fire department protection in addition to that covered elsewhere in this schedule will be considered in this item. Conditions considered in this item include but are not limited to: waterfront properties needing some special protection but not requiring a conventional fireboat, extensive brush areas, extensive bulk oil and other hazardous storage.	0	100%
17. Miscellaneous Factors and Conditions		
17a Fire Stations		
This item considers suitability of fire stations, including construction, housing of apparatus, and if the station is provided with a secondary power source. Communication equipment should be provided at fire stations and include two-way radios, spare portable radios, commercial telephone, and means for public reporting to the dispatch centers. Firefighters must have two separate means for receiving alarms from the communication center. At least one means must be supervised. If the stations are not staffed, firefighters must be equipped with the means to receive alarms.	9	91%
17b. Fuel		
Fuel must be available in sufficient quantities at fire stations. Suitable arrangements must be made for delivery of fuel to apparatus at fires of long duration.	15	25%
17c. Delays in Response		
The possibility of delays due to poor condition of roads, including snow and ice, steep grades, vehicle parking, traffic, railroad grade crossings, and similar features are considered in this item.	13	87%

SUMMARY OF POINTS

EMERGENCY COMMUNICATIONS

<u>Item</u>	<u>Points</u>
1 Communication Center	<u>10</u>
1a. Building Construction, Exposures, and Communicating Openings	<u>5</u>
1b. Fire Protection	<u>0</u>
1c. Security	<u>5</u>
1d. Emergency Lighting	<u>0</u>
2 Communication Center Equipment	<u>30</u>
2a. CAD	<u>25</u>
2b. Recording	<u>0</u>
2c. Telephone Service	<u>0</u>
2d. Supervision	<u>0</u>
2e. Dispatch Circuits	<u>0</u>
2f. Emergency Power	<u>5</u>
3 Tele-Communicators	<u>5</u>
3a. Training	<u>5</u>
3b. Number of Telecommunicators on Duty	<u>0</u>

Total Points: 45

EXPLANATION OF POINTS

EMERGENCY COMMUNICATIONS

Scored
points % of
Credit

1. Communications Center

1a. Building Construction, Exposures, and Communicating Openings

This item evaluates the building where the communication center is located. Communication centers should be in fire resistive, separate buildings without internal or external exposures.	5	90%
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1b. Fire Protection

This item evaluates the adequacy of fire protection provided for the communication center, including portable fire extinguishers, fire alarms, automatic sprinkler systems and suppression systems in computer and data processing equipment rooms.	0	100%
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1c. Security

Communication center security is meant to protect against vandalism, terrorism, civil disturbances. Restricted access, security of doors and windows, and the vulnerability of the areas surrounding the center are considered.	5	50%
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1d. Emergency Lighting

Communication centers must be provided with emergency lighting that will be placed in service immediately after a power loss so operations can continue uninterrupted. At least one self-charging lantern or flashlight should also be provided.	0	100%
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2. Communications Center Equipment

2a. Computer-Aided Dispatch (CAD)

Features and capabilities of the Computer-aided dispatch system are evaluated. Maximum credit is achieved when the CAD system has enhanced 911, wireless and VoIP capabilities, allows data exchange, has a redundant backup system with automatic switch-over to backup, selects and recommends units to be dispatched, MDC capable, has automatic vehicle locating, GIS capabilities, and management information system (MIS). Credit will be prorated depending on the communication center's CAD capabilities.	25	64%
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2b. Recording

All incoming and outgoing voice transmissions shall be recorded including the date and time. All telecommunicators should have access to immediate playback of recordings.	0	100%
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2c. Telephone Service

The number of required telephone lines for emergency and business calls is determined by the population served by the communication center. Additional lines may be required if emergency calls other than fire are received, or if central station alarms are received. One outgoing-only line must also be provided.	0	100%
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2d. Supervision

All components of the alarm dispatch circuits shall monitored for integrity including dispatch circuits, transmitters, repeaters, primary and secondary power. Fault conditions detected shall actuate an audible and visual trouble signal at a constantly attended location.	0	100%
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2e. Dispatch Circuits

The communication center must have separate primary and secondary dispatch circuits for transmitting alarms. Maximum credit is obtained when dual circuits are provided, circuits are supervised, have automatic switchover to secondary circuits, and all components of the system are owned by the communication center.	0	100%
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2f. Emergency Power

The Communication Center shall be provide with an emergency power source. An uninterruptible power supply (UPS) shall be provide along with an automatically starting generator.	5	83%
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3. Telecommunicators

3a. Training

A minimum of 480 hours of initial training is required for Telecommunicators. General dispatch training and fire dispatch training should be a minimum of 240 hours each. Non-certified telecommunicators should receive 40 hours of continuing education per year. Certified Telecommunicator I personnel and certified Telecommunicator II personnel shall receive 30 hours and 24 hours of continuing education, respectively.	5	90%
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3b. Number of Telecommunicators on Duty

The number of required telecommunicators on duty is based on the total number of calls received per year at the communication center. If the communication center is meeting the call answering and dispatching times set forth by NFPA 1221 Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, the full credit will be applied in this item.	0	100%
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SUMMARY OF POINTS - Fire Safety Control

<u>Item</u>	<u>Points</u>
1 Fire Code Enforcement	<u>200</u>
1a. Fire Marshal	<u>10</u>
1b. Fire Plan Review	<u>20</u>
1c. Inspections of Fire Code Permits	<u>5</u>
1d. Fire Code Inspections of Existing Occupancies	<u>160</u>
1e. Confidence Testing of Fire Protection Systems	<u>5</u>
2 Public Fire Education	<u>23</u>
2a. School Programs	<u>18</u>
2b. Adult Programs	<u>5</u>
3 Fire Investigations	<u>0</u>
4 Building Code Enforcement	<u>8</u>
Total Points:	<u><u>231</u></u>

EXPLANATION OF POINTS

FIRE SAFETY CONTROL

Scored points % of Credit

1. Fire Code Enforcement

1a. Fire Marshal

The fire marshal shall oversee fire code enforcement. The fire marshal shall have 10 or more years of code enforcement experience, be certified as a fire marshal, and receive at least 16 hours of fire-code-related continuing education per year.	10	50%
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1b. Fire Plan Review

Review of plans for fire code compliance must be done by experienced, certified personnel. The plan reviewer shall have 5 or more years of plan review experience, be a registered design professional (licensed professional engineer), and receive at least 16 hours of plan review related continuing education per year. Certified plan reviewers will receive 10% less credit than a design professional. The plan review department needs to have adequate staffing to ensure comprehensive plan reviews.	20	60%
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1c. Inspections of Fire Code Permits

New and renovated occupancies requiring a fire code permit must be inspected prior to issuing a Certificate of Occupancy. Fire inspectors shall be certified with 5 or more years of experience in inspections and receive at least 16 hours of fire inspection related continuing education per year. Adequate department staffing levels must be maintained to ensure comprehensive inspections.	5	90%
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1d. Fire Code Inspections of Existing Occupancies

Fire Code Inspections of existing occupancies shall be conducted. The frequency of inspections will be evaluated using Table 7 in the Protection Class Grading Schedule. Fire code inspectors should be certified with 5 or more years of experience and receive minimum of 16 hours of fire inspection related continuing education per year. Staffing levels must be sufficient to ensure comprehensive inspections.	160	60%
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1e. Confidence Testing of Fire Protection

Fire protection systems must be inspected and tested in accordance with the applicable NFPA standards. A program shall be in place to ensure these inspections are done, monitor the inspections results, and ensure deficiencies found with the systems are corrected.	5	75%
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2. Public Fire Education

Fire safety education must be provided to the general public. Fire educators should be Certified Public Educators in accordance with NFPA 1035, have 5 or more years of experience, and receive 16 hours of public-education-related continuing education per year.

2a. School Programs

School programs provided in the community will be evaluated and shall include age-appropriate subjects for all students.	18	49%
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2b. Adult Programs

Adult programs provided in the community will be evaluated.	5	67%
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3. Fire Investigations

Fire investigations must be done to determine the cause and origin of all fires. Fire investigator shall have 5 or more years of experience, be a commissioned law officer, be certified as a fire investigator, and receive at least 16 hours of fire-investigation-related continuing education per year. In addition, sufficient staff levels are required to ensure adequate response to fires, and all fires should be reported to NFIRS.	0	100%
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4. Building Code Enforcement

Building Code Class 3

Current building codes must be adopted and effectively enforced. The score for this item is based on the Building Code Class for the community and is shown above.	8	80%
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Summary of Points

Final Calculation of The Community Protection Class Grade

Sections evaluated

	Water Supply	Fire Department	Emergency Communications	Fire Safety Control
Points Scored	516	1024	45	231
Maximum Points	1450	1950	450	650
% of Credit	64	47	90	64
Relative Value of Section	35%	40%	9%	16%
Relative Class of Section	4	6	1	4

Total credit for all sections 5.95

Divergence Score 0

Community Protection Class (PC) Grade = (10-total Credit) + divergence score

Community Protection Class (PC) Grade = 4.05 (Unrounded Grade)

Community Protection Class (PC) Grade = 5

Protection Class	Point Range
1	0.0 to 1.00
2	1.01 to 2.00
3	2.01 to 3.00
4	3.01 to 4.00
5	4.01 to 5.00
6	5.01 to 6.00
7	6.01 to 7.00
8	7.01 to 8.00
9	8.01 to 9.00
10	9.01 to 10.00

Final Calculation of the Community Protection Class Grade

	Points Scored	% of Credit
Water Supply		
The water supplies in the community that provide fire hydrants are evaluated in this section. In communities with multiple water supplies, the water supplies are prorated by their size (number of fire hydrants) to determine the overall score. Water Supply Items 1 through 5 make up the total score for this section.	516	64%

Fire Department		
The fire department servicing the community is evaluated in this section. The total service area of the fire department including incorporated and unincorporated area will be considered. Fire Department Items 1 through 17 make up the total score for this section.	1024	47%

Emergency Communications		
The Emergency Communication Center responsible for dispatching the fire department that services the community is evaluated. This evaluation will also apply to other communities the communication center dispatches fire services to. Emergency Communication Items 1 through 3 make up the total score for this section.	45	90%

Fire Safety Control		
Fire Safety Control or fire prevention activities provided in the community are evaluated in this section. These activities may be provided by local, county or state authorities all of which will be included in the evaluation. Fire Safety Control Items 1 through 4 make up the total score for this section.	231	64%

Divergence		
Excessive difference between the class of the Water Supply and the class of the Fire Department prevents the more effective feature from being utilized to its full relative value. An additional number of points are assigned to the grading of the community to recognize this divergence. Divergence in class between Water Supply and Fire Department of 2 classes or more shall have points added to the final grading of the community.	0	

Community Protection Class (PC) Grade = 5

The Protection Class produced by this schedule is the overall class of the community, not the classification of all property located in the community. The rules of the applicable protection class manual must be applied to the Community Protection Class to determine the PC of an individual property located within the community.