



Staff Report

Agenda Item: ISO'S (INSURANCE SERVICES OFFICE, INC.) PUBLIC PROTECTION CLASSIFICATION SUMMARY REPORT FOR THE CLARKDALE FIRE DISTRICT - A review from Clarkdale Fire District Chief Joe Moore of highlights in the Public Protection Classification Summary Report.

Sponsored By: Mayor Von Gausig

Prepared By: Gayle Mabery, Town Manager

Meeting Date: September 28, 2010

Background: The ISO collects and evaluates information from communities in the United States on their structure fire suppression capabilities. In each of those communities, ISO analyzes data and assigns a Public Protection Classification (PPC) – a number from 1 to 10, with Class 1 representing exemplary fire protection. The surveys are conducted whenever it appears that there is a possibility of a classification change.

The efforts of the Fire Department/District itself are only one part of the overall criteria used to determine the PPC. A community's PPC depends on:

- Fire alarm and communication systems, including telephone systems, telephone lines, staffing and dispatching systems.
- The fire department, including equipment, staffing, training and geographic distribution of fire stations/companies.
- The water supply system, including condition and maintenance of hydrants, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires.

The last time ISO came to Clarkdale to conduct a full evaluation of the department, water system and communication systems, was in 1989. As a result of the 1989 evaluation, Clarkdale's ISO rating was 7/9. Properties which are over 1000 feet from the nearest hydrant were classified as a "9" and those within 1000 feet were rated a "7". Obviously, much has changed in Clarkdale since the last ISO evaluation. In 1989, Clarkdale had an all-volunteer municipal department. In those days, although we had very dedicated personnel, there were not very many of the policies/procedures and standards in place that ISO looks for during an evaluation. Since the Clarkdale Fire District formed, they have strived to improve the service they provide to the community in many ways, including:

- Consistent equipment testing, i.e. hydrants, hoses, ladders, engine pumps, etc.
- Extensive documentation of maintenance and repair records of equipment and apparatus.

- Purchase of equipment, i.e. large diameter hose, pike poles, attic ladder, nozzles, etc.
- Additional manpower. With the assistance of a SAFER grant, the Clarkdale Fire District was able to hire three additional personnel in March 2009, resulting in three full-time personnel on every shift.
- Personnel training. A large part of a firefighter's time is spent training. The amount and type of training is now methodically tracked and documented.

In addition, the Town of Clarkdale purchased the local water company from a private owner. Private owners of water systems in Arizona have no responsibility to provide water for fire protection. With that in mind, prior to the Town's purchase in 2006, there was no reason for the private water company owner to make capital improvements to the water system specifically for fire protection. The Town of Clarkdale does have a responsibility to provide water for fire protection, and is funding projects specifically to improve fire protection capacity.

ISO's PPC Program plays an important role in the underwriting process at insurance companies. Most U.S. insurers use PPC information as part of their decision making process when deciding what business to write, coverage's to offer or prices to charge for personal or commercial property insurance.

Because many of the changes since the 1989 rating were expected to improve the community's PPC, and could, therefore, have a positive impact on insurance rates for property owners in Clarkdale, Clarkdale Fire Chief Joe Moore requested a review from ISO in 2009. As a result, representatives from ISO conducted a review for the Clarkdale Fire District which began in 2009 and concluded in February, 2010. The review included evaluations not only of the Clarkdale Fire District, but of the Town of Clarkdale's water delivery system for fire suppression. As a result of the review and subsequent report, the PPC for Clarkdale improved from 7/9 to 5/9.

The report is attached in your packet for your information. Clarkdale Fire District Chief Joe Moore will be in attendance at the Council meeting to review the highlights of the report for the Town Council.

Recommendation: This is a report only, and no action is necessary by the Town Council.



INSURANCE SERVICES OFFICE, INC.

111 NORTH CANAL STREET SUITE 950 CHICAGO, ILLINOIS 60606-7270 (312) 930-0070 (800) 444-4554 FAX: (312) 930-9394

September 1, 2010

Gayle Maybery, Town Manager
Town of Clarkdale
PO Box 308
Clarkdale, AZ 86324

RE: Clarkdale FD, Yavapai County, AZ
Public Protection Classification: 5/9
Effective Date: October 1, 2010

Dear Ms. Maybery:

We wish to thank you, Fire Chief Moore and Water Official Debrosky for your cooperation during our recent Public Protection Classification (PPC) survey. ISO has completed its analysis of the structural fire suppression delivery system provided in your community. The resulting classification is indicated above.

Enclosed is a summary of the ISO analysis of your fire suppression services. If you would like to know more about your community's PPC classification, or if you would like to learn about the potential effect of proposed changes to your fire suppression delivery system, please call us at the phone number listed below.

ISO's Public Protection Classification Program (PPC) plays an important role in the underwriting process at insurance companies. In fact, most U.S. insurers – including the largest ones – use PPC information as part of their decision-making when deciding what business to write, coverage's to offer or prices to charge for personal or commercial property insurance.

Each insurance company independently determines the premiums it charges its policyholders. The way an insurer uses ISO's information on public fire protection may depend on several things – the company's fire-loss experience, ratemaking methodology, underwriting guidelines, and its marketing strategy.

PPC is important to communities and fire departments as well. Communities whose PPC improves may get lower insurance prices. PPC also provides fire departments with a valuable benchmark, and is used by many departments as a valuable tool when planning, budgeting and justifying fire protection improvements.

ISO appreciates the high level of cooperation extended by local officials during the entire PPC survey process. The community protection baseline information gathered by ISO is an essential foundation upon which determination of the relative level of fire protection is made using the Fire Suppression Rating Schedule.

The classification is a direct result of the information gathered, and is dependent on the resource levels devoted to fire protection in existence at the time of survey. Material changes in those resources that occur after the survey is completed may affect the classification. Although ISO maintains a pro-active process to keep baseline information as current as possible, in the event of changes please call us at (800) 930-1677 to expedite the update activity.

ISO is the leading supplier of data and analytics for the property/casualty insurance industry. Most insurers use PPC classifications for underwriting and calculating premiums for residential, commercial and industrial properties. The PPC program is not intended to analyze all aspects of a comprehensive structural fire suppression delivery system program. It is not for purposes of determining compliance with any state or local law, nor is it for making loss prevention or life safety recommendations.

If you have any questions about your classification, please let us know.

Sincerely,

Very truly yours,

Public Protection Classification Dept.

Public Protection Classification Dept.
(800) 930-1677 Ext. 6209

Encl.

cc: Joe Moore, Fire Chief
Wayne Bedrosky, Water Supt.
James Elmer, Chairman

Grading Sheet For: Clarkdale FD, Arizona
Yavapai County

Public Protection Class: 05/09

Surveyed: February, 2010

<u>Feature</u>	<u>Credit Assigned</u>	<u>Maximum Credit</u>
Receiving and Handling Fire Alarms	8.43%	10.00%
Fire Department	25.74%	50.00%
Water Supply	24.02%	40.00%
*Divergence	-1.71%	
Total Credit	<u>56.48%</u>	<u>100.00%</u>

The Public Protection Class is based on the total percentage credit as follows:

<u>Class</u>	<u>%</u>
1	90.00 or more
2	80.00 to 89.99
3	70.00 to 79.99
4	60.00 to 69.99
5	50.00 to 59.99
6	40.00 to 49.99
7	30.00 to 39.99
8	20.00 to 29.99
9	10.00 to 19.99
10	0 to 9.99

*Divergence is a reduction in credit to reflect a difference in the relative credits for Fire Department and Water Supply.

The above classification has been developed for use in property insurance premium calculations.

INSURANCE SERVICES OFFICE, INC.

CLASSIFICATION DETAILS

Graded Area: Clarkdale FD

County: Yavapai

State: Arizona

Date Surveyed: February, 2010 Total credit: 56.48 Class: 05/09 Pop.: 4,263

RECEIVING AND HANDLING FIRE ALARMS

This section of the Fire Suppression Rating Schedule reviews the facilities provided for the general public to report fires, and for the operator on duty at the communication center to dispatch fire department companies to the fires.

	<u>Actual</u>	<u>Credit</u> <u>Maximum</u>
1. Credit for Telephone Service (Item 414)		
This item reviews the facilities provided for the public to report fires, including the listing of fire and business numbers in the telephone directory.	2.00	2.00
2. Credit for Operators (Item 422)		
This item reviews the number of operators on-duty at the communication center to handle fire calls.	1.83	3.00
3. Credit for Dispatch Circuits (Item 432)		
This item reviews the dispatch circuit facilities used to transmit alarms to fire department members.	4.60	5.00
4. Total Credit for Receiving and Handling Fire Alarms:	8.43	10.00
Relative Classification for Receiving and Handling Fire Alarms:	2	

CLASSIFICATION DETAILS

Graded Area: Clarkdale FD

County: Yavapai

State: Arizona

Date Surveyed: February, 2010 Total credit: 56.48 Class: 05/09 Pop.: 4,263

FIRE DEPARTMENT

This section of the Fire Suppression Rating Schedule reviews the engine and ladder-service companies, equipment carried, response to fires, training and available fire fighters.

	<u>Actual</u>	<u>Credit</u> <u>Maximum</u>
1. Credit for Engine Companies (Item 513)		
This item reviews the number of engine companies and the hose equipment carried.	8.54	10.00
2. Credit for Reserve Pumpers (Item 523)		
This item reviews the number of reserve pumpers, their pump capacity and the hose equipment carried on each.	0.37	1.00
3. Credit for Pump Capacity (Item 532)		
This item reviews the total available pump capacity.	5.00	5.00
4. Credit for Ladder-Service Companies (Item 549)		
This item reviews the number of ladder and service companies and the equipment carried.	1.40	5.00
5. Credit for Reserve Ladder-Service Companies (Item 553)		
This item reviews the number of reserve ladder and service trucks, and the equipment carried.	0.26	1.00

CLASSIFICATION DETAILS

Graded Area: Clarkdale FD

County: Yavapai

State: Arizona

Date Surveyed: February, 2010 Total credit: 56.48 Class: 05/09 Pop.: 4,263

FIRE DEPARTMENT (continued)

	<u>Actual</u>	<u>Credit</u> <u>Maximum</u>
6. Credit for Distribution (Item 561)		
This item reviews the percent of the built-upon area of the city which has an adequately-equipped, responding first-due engine company within 1.5 miles and an adequately-equipped, responding ladder-service company within 2.5 miles.	1.81	4.00
7. Credit for Company Personnel (Item 571)		
This item reviews the average number of equivalent fire fighters and company officers on duty with existing companies.	2.87	15.00+
8. Credit for Training (Item 581)		
This item reviews the training facilities and their use.	5.49	9.00
9. Total Credit for Fire Department:	25.74	50.00+

Relative Classification for Fire Department:

+ This indicates that credit for manning is open-ended, with no maximum credit for this item.

CLASSIFICATION DETAILS

Graded Area: Clarkdale FD

County: Yavapai

State: Arizona

Date Surveyed: February, 2010 Total credit: 56.48 Class: 05/09 Pop.: 4,263

WATER SUPPLY

This section of the Fire Suppression Rating Schedule reviews the water supply system that is available for fire suppression in the city.

	<u>Actual</u>	<u>Credit</u> <u>Maximum</u>
1. Credit for the Water System (Item 616)		
This item reviews the supply works, the main capacity and hydrant distribution.	21.60	35.00
2. Credit for Hydrants (Item 621)		
This item reviews the type of hydrants, and method of installation.	1.82	2.00
3. Credit for Inspection and Condition of Hydrants (Item 631)		
This item reviews the frequency of inspections of hydrants and their condition.	0.60	3.00
4. Total Credit for Water Supply:	24.02	40.00
Relative Classification for Water Supply:	4	

INSURANCE SERVICES OFFICE, INC.

HYDRANT FLOW DATA SUMMARY

City Clarkdale Fd State Arizona Witnessed by: Insurance Services Office, Inc. Date: February 4, 2010
 County Yavapai

TEST NO.	TYPE DIST.*	TEST LOCATION	SERVICE	FLOW - GPM Q=(29.83(C(d ² p ^{0.5}))		PRESSURE PSI		FLOW -AT 20 PSI		REMARKS***
				INDIVIDUAL HYDRANTS	TOTAL	STATIC	RESID.	NEEDED **	AVAIL.	
1	Comm	Little Lady Lane & Main St	Town of Clarkdale, Zone 4	270	0	270	69	22	2000	300
2	Comm	North Miller Road & Broadway	Town of Clarkdale, Zone 1	840	0	840	110	35	2000	950
3	Comm	1st North & N 6th Street	Town of Clarkdale, Zone 4	370	0	370	70	40	2000	500
4	Comm	Main Street & S 9th Street	Town of Clarkdale, Zone 1	750	0	750	100	20	1750	750
5R	Res	Flat Iron & Phelps Dr	Town of Clarkdale, Zone 3	1210	0	1210	75	60	1500	2400
5	Comm	Rte 89a & 10th Street	Town of Clarkdale, Zone 3	1210	0	1210	75	60	1750	2400
6	Comm	Rte 89a	Town of Clarkdale, Zone 2	650	0	650	58	55	1000	2600
7	Comm	Black Hills Dr & Austin Way	Town of Clarkdale, Zone 3	1130	0	1130	90	58	1250	1700
8	Comm	Michel St & Beecher	Town of Clarkdale, Zone 1	750	0	750	62	35	1250	950

THE ABOVE LISTED NEEDED FIRE FLOWS ARE FOR PROPERTY INSURANCE PREMIUM CALCULATIONS ONLY AND ARE NOT INTENDED TO PREDICT THE MAXIMUM AMOUNT OF WATER REQUIRED FOR A LARGE SCALE FIRE CONDITION.
 THE AVAILABLE FLOWS ONLY INDICATE THE CONDITIONS THAT EXISTED AT THE TIME AND AT THE LOCATION WHERE TESTS WERE WITNESSED.
 *Comm = Commercial; Res = Residential.
 **Needed is the rate of flow for a specific duration for a full credit condition. Needed Fire Flows greater than 3,500 gpm are not considered in determining the classification of the city when using the Fire Suppression Rating Schedule.
 *** (A)-Limited by available hydrants to gpm shown. Available facilities limit flow to gpm shown plus consumption for the needed duration of (B)-2 hours, (C)-3 hours or (D)-4 hours.

THE ISO PUBLIC PROTECTION CLASSIFICATION (PPC) PROGRAM

ISO's PPC program evaluates communities according to a uniform set of criteria defined in the Fire Suppression Rating Schedule (FSRS). These criteria incorporate nationally recognized standards developed by the National Fire Protection Association and the American Water Works Association.

Utilizing the FSRS, ISO objectively reviews the fire suppression capabilities of a community and assigns a Public Protection Classification – a number from 1 to 10. Class 1 represents exemplary fire protection, and Class 10 indicates that the area's fire suppression program does not meet minimum recognition criteria. Assuming all other factors are equal, the price of property insurance in a community with a good PPC is lower than in a community with a poor PPC.

The FSRS allocates credit by evaluating the following three major features:

- Fire Alarm and Communication System - This review accounts for 10% of the total classification which centers upon a community's facilities and support for handling and dispatching fire alarms.
- Fire Department - This review accounts for 50% of the total classification which focuses upon items such as engine companies, distribution of fire stations and fire companies, department manning, and training.
- Water Supply System - This review accounts for 40% of the total classification highlighting the water supply a community uses for fire suppression.

Split Classifications

When ISO develops a single classification for a community, all of the community's properties receive that classification. In many communities, ISO develops a split classification (for example, 5/9). Generally, the first class, (Class 5 in the example) applies to properties within 5 road miles of a fire station and within 1000 feet of a fire hydrant. The second class (Class 9 in the example) applies to properties beyond 1000 feet of a hydrant but within 5 road miles of a fire station. ISO generally assigns Class 10 to properties beyond 5 road miles of a fire station. In a class 5/10 community, Class 5 applies to properties within 5 road miles of a fire station. Class 10 applies to properties beyond 5 road miles of a fire station station.

The above rules apply to properties with a needed fire flow of 3500 gpm or less. Properties with larger needed fire flows are individually evaluated, and may vary from the town classification.

Countrywide Public Protection Classification Summary

