

THE ISO FIRE PROTECTION RATING SYSTEM

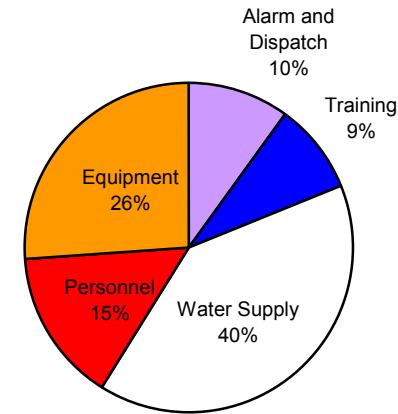
The Insurance Services Office, Inc. (ISO) has for many years done evaluations and ratings of the fire protection provided in communities. This system is called the ISO Public Protection Classification program, or PPC. The PPC process grades a community's fire protection on a scale of 1-10, based on ISO's PPC evaluations as a factor in setting the premiums they charge for property insurance; the better the community's PPC grade, the lower the premiums the insurance company would charge for property insurance in that community. ISO's data on fire losses indicates that communities with better fire protection as evaluated by the PPC do in fact tend to have lower losses from fire damage than other communities. This document gives an overview of the factors that affect a community's PPC rating, how these ratings affect, insurance premiums, how the city can have its rating reviewed, and where the city can get more information on the ISO PPC process.

❖ What factors are the PPC ratings based on?

ISO's PPC system has been in use since the early 1900's, and has been continuously modified and refined over that time. The Fire Suppression Rating Schedule (FSRS) is the manual ISO uses in reviewing the fire-fighting capabilities of individual communities. The FSRS looks at a great deal of specific information about the fire department, the water supply, and the types of property in the community, and uses a fairly complex process to evaluate that information. In general though, here are the factors the PPC system looks at.

- **Water supply** is the most important single factor, and accounts for 40% of the total rating. The FSRS compares the water supply available at representative areas of the community with the amount needed to fight a fire in the types of buildings there are at that location
- **Fire equipment** accounts for 26% of the rating. Again, there are both some specific minimum equipment requirements, and additional equipment standards based on the numbers and types of structures in the community. Regular testing of the equipment is also a factor

ISO Fire Rating Factors



- **Personnel** accounts for 24% of the rating. Fifteen percent of that is based on the numbers of firefighters available for the initial response and how quickly the firefighters can respond. The other 9% reflects the initial and ongoing training the firefighters receive.
- The **alarm and paging** system accounts for the remaining 10% of the rating. When ISO rates a community's fire protection, they will prepare a "Classification Detail Report" which shows in detail how much credit the city received in the rating process for each item reviewed, compared to the maximum credit possible for that item. ISO will also prepare an "Improvement Statement" which identifies what changes a city would need to make in order to move up to a particular grade. To get a copy of these reports, the fire chief needs to request them from ISO in writing on official letterhead.

❖ **Property Insurance Association of Louisiana: (PIAL)**

In the State of Louisiana the Property Insurance Association inspect and grade communities for the ISO rating evaluation. As a service organization, PIAL is a non-profit association of licensed insurance carriers in the State of Louisiana. PIAL serves its members by providing professional management and pricing inspection services, as well as residual market services to their representatives and the residents of our state.

❖ **Re-rating the city's fire protection**

In recent months the following communities have had their ISO/PIAL Fire Insurance Ratings changed. Below are listed just a few of the communities near the City of Lake Charles. Note that (DO) indicates that the classification applies to Dwellings Only and (WH) indicates Water Hauling credit was applied.

Listed below are local communities and their current fire rating status after recently being re-evaluated. Best fire rating being one (1) on a scale of 1-10, please see the increase or decrease change to the communities fire rating and how it affects fire insurance premiums.

COMMUNITY	Effects on Insurance	OLD	NEW
Merryville (Beauregard Parish)	Increase	4 (WH)	5 (WH)
Kinder (Allen Parish)	Decrease	6 (WH)	4
Allen Parish Fire District 5 (Outside Oberlin)	Decrease	10	6 (WH)
Beauregard Parish Fire District 3 (Dry Creek Area)	Increase	9 (DO)	10
Crowley (Acadia Parish)	Decrease	3	2

Current as of March 2003

ISO Definitions

Distribution: The built upon area of the city should have a first due engine company within 1 ½ road miles from the fire station and a ladder service company 2 ½ road miles from the fire station.

Divergence: It is a mathematical calculation that balances the score of the fire department with the score of the water supply.

Formula for Divergence: *Water Supply Credit (minus) 80% Fire Dept. Credit x 0.5 equals Divergence.*

Listed below are the results to the last fire protection rating conducted for Lake Charles in 1999.

1999 Grading

<u>Alarm</u>	Actual	Maximum
1. Credit for telephone service	2.00	2.00
2. Credit for operators	3.00	3.00
3. Credit for dispatch	<u>4.89</u>	5.00
TOTAL	9.89	10.00

Fire Department

1. Credit for engine companies	8.57	10.00
2. Credit for Reserve pumper	0.86	1.00
3. Credit for pump capacity	5.00	5.00
4. Credit for ladder service	3.29	5.00
5. Credit for Reserve ladder service	0.63	1.00
6. Credit for distribution	2.98	4.00
7. Credit for company personnel	8.50	15.00+
8. Credit for training	9.00	9.00
9. Credit for Fire prevention	<u>1.08</u>	2.00
TOTAL	39.91	50.00

Water Supply

1. Credit for the water system	32.76	35.00
2. Credit for hydrants	1.94	2.00
3. Credit for inspections of hydrants	<u>0.86</u>	3.00
TOTAL	35.56	40.00
	85.36	100.00

* Divergence -1.82% = 83.54 (final grade for 1999 PC 2)

❖ Fire protection ratings in Lake Charles

Example: Framed Residential (\$60,000)

Form: HO-3

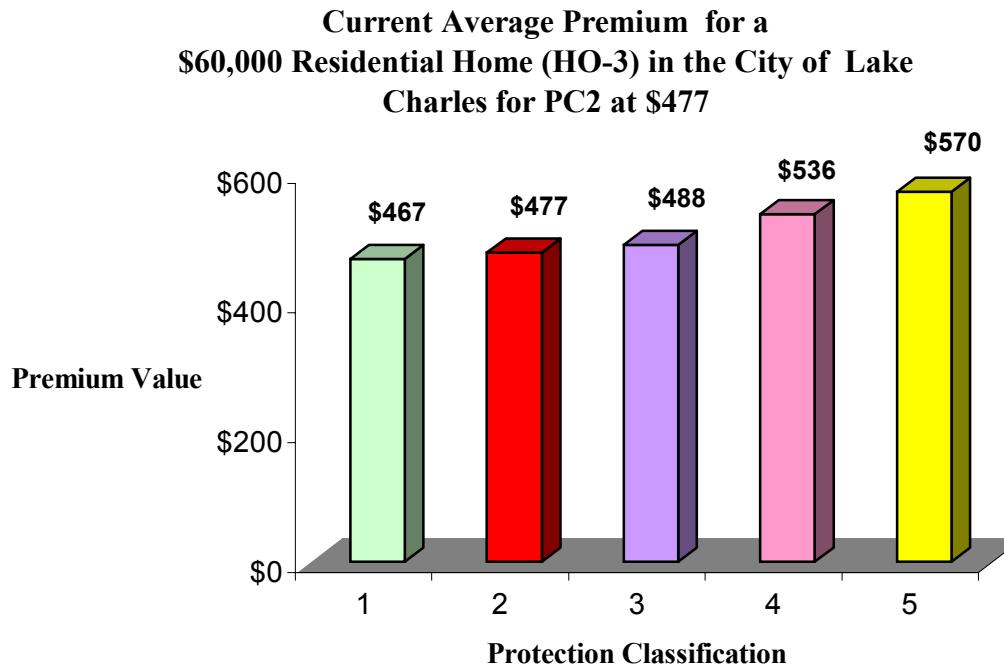
Type: Brick/Masonry

Value: (\$60,000)

Deductible: \$500

Current average premium for the City of Lake Charles for PC2-\$477

- Average premium for PC1-\$467 (Saving of -2.1% or -\$10.00)
- Average premium for PC3-\$488 (Increase of +2.3% or + \$11.00)
- Average premium for PC4-\$536 (Increase of +12.3% or +\$59.00)
- Average premium for PC5-\$570 (Increase of + 19.4% or + \$93.00)



Information provided by the Louisiana Department of Insurance

❖ Fire protection ratings in Lake Charles

Example: Framed Residential (\$100,000)

Form: HO-3

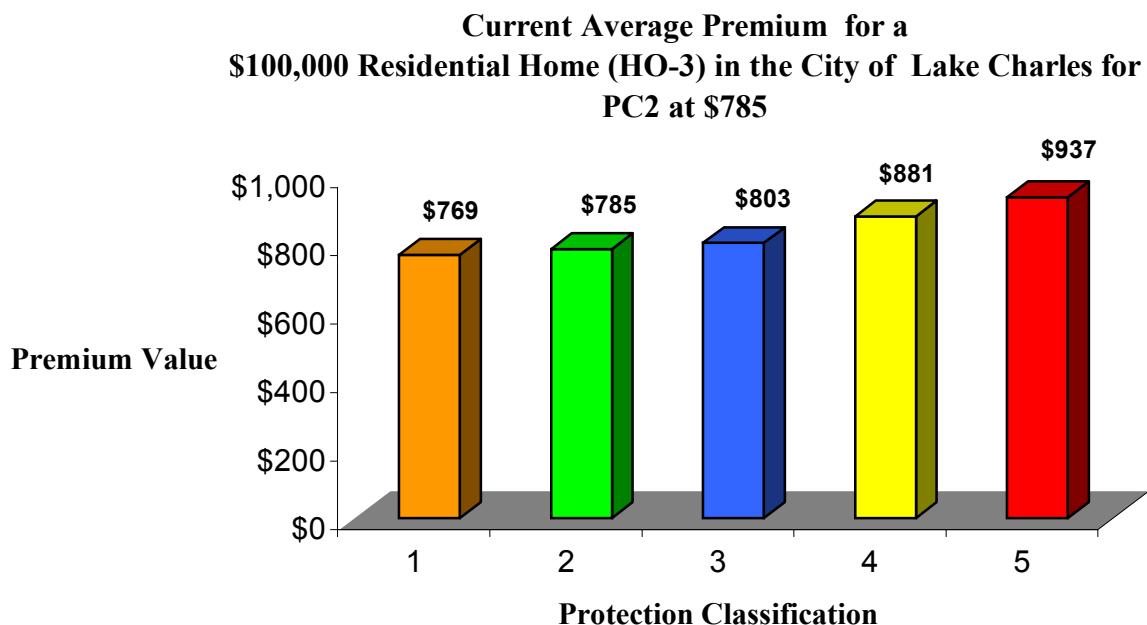
Type: Brick/Masonry

Value: (\$100,000)

Deductible: \$500

Current average premium for the City of Lake Charles for PC2-\$785

- Average premium for PC1-\$769 (Saving of -2.1% or -\$17.00)
- Average premium for PC3-\$803 (Increase of + 2.3% or +\$18.00)
- Average premium for PC4-\$881 (Increase of +12.2% or + \$96.00)
- Average premium for PC5-\$937 (Increase of + 19.3% or + \$152.00)



Information provided by the Louisiana Department of Insurance

❖ Fire protection ratings in Lake Charles

Example: Framed Commercial (\$500,000)

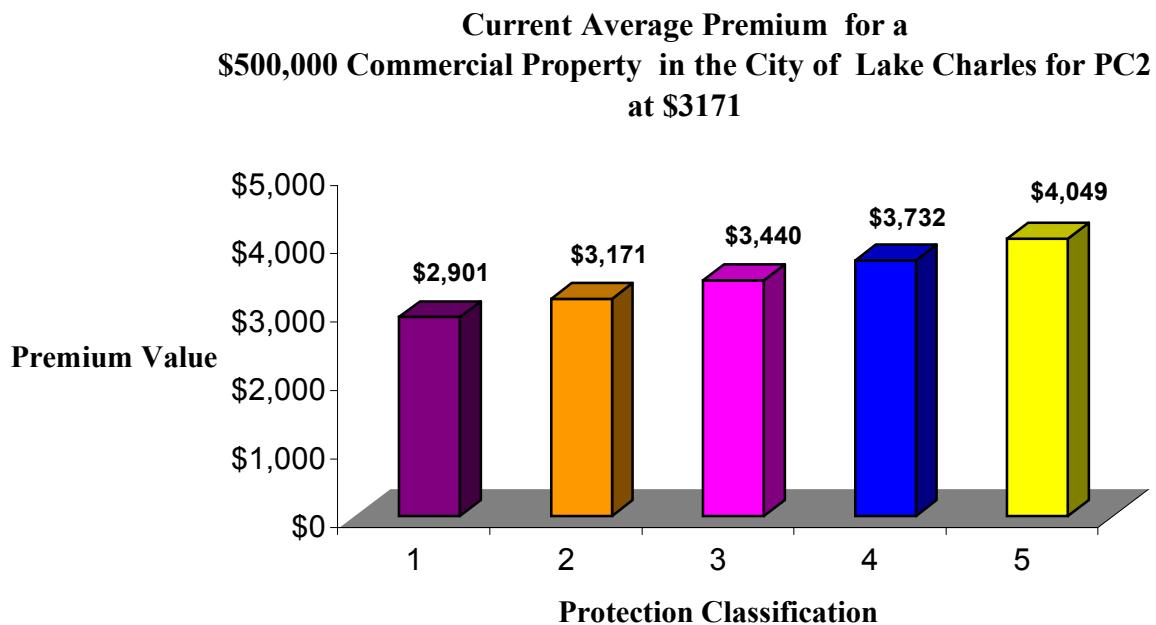
Type: Framed

Value: (\$500,000)

Deductible: \$500

Current average premium for the City of Lake Charles for PC2-\$3171

- Average premium for PC1-\$2901
- Average premium for PC3-\$3440
- Average premium for PC4-\$3732
- Average premium for PC5-\$4049



Information provided by the Louisiana Insurance Companies

How do ISO PPC ratings affect insurance premiums?

The table below shows how the premiums would vary for some typical structures under a couple of insurance companies' current rating schedules. Keep in mind though that every insurance company sets its own rates. While these figures are reasonably representative of how much difference the fire rating can make in an insurance buyer's premiums, the amounts and percentages of the premium credits for the various fire classes will vary among insurance companies.

Changes in the area served, improvements in the city's water system improvements, additional fire stations constructed, new equipment added, improvements in the city's alarm and paging system, etc., are some of the items most likely to trigger a review.

Fire Class Rating (PPC)	Residential (\$60,000)	Residential (\$100,000)	Framed Commercial (\$500,000)	Framed Commercial (\$1,000,000)
2	477	785	3171	6165
3	488	803	3440	6689
4	536	881	3732	7257
5	570	937	4049	7873

Information provided by comparison's of Louisiana Insurance Companies and the La Department of Insurance. With best fire rating being one (1) on a scale of 1-10, please see the above chart, which starts with the city's current fire rating of 2 and continues through the rating of 5 for an example of changes to annual fire insurance premiums per selected properties and their values.

Improving the city's ISO PPC rating will likely have the biggest impact on citizens' insurance costs. Having a better water supply helps in fighting fires in larger commercial structures, and therefore is reflected in a better rating.

For additional information

ISO's website www.isomitigation.com/fire1.html offers a great deal of useful and well-organized information on the Property Protection Classification system and the Fire Suppression Rating Schedule. You can also download a copy of ISO's Community Outreach Questionnaire from this site. You can also contact the ISO office by phone or mail:

Insurance Services Office
111 North Canal Street, Suite 950
Chicago, IL 60606-6214
312-923-0070
800-444-4454