



# CITY OF LONG BEACH

DEPARTMENT OF FIRE

925 Harbor Plaza, Suite 100 • Long Beach, CA 90802 • Telephone (562) 570-2500 • FAX (562) 570-2506

DAVID W. ELLIS  
FIRE CHIEF

September 5, 2006

HONORABLE MAYOR AND CITY COUNCIL  
City of Long Beach  
California

## RECOMMENDATION:

Receive and file report on status of Insurance Services Office (ISO) rating and Commission on Fire Accreditation International (CFAI) information. (Citywide)

## DISCUSSION

The following report examines the significance of the Insurance Services Office (ISO) rating system and provides information on the Commission on Fire Accreditation International (CFAI).

### **Origins of Public Protection Classification Grading**

In the early 1900s, major U.S. cities suffered disastrous fires that destroyed billions of dollars worth of property. In the aftermath, insurance companies realized that they needed advance information on the fire-loss characteristics of individual communities.

The National Board of Fire Underwriters (NBFU) was established in 1866 to promote fire prevention and public fire protection. After a number of conflagrations, including the great Baltimore fire of 1904, the NBFU expanded its scope, developing the Municipal Inspection and Grading System. Under this program, engineers evaluated the fire potential of many cities. In response, those cities improved their public fire protection services.

### **ISO History and Rating System**

Since 1909, the Municipal Inspection and Grading System and its successors have been involved in the underwriting and rating process for insurers writing personal and commercial fire policies. The ISO's Public Protection Classification (PPC) program is a direct descendent of the earlier grading systems. The PPC program provides insurers additional data that may be used in developing insurance premiums.

The program compiles information about municipal fire protection services throughout the country and markets it to insurance companies. ISO maintains information on public fire protection in more than 44,000 fire districts across the United States.

ISO analyzes relevant data obtained either through audit or based on community statistics and assigns a PPC from 1 to 10. A Class 1 rating represents exemplary fire protection, and a Class 10 indicates that the area's fire suppression capabilities do not meet ISO's minimum criteria. Currently, the City's PPC rating is a Class 2. Presently Long Beach is statistic-rated and was last physically audited in 1972. The current statistical rating by ISO for the City of Long Beach is a Class 2 rating, which equals the original classification. Long Beach is one of 56 cities so rated in California.

There are three components of a community's PPC:

- The fire department (50%)  
Includes equipment, staffing, training, and geographic distribution of fire companies.
- The water supply system (40%)  
Includes the condition and maintenance of hydrants, and an evaluation of the amount of available water compared with the amount needed to suppress fires.
- Fire alarm and communication systems (10%)  
Includes telephone systems, telephone lines, staffing, and dispatching systems.

Insurers of homes and business property *may* choose to use ISO's Public Protection Classifications in calculating premiums. Insurers typically group the PPC Classes into bands for the purpose of establishing homeowner premiums. The first band is usually Classes 1 to 6, Classes 7 and 8 as the second band, Class 9 as the third band and Class 10 as the fourth. Each band would have a different insurance rate; the better the band, the lower the rate. The bands may vary from state to state and insurer to insurer.

The ISO rating is infrequently used for commercial properties. Insurers determine commercial premiums by analyzing construction type and materials, occupancy, fire protection (such as fire extinguishers and sprinklers) and exposure to adjacent structures. Commercial properties are typically assigned their own PPC rating based on these factors. The City's property insurance premiums are not based on the ISO rating and a change in Class is not likely to have an effect on its property insurance premiums.

### **ISO Rating History in the City of Long Beach**

According to obtainable documents, a physical audit of Long Beach was conducted by the ISO in 1972. The audit assigned deficiency points to conditions that deviated from predetermined ISO standards. The deficiency points assigned depend upon the

importance of the item and the degree of deviation, as determined by ISO. The total number of deficiency points is charged against a municipality, which then determines its relative classification.

In 1972 the ISO noted a number of recommendations for improvement including:

- Increase staffing on all fire apparatus to 5 persons for both engine companies and ladder trucks. (ISO stated that a minimum of 6-person engine and truck companies was considered standard staffing, although this is actually rare.)

The City maintains 4-person staffing on its engines and trucks. Increasing staffing on all rigs to 5 would increase annual costs by at least \$8 million since three shifts must be maintained at all times.

- Add three fire trucks providing a total of seven fire trucks within the City.

The City currently maintains only four trucks citywide. Adding three trucks would cost \$5.1 million annually. Staffing these trucks with 5 persons would add an additional \$2 million a year.

- Water distribution system should be upgraded in certain areas.

The Water Department already has an on-going strategy and long-range plan for water pipe main replacement. Accelerating that schedule or changing priorities would be costly and could result in water user rate increases in order to finance the changes.

In addition, due to Homeland Security concerns, it is not advisable that strengths and any weaknesses of the City's water supply and distribution system be readily obtainable by the public. The ISO report would be made available nationwide. The City's insurance underwriters are, of course, afforded any information they require to provide sufficient property and liability coverage and determine the premium cost.

- Building code amendments to be implemented to improve life safety.

Since the 1972 audit, the City of Long Beach has been nationally recognized in the industry as a leader in building protection codes. In addition, the City's active Code Enforcement Program has been very successful in the past few years in ensuring compliance in neighborhoods.

The 1972 audit assessed the Fire Department only 376 total deficiency points, the Water Department only 98 deficiency points and 126 deficiency points were accessed due to weather conditions for a total of 600 points for the City. A Class 1 rating does not

exceed 500 deficiency points and a Class 2 is from 501 to 1,000 points. The charts below indicate the City's 1972 point evaluation and the ISO Class rating system:

**City of Long Beach**

	Water Supply	Fire Dept.	Fire Com.	Fire Control	Climate Cond.	Divergence	Total Points	Class
Points of Deficiency	98	178	46	152	126	0	600	2

The Class of a municipality or fire district is based on a total maximum of 5,000 deficiency points as follows:

1 <sup>st</sup> CLASS	0	TO	500
2 <sup>nd</sup> CLASS	501	TO	1,000
3 <sup>rd</sup> CLASS	1,001	TO	1,500
4 <sup>th</sup> CLASS	1,501	TO	2,000
5 <sup>th</sup> CLASS	2,001	TO	2,500
6 <sup>th</sup> CLASS	2,501	TO	3,000
7 <sup>th</sup> CLASS	3,001	TO	3,500
8 <sup>th</sup> CLASS	3,501	TO	4,000
9 <sup>th</sup> CLASS	4,001	TO	4,500
10 <sup>th</sup> CLASS	OVER		4,500

Even though the City of Long Beach was assessed a Class 2 rating, the Fire and Water Department's portions were within the Class 1 category. Apparently it was at this juncture that the departments began to utilize the Class 1 identification on a department basis.

It should be noted that since the original physical audit in 1972, a number of new services, apparatus, and equipment have been added to the Fire Department (Department), in addition to the Department's increased firefighting capability. For example, the development of the Paramedic Program, the transfer of Lifeguard services into the Marine Safety Division from the Department of Parks, Recreation and Marine, the construction of a new state of the art Emergency Communication and Operations Center (ECOC), fire stations, Urban Search and Rescue Program and a Basic Life Support (BLS) transport system have been implemented. The Department was also able to achieve its long time goal this fiscal year of having a paramedic at every station at all times, except the airport and boat stations which are specialty sites. ISO does not even consider many of these items when conducting an audit or physical survey, instead only focusing on fire suppression capabilities.

The Department, along with departments nationwide have expanded rescue and disaster service capability. The Department has been able to recently upgrade its fleet in the past year; ten new engines, two ladder trucks, a rescue boat, two airport crash

rigs, and a large Urban Search and Rescue (USAR) unit, among other vehicles, were placed into service. In the coming year, the department will place seven new Rescues (ambulances) and three Multi-Casualty Incident (MCI) units into service along with two new Rescue boats in early FY 08. All this equipment improves reliability, speed and appropriateness of emergency response.

However, there is a need for many fire facilities to be replaced, repaired and/or relocated. A separate report on public safety facilities has been transmitted to the City Council.

### **ISO Rating Comparison to other Fire Departments**

In May 2006, a survey was conducted of 16 area fire departments and the significance of utilizing ISO grading information as a method for the evaluation of services provided to the community or for budgetary purposes. Only 37.5% of the responding departments utilize ISO information for such purposes. Most fire departments utilize National Fire Protection Association (NFPA) guidelines, annual reviews and statistics, and consultant reports to determine the quality of service being provided to their community.

The Insurance Services Office has identified 10 Class 1 Fire Departments within the State of California. The majority of the departments are relatively small in comparison to the Long Beach Fire Department. The size of the departments identified range from the smallest, Arcadia with 3 fire stations, to the largest department, Stockton with 13 fire stations. It should be noted that only 106 agencies are accredited as a Class 1 out of 44,000 nationwide.

In recent years, the City of Los Angeles Fire Department has experienced a similar issue regarding ISO classification issues. The City of Los Angeles has not been re-evaluated by ISO recently and has been statistically classified by ISO as a Class 2 City. According to a Los Angeles City fire official an ISO physical audit is not scheduled at this time or in the immediate future.

### **Current Evaluation Methods**

The Long Beach Fire Department uses a number of methods to evaluate the level of service provided to the community. The methods used include NFPA standards, statistical information, departmental evaluations, and consultant reports. Results are continuously reported publicly through the City's new Focus on Results (FOR) program, which measures results to performance targets.

Since 1999, the Fire Department has participated in nine major reviews of its services and performance including: Strategic Plan (guided by the City Auditor's Office), 3DI Facilities Study, Loring Cruz facility review, TriData study (arson program), Management

Partners, Inc. (code enforcement), TriData Fire Services Study, GeoComm study (911 call and dispatch center) and the PRM fee study.

As noted above, in 2005 the consulting firm TriData presented its Fire Optimization Study to the City Council. The Study was a detailed review of the Fire Departments' practices and service to the community and contained scores of recommendations, which the department is in the process of implementing.

The TriData Study looked beyond the three major categories identified by ISO and evaluated additional issues including population densities, response times, training, workload demands, disaster preparedness, fire prevention, and public education. TriData concluded "the Long Beach Fire Department is an excellent organization that is comprised of well-trained professionals providing excellent service throughout the community."

### **Commission on Fire Accreditation International**

The Commission on Fire Accreditation International (CFAI) is a self-assessment process of an agency's fire and emergency services. Recently, the name has been changed to Center for Public Safety Excellence (CPSE). The system helps an agency evaluate its performance and provides a method for continuous improvement. The assessment is lengthy and comprehensive and requires that an agency develop a strategic plan. The accreditation is provided to the ISO who markets it to the insurance industry.

The objectives of an accrediting program are:

1. To create an impetus for organizational self-improvement and to stimulate a general raising of standards.
2. To offer a voluntary activity concerned with evaluation and education as a viable substitute for a governmental regulatory activity concerned with inspection and enforcement.
3. To provide recognition of good performance and motivation to maintain and improve performance.
4. To protect the interests of the general public as well as to assist prospective users to identify acceptable institutions, programs of study or services (CFAI Self-Assessment Manual).

Accreditation is an excellent tool for those agencies that have not previously performed any self-assessments or participated in audits and/or optimization studies. Since Long Beach has recently participated in numerous such evaluations and studies and has developed a strategic plan, this information has already been obtained and synthesized and included in the City's budget in the form of performance measures within the FOR system.

The issue of facilities is being addressed separately. Additionally, the recently discussed ballot initiative proposed to fund service priorities of an additional truck company, addition of a fifth person to the trucks, and additional resources for disaster preparedness planning. These priorities were determined as a result of the TriData Study and input from our stakeholders.

## **CONCLUSION**

The ISO headquarters in New Jersey was consulted as to the advantages of requesting a physical audit and reevaluation of the City. Senior ISO officials recommended against a physical audit due to the City's current excellent Class 2 rating. In fact, ISO officials stated that there may be no advantage in requesting a physical audit and that the City has an excellent rating.

The Insurance Services Office rating is only one of a number of ways to analyze the effectiveness of fire departments throughout the country. A number of reports and documents, such as NFPA 1710, and independent consultant reviews are used to evaluate the quality and effectiveness of fire departments and their service to the community.

The Long Beach Fire Department prides itself on its commitment to exceptional firefighting performance, emergency medical services, marine safety, fire prevention, training, emergency and disaster preparedness and public education. The Water Department is similarly an outstanding leader in the industry and is considered an exemplary example of a municipal utility.

It is recommended that the City not request a physical audit from the Insurance Services Office (ISO) nor start the self-assessment process for the CFAI. The purpose and goals of these two organizations has been fulfilled over the last thirty years through audits and optimization studies and now through program budgeting and the FOR program. FOR requires continual self-evaluation and quality improvement since performance results are publicly communicated.

The time and expense of participating in the ISO and CFAI programs are unnecessary since they are redundant to recent and continuing activities. However, it is recommended that the City register with CFAI in order to receive any information provided by them.

This matter was reviewed by Deputy City Attorney Richard F. Anthony on August 28, 2006 and David Wodynski, Budget Services Officer, on August 28, 2006.

## **TIMING CONSIDERATIONS**

This report is not time critical.

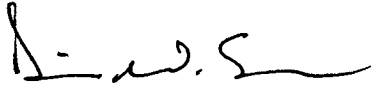
FISCAL IMPACT

There is no fiscal impact associated with this report.

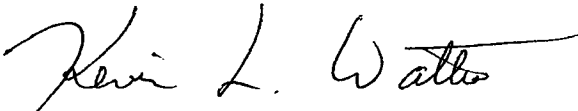
SUGGESTED ACTION

Approve recommendation.

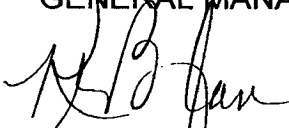
Respectfully submitted,



DAVID W. ELLIS  
FIRE CHIEF



KEVIN WATTIER  
GENERAL MANAGER, WATER



KEVIN BOYLAN  
DIRECTOR OF HUMAN RESOURCES

APPROVED:



GERALD R. MILLER  
CITY MANAGER