

Memorandum

City of Lawrence

Planning & Development Services

TO: David L. Corliss, City Manager

FROM: Barry Walthall, Building Codes Manager

CC: Scott McCullough, Planning & Development Services Director

Date: November 14, 2012

RE: Building Codes Enforcement Evaluation Report

The Insurance Services Office, Inc. (ISO) recently completed an evaluation of the City's building codes and enforcement, known as the Building Codes Effectiveness Grading Schedule, or BCEGS, and issued a report assigning classifications of 4 for residential one- and two-family construction, and 3 for all other construction (hereafter referenced as "commercial construction", or "commercial"). Ratings are assigned on a scale of one to ten, with one being the best. According to the ISO website, approximately 16% of building departments achieve ratings between 1 and 3, and 67% between 4 and 6.

BCEGS Program Overview

ISO is an advisory organization that provides information about property/casualty insurance risk to the insurance industry. The BCEGS program was created in 1995 to assess communities' adopted building codes and how the codes are enforced, with an emphasis on mitigation of losses from natural hazards. Insurance companies may access the BCEGS classification, as well as any data collected by ISO in determining the classification such as staff training and certification, workloads, types of construction projects, or volume and value of construction. Insurance companies are not required to utilize the community's BCEGS classification, or any data gathered by ISO regarding building codes or enforcement, and the City's participation in the BCEGS program does not guarantee any benefits or reductions to insurance rates for policy holders within the City. In addition to the BCEGS program, ISO provides a number of other services to the insurance industry, including the Public Protection Classification program which evaluates municipal fire-protection efforts.

The BCEGS evaluation also provides a good opportunity for a comprehensive internal review of building code enforcement operations, and to establish goals and benchmarks for measurement of future improvements.

BCEGS Evaluation

Lawrence was among the first, if not the first, communities in Kansas to participate in the BCEGS program in 2004 and received ratings of 9 for both residential and commercial construction. The BCEGS evaluation process places a heavy emphasis on adopting the most current building codes. Communities with building codes more than 5 years out of date are challenged to score well. The total

points earned in the evaluation are multiplied by a factor of the ratio of points earned to points possible for the category "Adopted Building Codes":

Commercial Construction BCEGS Scores:

2004 points calculation = $\{(62.87 - 2.21) * 2.21/8\} + 2.21 = 18.97$ (BCEGS rating of "9")

2011 points calculation = $\{(76.80 - 8) * 8/8\} + 8.00 = 76.80$ (BCEGS rating of "3")

Residential Construction BCEGS Scores:

2004 points calculation = $\{(50.52 - 2.21) * 2.21/8\} + 2.21 = 15.56$ (BCEGS rating of "9")

2011 points calculation = $\{(73.42 - 7.6) * 7.6/8\} + 7.6 = 70.13$ (BCEGS rating of "4")

Lawrence's adopted building code at the time of the 2004 evaluation was the 1997 Uniform Building Code; and although newer codes were under review, the City was not eligible for those points. According to an analysis provided by ISO, the 2004 BCEGS scores would have been 6 for both residential and commercial construction if current building codes had been in effect.

This demonstrates that although improved scores would not be possible without having current building codes with minimal modifications adopted, even greater improvement has been noted. BCEGS ratings are based on three main categories of analysis, Administration of Codes (54 points possible), Plan Review (23 points possible), and Field Inspection (23 points possible). Most scores in these categories improved or remained the same compared to the 2004 evaluation.

Administration of Codes

Administration of codes includes the adopted building codes and modifications, staff qualifications, experience and education, zoning provisions, contractor licensing, public awareness programs, the building department's participation in code development activities, and administrative policies and procedures. The largest improvement to the current BCEGS rating resulted from improved ratings in this category, including:

Additional Points Earned Compared to 2004 Ratings		
Category	Commercial Construction	Residential Construction
Adopted Codes	5.79	5.39
Code Modifications	2.89	2.69
Staff Certification	2.24	2.24
Training	1.01	1.01
Contractor Licensing	.67	.67
Design Professionals	.22	.22
Public Awareness Programs	.02	.02

Net improvement for the category of Administration of Codes was 10.94 points (37.42 total points) for commercial construction, and 10.34 points (36.82 total points) for residential construction. With a total of 54 points available, this represents an increase of approximately 41% for commercial and 39% for residential.

It should be noted that the Kansas Statute restricting the adoption of building codes that require fire sprinkler systems in one- and two-family dwellings had some negative impact on the rating for residential construction in this category.

Plan Review

Plan review includes staffing levels, personnel experience, performance evaluation schedules, and the level of review of construction documents. The score for commercial construction plan reviewed went down .2 points, the explanation for which was given that one of the staff has less than five years of experience in building code enforcement. Residential plan review scored the second largest improvements:

Additional Points Earned Compared to 2004 Ratings		
Category	Commercial Construction	Residential Construction
Existing Staffing	0	5.52
Detail of Plan Review	0	3.25
Experience of Personnel	-.2	-.2

Net improvement for the category of Plan Review was -.2 points (18.87 total points) for commercial construction, and 8.57 points (18.87 total points) for residential construction. With a total of 23 points available, this represents a decrease of 1% for commercial plan review, and an increase of 83% for residential plan review.

Field Inspection

Field inspection includes staffing levels, personnel experience, performance evaluation schedules, level of review of building construction. The ratings for both commercial and residential field inspection both increased:

Additional Points Earned Compared to 2004 Ratings		
Category	Commercial Construction	Residential Construction
Existing Staffing	2.52	2.17
Issuance of Certificate of Occupancy	0	2.00
Experience of Personnel	.51	.51

Net improvement for the Field Inspection category was 3.03 points (20.51 total points) for commercial construction, and 4.68 points (17.73 total points) for residential. With a total of 23 points available, this represents an increase of 17% for commercial field inspection and 36% for residential field inspection.