"A CONTINUING EDUCATION PROGRAM FOR FIRE SAFETY INSPECTORS OF THE MAUMEE FIRE DIVISION"

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An applied research project submitted to the Ohio Fire Executive Program

ABSTRACT

This research paper analyzed the need for development of a continuing education program for fire safety inspectors of the Maumee Fire Division. This specific problem needed attention for numerous reasons. Multiple part-time inspectors that have no continuing education after initial certification, and full time inspectors that require a refreshed continuum is a basic portion of the problem. The possibility of negligence; liability; and lack of upgrading professional expertise can hamper well-groomed operations in the area of fire prevention and code enforcement. The fire safety inspectors work must coincide with that of the local building department, and this also gives reason to increase the inspector's knowledge base of what is happening with the latest in building code topics.

The purpose of this report was to study the feasibility of developing such a continuing educational program. Using the evaluative research method, answers to three basic research questions materialized. Those questions were: Should there be a continuing education program for Maumee's fire safety inspectors? If so, what standard or criteria should be met for continuing education? Finally, what time periods for fulfillment of continuing education credit should be used?" By incorporating literature review, a sound basis for the need to attempt to commit to a continuing educational program was introduced. Procedurally, 100 surveys were mailed to fire chiefs throughout Ohio that have fire departments that have municipalities similar in population and have a local building department. Limitations that pose a threat to the validity of the survey procedure were also introduced.

The major findings of this research paper were identified. The results indicated that fire chiefs of the responding departments would recommend, but not require, continuing education for their inspectors. The use of seminars or attendance at local fire prevention association meetings was encouraged as a means for an educational beginning.

Recognized also were pitfalls to continuing education: scheduling conflicts, cost, maintaining an adequate number of inspectors who want to do the job, and last, labor problems. The City of Maumee's largest concern of these four would mirror problem number one, scheduling.

The recommendations of this report were that a program of continuing education be offered to all inspectors, starting with the use of attendance at seminars or local fire prevention association meetings. To establish a baseline, the program must allow for a set number of hours of credit for attendance at these functions. Re-certification time periods would need to be instituted.

In conclusion, it is recommended the Maumee Fire Division take the initiative to institute a program of continuing education for the fire safety inspectors. This initiative will promote professionalism, pride and improved public relations for the community.

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INTRODUCTION

The fire service of today expects its personnel to keep abreast in training and education for various subject matters. Advanced training in fire suppression tactics, hazardous materials, emergency medical care, and now to complicate matters, weapons' of mass destruction education has been added to the ever-growing list of "things to know." The fire service has evolved from being a job to a professional career. The definition of a job is "an action or task that needs to be done, while a profession is an occupation or vocation requiring training in liberal arts or sciences" (American Heritage Dictionary, 1991). Professional careers usually have educational standards, with continuing education throughout the career. The one subject area where a problem exists is continuing education for fire safety inspectors.

The specific problem is that the Maumee Fire Division does not have a continuing education program for its certified fire safety inspectors. Currently, neither the Maumee Fire Division nor the State of Ohio requires continuing education for certified fire safety inspectors. Not having continuing education could present multifaceted problems for the inspector, the Bureau, the Fire Division, and the City of Maumee. Problems that could occur would reflect on the professional aspects, if not legal competencies of the Fire Prevention Bureau personnel.

The purpose of this research report is to study the feasibility of developing a fire safety inspector continuing education program for the Maumee Fire Division. Through the use of evaluative research, an attempt will be to find outcomes for the following questions:

- 1. Should there be a continuing education requirement for Maumee's fire safety inspectors?
- 2. If so, what standards or criteria should be met for continuing education?
- 3. What time periods for fulfillment of continuing education credit should be used?

The three research questions will guide this report toward resolving the issue of continuing education for the Fire Division's fire safety inspectors. This research will aid in protecting the professionalism for Maumee's fire safety inspectors.

BACKGROUND AND SIGNIFICANCE

The Maumee Fire Division serves a community of approximately 16 square miles, with a population of approximately 15,752 citizens. (*Maumee Web Site*, 2001.) The average daily number of persons into Maumee increases during the day, mainly due to the Arrowhead Park Business community, a thirty-year old subdivision within the City of Maumee that contains a cornucopia of light to medium size businesses. Along with these Arrowhead Park businesses, the older, established businesses in the city, which are from light to heavy industry, are the mainstay for the City's tax base.

Through the Department of Public Safety, the Fire Division contains 3 Bureaus and is lead by a Fire Chief (*Maumee Codified Ordinances*, 1987.) The Firefighting Bureau, having a full-time Deputy Chief, has the capacity to maintain 55 volunteers. The Emergency Medical Services Bureau (EMS Bureau), staffed by a full-time Chief,

Assistant Chief, and 13 paramedics, handle the City's EMS response, and staff a Lucas County-owned Advanced Life Support Unit. The Fire Division's volunteers, also Basic Emergency Medical Technicians, staff the City's ambulance service, along with the full-time paramedics.

The Fire Prevention Bureau (FPB) is staffed with a Bureau Chief and two full-time Fire Safety Inspectors. Five part-time inspectors can be used from the volunteer list to support the Fire Prevention Bureau at any time. This need is fulfilled upon request of the FPB Chief to the Director of Public Safety (Maumee Codified Ordinances, 1987.)

Any person performing fire safety inspections in the City of Maumee must be a state certified fire safety inspector (Maumee Codified Ordinances, 1987.) Currently there are 21 persons on the Maumee Fire Division roster certified as fire safety inspectors, that would be available as part-time inspectors if needed (Maumee Fire Division, 2002.)

The Fire Prevention Bureau provides a wide variety of services and programs to the community. The largest percentage of the inspector's time is committed to fire prevention and code enforcement activities. The two full-time inspectors conducted 3502 commercial and residential inspections in the year 2001 (*Annual Report*, 2001.) Each commercial structure is inspected either annually or semi-annually. The Prevention Chief administers to: plan review for fire protection and prevention measures, new occupancy inspections in conjunction with the City Building Department, and complaints. All full-time inspectors rotate the responsibility for public fire safety education. Part time inspectors fill in during extended vacations, sick leave, or special events.

The significance of this research is to underscore the multifaceted problems that have arisen, or are probable, for having little or no continuing education in the profession of a fire safety inspector within the City of Maumee. One of those problems is having 21 fire safety inspectors that can *legally* conduct the inspections, but only the two full-time inspectors have been maintaining somewhat adequate, but not routine, continuing education. Various reasons exist to justify *having or not having* continuing education.

The inspector's knowledge base is broadened to cover new areas in fire, life and building safety measures, therefore validating technical expertise. Two important needs are that inspectors would be personally satisfied having achieved a more professional level, and validation of commitment to protect the public health, safety and welfare. The working relationship between building and fire inspectors needs improvement. There would be an increase in career advancement opportunities for inspectors. On the other hand, continuing education would not go without problems. Cost, scheduling arrangements and who is to conduct the continuing education would all need to be evaluated.

In summary, to justify why this study is needed, the fire safety inspector's educational background plays a significant role in not only fire and life safety, but on professional levels of expertise.

LITERATURE REVIEW

The following section analytically reviews trade journals, books, electronic correspondence, and professional publications regarding the issue of education and continuing education. Along with these works, the Maumee Codified Ordinances and

Ohio Revised Code were examined for clarifying certain areas of research. It should be noted at this juncture that articles dealing directly with continuing education for fire safety inspectors were limited. Additional research information could be made available during the evaluative phase of the report.

Education theory as a foundation

"The basic educational pattern of professional workers has long been established" (Houle, 1980, p. 4). "The work of professionals is important, not only because of their technical skills, but also because they define to a great extent the problems in which they work. As a result they have the power to define our needs" (Cervero, 1988, p. 74). "The special place of professionals in society results as much from their symbolic leadership as from the application of their technical knowledge and skills" (Cervero, 1988, p. 6). According to Houle (1980):

The lives of some men and women are structurally shaped by the fact that they are deeply versed in advanced and subtle bodies of knowledge, which they apply with dedication in solving complex practical problems. (p.13)

Houle further reported: "Every occupation that lays claim to the distinction conferred by the term *profession* seeks constantly to improve itself in certain distinctive ways" (p.11).

As noted earlier in this report, the fire service profession is requesting more time on education and training its personnel, both administratively and firefighters, to improve knowledge and efficiency. "For more than 20 years, the fire service has been in the process of developing and refining professional standards for all fire department positions" (Chubb, 1994, p. 109).

"Most experts say that professionalism – the cry of the fire service for the past decade – begins with education" (Nielsen, 1981 p. 26), "and as the fire service's scope and vision have broadened, the need for enhancements in both training and education have grown proportionately" (Bachtler & Brennan, 1995 p. 326). Bachtler & Brennan report further that "while both training and education are necessary in the fire service, they are not the same. While there is some overlap, they differ essentially in that training is designed to show practitioners how to get the job done, and education shows why the job is necessary" (p. 328). Chubb (1994) reports that:

In the fire service, education often is confused with training. While training focuses on acquiring skills and mastering tasks, education focuses on understanding concepts and applying knowledge. The ability to extract abstract information from code and standards, apply it to real-world situations, and communicate it effectively is dramatically different from learning how to raise a ground ladder or advance a hose-line. (p. 114)

Formerly, persons pursuing a certification for fire safety inspector (FSI) in Ohio were required to attend a thirty-six hour academic training program only. There was no state mandated test upon completion, students were "issued" their cards once the course was completed. Currently, persons that would be attending an inspection class must meet prerequisites, complete an eighty-hour academic core, and successfully pass a state mandated test by a minimum of 70% (*Ohio Cert. Requirements*, 1999). The test establishes a starting point for the new inspector; a seasoned inspector relies on the original training secured, and on-the-job training or education. In contrast, building

officials in the State of Ohio, depending upon their type of certification, must re-certify every three years. "Holders of certificates shall attend board sponsored continuing education courses and complete at least thirty hours of board approved continuing education in their respective classification prior to the expiration date of the certificate" (Ohio Basic Building Code, 1998 p. 20R). According to Corbett (1995):

Veteran field inspectors need periodic refresher training, especially in areas they may not have come across for some time. Problems resulting from incorrect application of the code may arise in the field, making it apparent that refresher training is needed. (p. 22)

Corbett (1995) continues that; "the fire code has expanded (and continues to expand) greatly. Update training is essential to keep abreast of all changes" (p. 22). Laird (1995) finds that: "Able people may grow to a point where they are ready for responsibilities beyond their initial assignment. When this happens, the organization can profitably help them develop new, larger capabilities. Furthermore, the organization itself may grow and develop" (p. 6). "A discipline's scientific research is what generates its body of knowledge. Most of the fire service's body of knowledge is based on consensus and experience, neither of which is considered a scientifically sound methodology" (Clark, 1993, p. 52).

It can be noted then, that a standard educational foundation must be in place to achieve building a strong structure for the profession of the fire safety inspector. The "building" can falter if not maintained; thus continuing education should be used to perform the "maintenance" on that building.

Continued challenges for educational needs

There are some distinct problems related to fire safety inspectors and the lack of continuing education. Building officials "build the buildings", whereas fire safety inspectors "maintain the buildings". According to Conrad and Coleman (1996):

Building and fire officials serve a similar constituent-the citizens of their community. When the building and fire official can find common ground to ensure the safety of their community, citizens are the winners. If there are conflicts between the building and fire official, however, there is the possibility that many people will be caught in the middle of this controversy and forced to take sides. (p. 7)

Conrad and Coleman further reported: "These different levels of competency and qualifications of building and fire officials do not necessarily make one of these professions more significant in the final analysis than the other. Fire and building officials simply cannot afford to work against each other. Partnering is a process that allows for the development of fire and life safety as a community is built-built together" (p. 7). According the Hart (2001):

Working in a fire prevention bureau (FPB) often involves challenges raised by customers (professional engineers, architects, developers and contractors) about the knowledge and understanding of the FPB staff members they're dealing with. These challenges can be direct or indirect and may be raised as a defense for the issue being discussed.

Hart also notes: "Take a moment to list the various customers your FPB staff deals with and identify what credentials they must have to work in your state or jurisdiction" This brings up a very valid issue when it deals with basic knowledge of the job; an inspector either has the educational background or doesn't, and continuing education should be there to supplement the base. O'Connor (1998) reports that:

And the codes, standards, and systems we use to prevent, detect, and contain fires have become infinitely more sophisticated. All of these changes have had a dramatic impact on the fire service in general and on the fire inspector in particular. (p. 118)

"Many, if not most, professionals are required to participate to some extent in continuing education" (Cervero, 1988, p. 75), "everyone must expect constant change and with it new goals to be achieved and new understanding and skill to be mastered" (Houle, 1980, p. 5). "Meeting the constantly changing requirements and demands of various emergency and non-emergency situations have required the profession to mold, adapt and overcome as few other career fields" (O'Neal, 1998, p. 6). "We tell the world we are professionals. If we wish to be treated as professionals by other professionals, we have to be able to demonstrate that we have total competency in the environment in which we are exercising that profession" (Coleman, 1999).

It appears that the fire service lags behind the police service regarding educational efforts. "Higher education for the police service clearly outweighs the fire service at all levels" (Clark, 1993, p. 51).

According to McLaren (1977):

In addition to recruit training, a continuation-training program should be provided. It should be redesigned annually to meet current needs arising from changes in policies and procedures, the adoption of new technologies, and weaknesses detected in the recruit program. (p. 304)

"Law enforcement trainers today must not only develop training that is adequate, consistent of the industry, but must be capable of defending the validity of that training" McKee, 2000, p. 22). "The technology factor changes daily and has a very strong impact on training" (Austen-Kern, 2000, p. 30). Therefore, it can be observed that not only does the fire service look at additional training beyond the elementary training; continued training for the police service has, and will continue to be present.

Standards and continuing education

The National Fire Protection Association's (NFPA) #1031, "Professional Qualifications for Fire Inspector" is the standard which fire safety inspector training qualifications are based. "The fire inspector at all levels of progression shall remain current with inspection methodology, fire protection technology, and current applicable codes and standards by attending workshops/seminars or by means of professional publications and journals" (NFPA, 1993 p. 5). The standard establishes a base for educational requirements, but does not specifically calculate how continuing education should be accomplished.

However, the NFPA promotes professionalism within the fire inspection field of practice through a widely accepted, recognized, appreciated, and practical Fire Safety

Inspector I & II Certification program (NFPA's Fire Inspector I & II Certification Handbook.) (This program is not mentioned in the NFPA Standard #1031.) The applicant files an application through NFPA, takes a written examination, and has a Practicum Phase to complete. The Practicum phase has 12 exercises to complete, which are field inspections done under supervision of an experienced inspector. Once certified, re-certification is mandatory every 5 years. Re-certification is submission of written documentation of 100 hours of successful continuing education over the 5-year span. Another method to re-certify is by written examination. Any test or course material given is developed around NFPA#1031. Continuing education credit must be obtained through certified courses or college credit hours.

The Building Officials and Code Administrators International (BOCA), a model code development agency, offers a similar program to NFPA's certification, except BOCA bases their main examination questions and theories on their model codes (BOCA Web Site). Re-certification is also very similar to NFPA's. The preceding organizations noted are two major sources of fire inspector development and education. Both of these are based on fees paid to their organization for certification and re-certification.

In summary of the Literature Review, it was observed that the theory of a sound educational background for fire safety inspectors is a necessity. The fire service has for years been struggling to improve training and education for various entities within the service, and fire prevention should not be excluded. Other professions, such as law enforcement and building officials, are ahead of the fire service in these matters.

The reviewed literature indicated and identifies the need for formalized continuing education for fire safety inspectors for the Maumee Fire Division. It has been identified that to increase professional stature, the fire service, especially those in prevention, must become aware of, and obtain, continued education. This review of the professions strongly influenced the need for further education. There is a saying in the fire service that states: "150 years of tradition, unimpeded by progress" (Anonymous). *Tradition* should not impede *educational progress*.

PROCEDURES

The desired outcome of this research was to study the feasibility of developing a continuing education program for fire safety inspectors of the Maumee Fire Division. To assist this research, various aspects for determining this need will be ensued.

The Population

Due to the large number of fire departments within the state of Ohio, a sample population of departments was surveyed. To aid in reducing this lengthy list to a smaller sample population, the state was be divided up into northwest, northeast, southwest, and southeast quadrants. A total of 100 departments were surveyed, 25 from each quadrant. The departments surveyed had to meet certain criteria to be used for the survey. The departments surveyed would be in comparison to the Maumee Fire Division, relative to size and type (i.e. part-paid or combination), and the community in which that particular department serves would be similar in civilian population. This method of choosing is provided to evenly distribute the surveys, and cause a fair sample to be taken from each quadrant of the state. This aids in eliminating any bias from incorporating just the

northwest portion of Ohio for the survey. The list of fire departments was established from the "Ohio Fire Department Directory 2002", a publication available to all fire departments from the Ohio State Fire Marshal's Office.

The survey, consisting of 15 questions, was mailed directly to the fire chief of the department. The main crux of the survey requested answers relative to any required or recommended continuing education used, type of courses obtained, numbers of hours, and various questions regarding the working relationship and configurations between the building and fire department.

Limitations

There may be some limitations or assumptions that pose a threat to the internal or external validity of this research project. There may be some ambiguity concerning the end results or the generalization of the findings.

- The fire chief surveyed may "hand down" the survey to a less-knowledgeable subordinate to complete.
- The impact of any missing or omitted data has the potential to skew the results or conceal bias.
- It is possible that one or two quadrants of the state of Ohio respond more intensely than the other two quadrants.
- A myriad of reasons exist for non-return of the surveys: from evaluation
 apprehension, lack of knowledge regarding fire prevention activities, to a simple
 lack of time or willingness to commit to the survey.

There were no obstacles regarding the output of this survey relative to the City of Maumee Fire Administration, and the probability of future problems arising are not likely to appear. Cost of the survey materials and mailing are not an issue.

Definition of Terms for the Survey

Certified Fire Safety Inspector – an individual tested and certified by the state of Ohio to conduct fire safety inspections for commercial buildings within the state boundaries.

These individuals are normally hired by the fire departments.

Certified Building Official – (Classes I-V) -an individual tested and certified by the state of Ohio Board of Building Standards, in their appropriate field of endeavor, such as building, mechanical, fire sprinkler, or electrical to perform such inspections on commercial buildings within state boundaries. An individual can possibly possess more than one of these Classes of certification.

Continuing education – refresher education or training beyond the initial scope of the basic training or education received for the certification.

Fire Chief – That individual recognized by that municipality, village or township as the executive officer of the fire department. For this research survey, for the municipality only.

Required – to have as a requisite; need (Webster's Dictionary).

Recommended - To counsel or advise (Webster's Dictionary).

Certified Building Department – A department or division of the government of a municipal corporation, township, or county, that has been created in conformity with law

for purpose of enforcing the "Ohio Building Code". For this research survey, certified Building Department refers to municipal only.

Plan review – In the case of this research, the submittal of plans or drawings to the local fire department for review of fire protection systems, life safety features design, installation, or alterations.

RESULTS

This research project, specifically in the literature review, identified some professional occupations and certifications that require initial qualifications, and then infer continuing education be rendered. The survey, sent to 100 fire departments throughout Ohio, had 68 returned responses. The results did assist in answering the 3 research questions introduced. The questions poised did receive answers. (The survey's tallied results are noted in the Appendices).

Research question #1: "Should there be a continuing education requirement for Maumee's Fire Safety Inspectors?" Based on the first 4 initial questions on the survey, 53 of the fire departments that use inspectors on a daily basis, only 39 "recommend" continuing education. Those departments requiring the education were only 4, and 25 noted that they would not require it; Refer to Table 1. Of the 68 respondents, 53 had fire prevention bureaus. Concerning the problem related to continuing education for the inspectors, the number one reason for not requiring or recommending the education was scheduling problems (60), The second problem noted was cost (59), and "maintaining an adequate number of inspectors who want to do the job" was third, at 54 responses. Labor problems were placed as the fourth reason against education, at 53. Refer to Table 2.

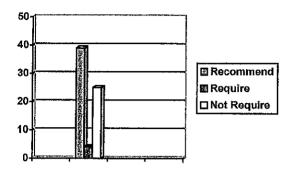


Table 1 - Continuing Education

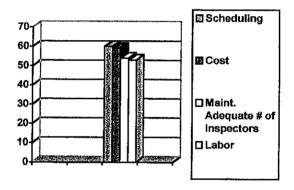


Table 2 - Continuing Education Pitfalls

In review of these findings, it is noted that the majority of the responding fire departments would recommend, not require continuing education. Therefore, to answer research question 1, the conclusion would be to "recommend", not "require" continuing education for fire safety inspectors.

Research question 2: "If so, what standard or criteria should be met for continuing education?" Those departments that responded to the sixth survey question offered the following answers. 37 would incorporate the use of "seminars" for the education; this was the first of eight options to choose from with this question. Local fire prevention association meetings were ranked second, with 24 responses. Third on the list were regular departmental drill periods with 22 using this method. Only 17 of the 68 respondents would use courses offered by local building officials for educational benefits. Refer to Table 3.

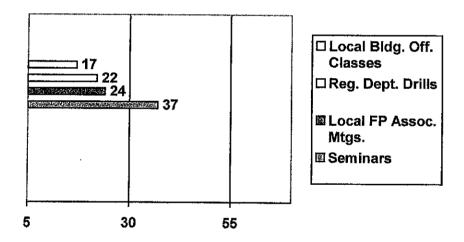


Table 3 – Continuing Education Preferences

In response to research question #2: "What standard or criteria should be met for continuing education?" The conclusion is "fire prevention seminars" would be the most applicable continuing education credit to use, followed by local fire prevention association meetings.

Research question #3 stated: "What time periods for fulfillment of continuing education credit should be used?" There are two questions on the survey that involved this research question. If respondents to survey question #4 answered with a "recommended" or "required" response to continuing education, question #5 queried them on the average amount of hours needed per year. 15 respondents labeled 6-11 hours per year. 13 noted 12-21 hours, whereas 9 answered with 1-5 hours. The second question that involves time periods for re-certification was question #7 of the survey. The responses to how often the inspectors should re-certify within the respective departments; 38 responses were noted for "not applicable", 10 would require recertification at the time the State fire code, or municipal codes changed. Only 5 answered with "per the requirements of the course the inspector is enrolled in." The concluding answer to research question #3 is that inspectors would need at least, on the average, 6-11 hours per year, with a time frame of approximately every 3 years for a recertification time frame period.

Three survey questions requested responses involving the relationship of the fire department with the local building authority. 33 departments have a municipal or county building authority, and 33 do not. The number of departments that work closely with their local building authority was 52, and only 8 do not. Conduction of plan reviews with the local building authority in conjunction with the fire department was 54. 6 fire departments responded that they did not do plan reviews with the building personnel. The last portion of the survey asked two pieces of information about the respondents themselves; how many years have they been in the fire service in Ohio, and the number

of years as Fire Chief of the current department they are affiliated with. Of the 68 answers, the average number of years in the Ohio fire service is rated at 26-30. The average years as fire chief was figured at 3-5 years. On 5 of the 68 returned surveys, the persons indicated that they were not the fire chief, but dealt extensively with fire prevention aspects of the department.

DISCUSSION

In comparing the study's results with the finding's of those in the literature review, it was determined that those finding's stand clear and comprehensible of the fact that education is very much needed for fire safety inspectors to perform their jobs responsibly.

"The basic educational pattern of professional workers has long been established"

(Houle, 1980, p. 4). Education is at the beginning of the fire service career of every person, and must continue throughout that person's career ladder. "Most experts say that professionalism - the cry of the fire service for the past decade - begins with education" (Neilsen, 1981 p. 26), "and as the fire service's scope and vision have broadened, the need for enhancements in both training and education have grown proportionately" (Bachtler & Brennen, 1995 p.326). Therefore, the study presented with the recommendation that fire safety inspectors have continuing education. Corbett emphasizes, "Veteran field inspectors need periodic refresher training, especially in areas they may not have come across for some time. Problems resulting from incorrect application of the code may arise in the field, making it apparent that refresher training is

needed" (p.22). In light of this, continuing education should be recommended if not required. A majority of the respondents noted that they work relatively close with the local building authority. According to Conrad and Coleman (1996), "Fire and building officials simply cannot afford to work against each other. Partnering is a process that allows for the development of fie and life safety as a community is built - built together" (p. 7). Hart also notes: "Take a moment to list the various customers your FPB staff deals with and identify what credentials they must have to work in your state or jurisdiction. This brings up a very valid issue when it deals with educational background or doesn't, and continuing education should be there to supplement the base. The preceding literature found supports this prospect in whole. In relation to continuing education re-certification time frames, The National Fire Protection Association's Fire Safety Inspector's program recognizes written submission of written documentation 100 hours of continuing education over a 5-year time period (NFPA, 1993). However, Ohio Certified Building Officials must re-certify with 30 hours every 3-year period (Ohio Basic Building Code, 1998 p. 20R). The survey responses to the number of continuing education hours and the re-certification time frame are not adequate to produce sufficient evidence that warrants requiring the same, however, in review of the some of the literature finding's, this may not be the case. "Many, if not most, professionals are required to participate to some extent in continuing education" (Cervero, 1988, p. 75). However, Houle, (1988), summarizes most exactly: "everyone must expect constant change and with it new goals to be achieved and new understanding and skill to be mastered" (p.5). This author's interpretation of the findings is fairly close to what was

found. It appears that survey respondents seek recommending, not requiring continuing education.

But in comparison to the literature findings, continuing education needs to be emphasized more strongly *towards requiring*, than a recommendation. Cerero (1988) asserts: "Many, if not most, professionals are required to participate to some extent in continuing education" (p. 75). Second, the criteria or standards for continuing education were most highly noted as "seminars" or "attendance at local fire prevention association meetings". These types of programs may or may not have adequate foundation for instilling proper continuing education. Time frames reviewed in the survey results are fairly close to what was expected; at least 6-11 hours every year, if the continuing education was required or recommended. Relative to time frames for re-certification periods, every 3 years would appear to be the measurement to be used.

In relation to organizational implications, the following could be interpreted. The use of continuing education on a "recommendation" type action may start the process in the direction of benefit towards the Fire Division's needs. The use of seminars or local fire prevention meetings for educational renderings to meet the criteria or standard question imposed, at this juncture, may benefit to some degree the present inspectors, both full and part-time status. Matters of scheduling and cost factors would need further consideration.

RECOMMENDATIONS

Based on the supporting information from the literature review and the data collected from the mail survey of Fire Chiefs throughout Ohio, the following

recommendations are made. It is suggested, and strongly recommended, that fire safety inspectors for the City of Maumee, Ohio, being of full or part-time status, receive continuing education while under the employment of this fire division. Also, at this juncture, that the continuing education credit be made available through attendance at seminars and local fire prevention association meetings.

Part-time status inspectors should make effort to join the local fire prevention association (Northwest Ohio Fire Prevention Association), and attend monthly meetings to keep updated on current topics affecting the fire prevention community. The attendance at these meetings and seminars not only increases the inspector's information on current topics, but also could possibly aid in reduction of liability issues. The Fire Chief or Fire Prevention Chief should make these seminars and association meetings identifiable to both full and part-time inspectors.

It is further recommended that some type of program be implemented with the local building officials to include all inspectors for training in areas where building and fire officials coincide. As noted in the mail survey, many fire departments work closely with their local building authority, and the Maumee Fire Division is no different in this aspect. A stronger cohesion between the building and fire division will increase the professional facet between these two bodies.

Regarding the amount of hours and time frames for re-certification, this matter will need to be invoked upon the mandatory requirement of continuing education at a later point. Currently, an amount of 6-11 hours of continuing education per year should

be recommended for fire safety inspectors, for documentation of credit for education.

Not only is a recommended, but also a required program for continuing education acknowledgement needs administered. Proper time frames and hours of credit should be established.

This research report has concentrated on the problem and purpose of this study, as noted in the Introduction...the problem of a lack of a continuing education program for fire safety inspectors of the Maumee Fire Division, and looking into the feasibility of developing such a program. This research paper has dealt with those issues and conclusions have been noted. Furthermore, this research paper should be reviewed by the Maumee Fire Chief and Municipal Administrator/Safety Director for further consideration of proposing a continuing education program for the fire safety inspectors of the Fire Division. In addition, it is recommended that additional research is needed to further promote, encourage, and clarify the impact of continuing education on the efficiency of fire safety inspectors employed by the City of Maumee's Fire Division.

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FIRE DEPARTMENT SURVEY - TALLIED RESULTS

Please provide the information requested on the following questions by indicating with a check mark or X the appropriate corresponding answer.

1.	How often does your fire department use certified fire safety inspectors?					?	
	<u>53</u> Daily (fu	ıll-time)	5 Company inspections		inspections		
	9_Part-tim	e basis (part	t-time or volunt	ary) <u>1</u> No	ot used		
2.	2. Does your fire department have a fire prevention bureau?						
	<u>52</u> Ye	es	<u>16</u> No				
3.	. How many certified fire safety inspectors does your fire department currently have available for inspections (on a full-time or part-time basis):						
	1_0	<u>28</u> 1-5	<u>15</u> 6-12	<u>8</u> 13	-17		
	<u>1</u> 18 –21	<u>10</u> Over 2:	2				
4.	 Does your fire department policy, or you, require or recommend continuing education for the department's certified fire safety inspectors? (Not continuing education requirements for certified Building Officials) Required 39 Recommended 25 No 						
		1	<u> </u>	.m Cm C	= <u>~</u> .10		

5. If you answered "Required" or "Recommended" to # 4, how many average hours per year do the certified fire safety inspectors receive?

9 1-5 15 6-11 13 12-21 4 21 and greater

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FIRE DEPARTMENT SURVEY

6.	Which type of continuing educational source do you have available or use for the certified fire safety inspectors?				
	22 Departmental drill periods 37 Seminars				
	8 Local community college				
	34 Local fire prevention association meetings				
	14 Building Officials & Code Administrators' International, Inc. courses				
	17 Courses offered and used by the local Building Officials				
	37 Other (please note)				
	11 Not applicable				
7.	. If you or your fire department requires continuing education, how often do you mandate that the inspectors "re-certify" within your department?				
	<u>0</u> Every year <u>1</u> 2 years <u>2</u> 3-5 years <u>0</u> Over 5 years				
	5 Per requirements of the course the inspector is enrolled (i.e., BOCA course).				
	10 At the time the State code or municipal code changes.				
	38 Not applicable				
8. Do	es your municipality have a certified building department?				
	<u>33</u> Yes <u>33</u> No				
9. Do the building officials and certified fire safety inspectors work together on a regular basis?					
	<u>52</u> Yes <u>8</u> No PAGE 2				

FIRE DEPARTMENT SURVEY

	. Do any or all of the fire department's certified fire safety inspectors maintain any State of Ohio Building Official certifications?						
	<u>12</u> Yes		<u>52</u> No				
11. If you answered "Yes" to # 10, which of the following do a <u>majority</u> of the certified fire safety inspectors maintain?							
	O Class I	1_ Class II	1 Class III				
	10 Class IV	0_ Class V					
12. Does your fire department conduct plan reviews in conjunction with the local building authority?							
	<u>54</u> Yes	<u>6_</u> No	7_ Not applicable				
13. Listed below are several "stumbling blocks" to having a continuing education program. In your opinion, please indicate by placing the #1 by the greatest problem you would have, and continue to #4 as the least of the problems listed. If you have an additional problem area, please note in "Other" and number that also.							
	<u>59</u> Cost	<u>60</u> Scl	heduling conflicts				
	53 Labor problems						
	54 Maintaining an adequate number of certified fire safety inspectors who want to do the job.						
	10 Other (please note)						

14. How many years have you been in the fire service in Ohio?

<u>0</u> 1-5 years

<u>1</u> 6-10 years

<u>3</u> 11-15 years

<u>8</u> 16-20 years

18 21-25 years

24 26-30 years

<u>14</u> Over 30 years

15. How many years have you been the fire chief of the fire department you are currently affiliated with?

3 Less than 1 year

<u>8</u> 1to 2 years

<u>24</u> 3-5 years

<u>10</u> 6-10 years

<u>15</u> 11-15 years

3 16-20 years

4_Over 21 years

IF YOU WOULD LIKE TO KNOW THE FINAL RESULTS OF THIS SURVEY, PLEASE INDICATE BY CHECKING THIS BOX:

___ Yes, I would like to be sent the results of this survey.

PLEASE PLACE THIS SURVEY INTO THE SELF-ADDRESSED STAMPED ENVELOPE PROVIDED AND RETURN IT VIA U.S. MAIL. BY DECEMBER 20, 2002

I WOULD LIKE TO TAKE THIS OPPORTUNITY TO AGAIN <u>THANK</u> <u>YOU</u> FOR TAKING YOUR TIME IN COMPLETING THIS SURVEY.

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